

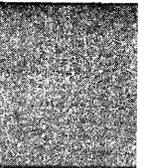
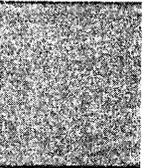
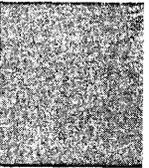
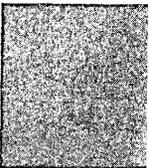


Systems Reference Library

**IBM System/360 Operating System:
Messages and Codes**

OS Release 21

This publication lists, explains, and suggests appropriate responses to the system completion codes, wait state codes, and messages produced by IBM-supplied components of the IBM System/360 Operating System. The codes and messages are presented in alphameric order.



Twelfth Edition (March, 1972)

This is a major revision of, and obsoletes, GC28-6631-11 and Technical Newsletter GN28-2501. Major changes to the text are listed in the "Summary of Amendments." All changes to the text are indicated by a vertical line to the left of the change.

This edition applies to release 21, of IBM System/360 Operating System, and to all subsequent releases until otherwise indicated in new editions or Technical Newsletters. Changes are continually made to the information herein; before using this publication in connection with the operation of IBM systems, consult the latest IBM System/360 and System/370 SRL Newsletter, Order No. GN20-0360, for the editions that are applicable and current.

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Preface

This publication lists the system completion codes, wait state codes, and messages produced by IBM-supplied components of the operating system. The causes of the codes and messages are explained, the accompanying actions by the operating system are described, and appropriate responses are suggested. The codes and messages are presented in alphabetic order.

ASSOCIATED PUBLICATIONS

This publication contains some messages that appear in other publications and are duplicated in this publication, and some messages that appear in this publication only. Those publications that contain messages or that serve as references to specific messages are listed at the beginning of their appropriate message sections in this publication.

Those publications that introduce concepts and terminology relevant to all messages are:

IBM System/360 Operating System:

Data Management Services, GC26-3746

Job Control Language Reference, GC28-6704

Operator's Procedures, GC28-6692

Operator's Reference, GC28-6691

Programmer's Guide to Debugging,
GC28-6670

Supervisor and Data Management Services,
GC28-6646

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3410 Tape Subsystem - 3420/3803 Tape Subsystem

Input/Output Supervisor message IEA000I now contains information for these new tape subsystems.

3505/3525 Card Reader/Punch

Two new system completion codes and four new data management (IEC) messages provide support from the 3505/3525 card reader/punch.

Model 65 - MP Shared DASD (IEE)

The Master Scheduler (IEE) messages contain support for Model 65 Multiprocessing shared direct access files.

Open, Close End-of-Volume Repack

System completion codes for the open, close, end-of-volume Data Management routines will now be accompanied by messages that indicate the associated return code, jobname, stepname, ddname-concatenation number, dsname, and volume serial number.

Password Protect

The System Utility (IEH) section now includes the IEHPRGM Password Protect function messages.

PCP Removal

The Primary Control Program (formerly known as the Unit Control Program) is not supported for this release.

Problem Determination

Messages and codes throughout the book contain additional problem determination information. A new section has been added to consolidate common problem determination actions (Part VI). Messages will now indicate problem determination actions under the heading "Problem Determination" and refer the user to the tables in Part VI.

Service Aids

Three new Service Aid programs have messages for this release: IHLGTF (the Generalized Trace Facility), IMCOSJQD (the OS jobqueue dump service aid), and IMBLIST (the module list service aid). The IMDPRDMP service aid message now include the GTF EDIT messages.

Status Display

Master Scheduler (IEE) section now includes messages for Status Display support.

RMS for System 370/135

The Machine Check Handler and Dynamic Device Reconfiguration (IGF) section contains RMS/135 messages.

TSO

This technical newsletter includes messages of the TSO START/STOP/MODIFY function.

IMDPRDMP

This technical newsletter includes messages of the IMDPRDMP - PRINT SWAP function.

Summary of Amendments
for GC28-6631-10
OS Release 20

Item Supported by the Change	Messages, Completion Codes, and Wait State Codes Added, Changed or Deleted in This Edition
SVC Dump	IEA021 - IEA023I
MFT ATTACH	scc 62A
ASCII Support	IEC017I,IEC018D,IEC114E,IEC133I,IEC134D,IEF243E,IEF510D,IHJ007I
Time-of-Day Clock	IEE112I - IEE114A,IEE116A,IEE117A,IEE306I
IFCEREPO	IFC010I - IFC01CI
OS OLTEP	Entire IFD section
Deletion of Service Class C Components from Type I Documents	Entire IEJ (FORTRAN IV E) Section Entire IET (Assembler E) Section Some portions of IHC (FORTRAN IV Object Program) Section
Eliminate Duplication of Compiler Messages in Programmer's Guides and Messages and Codes SRL	IEK (FORTRAN IV H) Section* IEM (PL/I) Section* IEP (COBOL E) Section* IEQ (COBOL F) Section* IER (Sort/Merge) Section* IES (Report Program Generator (RPG)) Section* IEU (Assembler F) Section* IEX (ALGOL) Section* IEY (FORTRAN IV G) Section* IHC (FORTRAN IV Object Program) Section* IHD (COBOL E Object Program) Section* IHE (PL/I Object Program) Section* IHI (ALGOL Object Program) Section* IKF (American National Standard COBOL) Section* *indicates that the messages have been removed from this publication, but that the explanatory table at the beginning of each section, along with the appropriate index tab, has been retained to permit easy insertion of messages taken from the Programmer's Guides. The tables showing the routing and descriptor codes for these messages have also been retained.

Item Supported by the Change	Messages, Completion Codes, and Wait State Codes Added, Changed, or Deleted in This Edition
TCAM	Entire IED Section; scc 040 - 046; messages IHB066 - IHB0708, IHB300 - IHB320, IHB342, IHB345, IHB346
TSO	Entire IKJ Section; messages IEE102I, IEE324I, IEE325I, IEE237I, IEE359I, IEF110I, IEF125I, IEF126I, IEF279I, IEF450I, IEF619I
SMF Dump	Entire IFA Section
3330/2305 Models A & B	IBC messages, IEA000I
3211 Printer	System completion code B13; Wait state codes B01-B1D; messages IEC122D, IEC124I, IEC125I, IEC127D, IEC129D, IEF311I, IEF322I - IEF329I, IEF331I
Remote Analysis OLTEP Retain/370	IFD125I
IMAPTFLE	IMA0005 - IMA007

This publication lists, explains, and suggests appropriate responses to the system completion codes, wait state codes, and messages produced by most of the IBM-supplied components of the IBM System/360 Operating System.

Note: Numbered messages for certain programs, such as the compilers, assemblers, and other special application programs (if not listed in this publication) are contained in the associated System Reference Library publication. Where desired, the messages may be moved from their associated programmer's guide and placed behind the appropriate section title page provided in this publication.

Part I contains the system completion codes. These 3-digit hexadecimal codes designate conditions causing abnormal termination of a task or a job step.

Completion codes are intended to be interpreted after execution by the operator, programmer, system programmer, or installation manager. Where possible, action required for resolution of the abnormal termination is indicated in the associated operator or programmer response.

During execution, a completion code may be interpreted and/or handled by the (1) COND parameter of the EXEC or JOB statement, or by (2) an appropriate user-written routine specified in the STAE macro instruction or the ETRX operand of the ATTACH macro instruction.

Part II lists all the system wait state codes. A wait state code is the last 12 bits of the current program status word (expressed in hexadecimal), indicating the reason for the wait state. Unless otherwise specified, the wait state is to be interpreted by the operator and handled according to the operator response given for the code.

Part II also contains diagnostics and corrective actions for uncoded wait states and loops.

Part III contains numbered messages produced by IBM-supplied components of the System/360 Operating System. Numbered messages are grouped by component name and listed in numeric order.

Part IV contains the unnumbered messages produced by IBM-supplied components. They are grouped alphabetically according to issuing component name and are listed alphabetically within their respective groups.

Part V contains the routing and descriptor codes for applicable messages. Messages and their routing and descriptor codes are tabularized and grouped by component name; and within each table, they are listed in alphameric order.

Part VI contains problem determination information. Where applicable, the documentation for messages and codes will identify common problem determination actions by referring to the action lists in Part VI, or by identifying unique actions.

PART I: SYSTEM COMPLETION CODES

Completion Code Summary (Part 1 of 10)

Group	Completion Code	Operation or Macro Instruction	Explanation
BISAM/ BSAM/ QSAM/ BDAM	001	CHECK, GET, PUT	I/O error; terminate specified or no SYNAD specified
BSAM/ QSAM/ BDAM/ ISAM	002		Record is greater than 32,768 bytes, exceeds maximum track length or stated blocksize; could not be contained in one extent; too many tracks specified for cylinder overflow; or BDW or RDW (SDW) invalid.
	003	EOB	3525 associated data set I/O sequence error.
	004	OPEN	Invalid FORMAT card or invalid device specified with OMR. Conflicting or invalid DCB parameter.
	008	CHECK while creating direct data set	Data protection image not present in SYS1.IMAGELIB. SYNAD returned to CHECK routine, but save area was destroyed
BDAM	020	OPEN	Invalid DCBMACRF field
	025		Address in DCBSQND field outside task
	026	Processing with exclusive control	Invalid DCBXARG field or exclusive control status not indicated
BISAM/ QISAM	030	OPEN	Invalid DCBMACRF field
	031		I/O error; no SYNAD specified
	032	OPEN	Invalid DCBMACRF field
	033	OPEN	I/O error in reading volume index or in validating last record pointers, or address in DCBMSHI field outside task or under incorrect protection key
	034	OPEN	DCBMSHI and DCBSMSI fields specify area too small for volume index
	035	OPEN	DCBMSWA and DCBSMSW fields specify area too small for one track
	036	OPEN	No prime area specified
	037	OPEN	Invalid buffer specification
	038	OPEN	Index area too small or crosses volumes
	039	Scanning	End of data set; no address in DCBEODAD field
	03A	CLOSE	I/O error in writing updated format 2 DSCB
	03B	OPEN	ISAM data set to be processed, but not created or its DCB not closed after creation
	03E	OPEN	Records to be loaded, but data set previously loaded; attempt to add records with resume load to variable length data set
BISAM/ QISAM/ BDAM	03D	OPEN	No DSORG=IS or ISU in DD or serial numbers in SER in DD not in order or not all present

Completion Code Summary (Part 2 of 10)

Group	Completion Code	Operation or Macro Instruction	Explanation
TCAM	040	OPEN	Error in opening a TCAM line group data set.
	041	OPEN	Error in opening a TCAM message queues data set.
	042	Processing	Error in running a TCAM MCP with the telecommunication on-line test executive.
	043	OPEN	Error in opening a TCAM application program data set.
	044	Processing	Error in processing the FE common write subtask.
	045	Message Control Program (MCP)	I/O error or logical read error.
	046	CLOSE	TCAM MCP is scheduled to be terminated, application program data set is active. Completion code is for the application program data set.
Graphics access method (GAM)	056	Graphic attention service routine	ANALYZ or GSERV specified DCB, which pointed to DEB, which pointed to invalid UCB
	057	Graphic attention service routine	ANALYZ or GSERV specified DCB, which pointed to DEB, which pointed to UCB for other than graphic device
	061	CLOSE	CLOSE issued DAR for GACB that was not specified (via SPAR) by the closing task
	062	Graphic Subroutine Package (GSP) for FORTRAN IV, COBOL, and PL/I	Return code equal to or greater than value of null argument produced
	063		2250 operator depressed alphameric keyboard CANCEL key and used light pen to terminate program
BTAM	090	OPEN	UCB for other than communications device
	091	OPEN	UCB specified invalid or unsupported transmission control unit
	092	OPEN	UCB specified invalid or unsupported terminal control or adapter
	093	OPEN	UCB specified invalid or unsupported terminal
	094	OPEN	UCB specified invalid or unsupported optional feature or mode of operation
	095	OPEN	Line group did not have identical terminal types and/or optional features
	096	OPEN	DCBBFTEK field specified dynamic buffer allocation, but DCBBUFEB, DCBBUFNO, and DCBBUFL fields not specified
	097	OPEN	Device I/O directory full
	098	OPEN	Transmission control unit not a 2701 or the Dual Communication Interface, or Dual Code Feature not specified in UCB
QTAM	0A0	OPEN	DCBTRMAD field not filled
	0A1	OPEN	DCBSOWA field not filled
	0A2	OPEN	ddname, in DD or terminal table, not name of process entry in terminal table

Completion Code Summary (Part 3 of 10)

Group	Completion Code	Operation or Macro Instruction	Explanation
QTAM (Cont.)	0A3	Message control program	All available space used in message queues data set
	0A4	Checkpoint data set	Insufficient space allocated when opening data set; I/O error when setting up format of or closing data set
	0A5	OPEN	DCB for main storage process or main storage destination queue previously opened
	0A6	OPEN,CLOSE	DCB for direct access message queue not opened first or not closed last
	0A7	OPEN	DCB for checkpoint data set opened before DCB for direct access message queues data set opened, or uncorrectable disk error
Job scheduler	0B0		I/O error in reading or writing SYS1.SYSJOBQE
	1B0		Invalid TTR for SYS1.SYSJOBQE found by system conversion routine
PROLOGUE	0Cx		Program interruption, not in I/O interruption handler or type 1 SVC routine; no program routine to handle interruption; x = program interruption code
	0F1		Program interruption in I/O interruption handler
	0F2		Program interruption in type 1 SVC routine
	0F3		Machine-check interruption; MCH or SER1 able to abnormally terminate job step to continue operating system
	0F5		Program interruption occurred while loading transient area for type 3 or 4 SVC
EXCP (SVC 00)	100	I/O operation	Device not operational
	200	I/O operation	Invalid SCB, IOB, DCB protect key
	300	I/O operation	Invalid DEB protect key
	400	I/O operation	Invalid DCB pointers
	500	I/O operation	Invalid UCB address
WAIT (SVC 01)	101	WAIT	More events than ECBs
	201	WAIT	Invalid ECB address
	301	WAIT	ECB wait flag already on
POST (SVC 02)	102	POST	Invalid ECB address
	202	POST	Invalid RB address in ECB
Task termination (SVC 03)	103	RETURN or branch to return address in register 14	ECB already posted or RB address in ECB invalid
	A03	RETURN or branch to return address in register 14	Subtasks not yet terminated

Completion Code Summary (Part 4 of 10)

Group	Completion Code	Operation or Macro Instruction	Explanation
Task termination (SVC 03) (Cont.)	C03	RETURN or branch to return address in register 14	TCBDEB points to DEB that is associated with an invalid DCB <u>Warning:</u> Not all data sets closed
	D03	RETURN or branch to return address in register 14	ENQ resources not yet released
GETMAIN (SVC 04)	104	GETMAIN for program in supervisor mode	Not enough available storage in local system queue area.
	504	GETMAIN with LA and A operands	Length and address lists overlap
	604	GETMAIN	Invalid address or length in free area queue element, or inactive program specification; address in A or LA operand is outside task or is not multiple of 4; address of parameter list erroneous
	704	GETMAIN	List request; MVT not in system
	804	GETMAIN or language processor	Request for zero bytes of main storage or not enough main storage available
	B04	GETMAIN	Subpool number greater than 127
	C04	GETMAIN	Invalid storage hierarchy specification
	E04	GETMAIN for program in supervisor mode	Not enough main storage available
FREEMAIN (SVC 05)	305	FREEMAIN	Area to be released not within correct subpool or not described by DQE
	505	FREEMAIN with LA and A operands	Length and address lists overlap
	605	FREEMAIN	Invalid address or length in free area queue element; address in A or LA operand is outside task or is not multiple of 4; address of parameter list erroneous
	705	FREEMAIN	List request; MVT not in system
	905	FREEMAIN	Address of area to be released not multiple of 8
	A05	FREEMAIN	Area to be released overlaps an existing free area
	B05	FREEMAIN	Subpool number greater than 127
	D05	FREEMAIN	Attempt to free system queue space storage not owned by task
FETCH (SVC 06)	106	LINK, LOAD, ATTACH, XCTL	Error while loading module into main storage: scatter data invalid (MVT), invalid record type (MFT), invalid address (MFT, or MVT), I/O error (MFT or MVT)

Completion Code Summary (Part 5 of 10)

Group	Completion Code	Operation or Macro Instruction	Explanation
FETCH (SVC 06) (Cont.)	406	LINK, ATTACH, XCTL	Module was only loadable; module specified by entry point defined by IDENTIFY macro instruction in system with option 3, but not MVT
	506	LINK, LOAD, ATTACH, XCTL	Not enough main storage for module and overlay supervisor or TESTRAN interpreter
	606	LINK, LOAD, ATTACH, XCTL	Not enough main storage for module
	706	LINK, LOAD, ATTACH, XCTL	Module marked "not executable"
	806	LINK, LOAD, ATTACH, XCTL	BLDL detected error: module not found or I/O error during directory search
	906	LINK	Tasks waiting for reenterable or serially reusable module exceed 255
	A06	LINK	Task already waiting for serially reusable module
	B06	I/O activity	Abnormally terminating system error task reinstated, and user task abnormally terminated
	C06	XCTL	Abnormally terminating transient area task reinstated, and user task abnormally terminated
XCTL (SVC 07)	207	XCTL	Asynchronous exit routine attempted to execute XCTL
LOAD (SVC 08)	308	LOAD	Module specified by entry point defined by IDENTIFY macro instruction
GETMAIN, FREEMAIN with R operand (SVC 0A)	10A	GETMAIN for program in supervisor mode	Not enough available storage in local system queue area.
	20A	Getting, freeing, or replacing region for new job step	Storage still allocated to previous step; new step
	30A	FREEMAIN	Area to be released not within correct subpool or not described by DQE
	40A	FREEMAIN	Attempt to release all of subpool zero
	60A	GETMAIN, FREEMAIN	Invalid address or length in free area queue element or inactive program specification; address of area to be released (in register 1) not multiple of 8
	80A	GETMAIN	Request for zero bytes of main storage or not enough main storage available
	90A	GETMAIN, FREEMAIN	Inactive program address not multiple of 8; address of area to be released not multiple of 8
	A0A	GETMAIN, FREEMAIN	Inactive program overlaps free area; area to be released overlaps an existing free area

Completion Code Summary (Part 6 of 10)

Group	Completion Code	Operation or Macro Instruction	Explanation
GETMAIN, FREEMAIN with R operand (SVC 0A) (Cont.)	B0A	GETMAIN, FREEMAIN	Subpool number greater than 127
	D0A	FREEMAIN with R operand	Attempt to free system queue space storage not owned by task
ABEND (SVC0D)	D0D	ABEND	Invalid ABEND recursion during abnormal termination of subtask; job step task terminated.
	E0D	ABEND	Insufficient main storage available for ABEND processing of subtask, job step terminated.
OPEN (SVC 13)	013	OPEN	Conflicting or unsupported parameters in DCB; member name specified in DD not found; no directory allocation subparameter in DD
	113	OPEN, OPEN with TYPE=J	I/O error in reading or writing JFCB or in reading JFCB extension block; no exit code provided
	213	OPEN	DSCB not found; I/O error in reading or writing DSCB
	313	OPEN	I/O error in reading format 3 DSCB
	413	OPEN	INPUT, INOUT, or RDBACK specified but no serial number in SER in DD; I/O error in reading volume label; could not mount volume on device; volumes specified less than devices allocated
	513	OPEN	Attempting to open second DCB for same tape volume
	613	OPEN	I/O error in label processing or tape positioning
	713	OPEN	Expiration date not occurred, but data set to be opened for output and DD contained MOD in DISP
	813	OPEN	Verification error in label processing
	913	Supplying of password	Operator entered incorrect password twice; third byte of 80-byte record for data set not used to indicate read, write, or read and write
	A13	OPEN	File sequence number in LABEL in DD not on volume
	B13	OPEN for UCS printer	Operator canceled UCS load or permanent I/O error detected
	C13	OPEN, OPEN with TYPE=J, OPEN for graphics	I/O error in reading JFCB or DSCB for concatenated data set; JFCB or DSCB not found for one data set in concatenation; graphic DCB already opened by another task
	D13	OPEN for graphics	DCB for other than graphics device
E13	OPEN for graphics	DCBGNCP field not 1 through 99	
CLOSE (SVC 14)	214	CLOSE	I/O error in tape positioning or volume disposition
	314	CLOSE	I/O error in reading DSCB
	414	CLOSE	I/O error in writing updated DSCB
	514	CLOSE	I/O error in reading JFCB
	614	CLOSE	I/O error in writing file mark

Completion Code Summary (Part 7 of 10)

Group	Completion Code	Operation or Macro Instruction	Explanation
CLOSE (SVC 14) (Cont.)	714	CLOSE	I/O error in label processing
	A14	CLOSE	I/O error in release of unused direct access space
	B14	CLOSE	STOW unable to store, modify, or delete data from partitioned data set directory because name already in directory, no space available in directory, or I/O error in searching directory
	D14	CLOSE for graphics	Graphic device previously opened by another task
TCLOSE (SVC 17)	117	BSAM CLOSE with TYPE=T	I/O error in tape positioning or writing file mark
	217	BSAM CLOSE with TYPE=T	I/O error in reading JFCB
	317	BSAM CLOSE with TYPE=T	I/O error in reading DSCB
	417	BSAM CLOSE with TYPE=T	I/O error in writing updated DSCB
	717	BSAM CLOSE with TYPE=T	I/O error in label processing
Master scheduler (SVC 22)	122		Operator canceled job, requested dump
	222		Operator canceled job, did not request dump
	322		Execution of job step or cataloged procedure taking longer than time specified
	422		Job required too much queue space for initiation
	522		All tasks in SVC wait state for 30 consecutive minutes or for time specified in JWT parameter (is systems with SMF)
	722		OUTLIM keyword on SYSOUT DD statement exceeded
WTO/WTOR (SVC 23)	D23	WTO, WTOR	Parameter list does not begin on proper boundary
	E23	REPLY command processing (in response to WTOR)	Invalid ECB address or reply address
SEGLD/ SEGWT (SVC 25)	425	SEGWT	Exclusive segment requested

Completion Code Summary (Part 8 of 10)

Group	Completion Code	Operation or Macro Instruction	Explanation
EXTRACT (SVC 28)	128	EXTRACT	Output list not on fullword boundary or not contained in storage assigned to job step
	228	EXTRACT	Input parameter list not on fullword boundary or does not begin in storage assigned to job step
	328	EXTRACT	TCB not for immediate subtask
ATTACH (SVC 2A)	12A	ATTACH	Attempt to give subpool being shared with other subtasks
	22A	ATTACH	Subpool number greater than 127
	32A	ATTACH	Attempt to give job pack queue, which contains active programs, to new task.
	42A	ATTACH	Address for ECB to be posted upon subtask termination is not multiple of 4, higher than highest main storage, or does not have same protection key as macro instruction
	62A	ATTACH (MFT)	Exceeded maximum number of tasks by this ATTACH.
CHAP (SVC 2C)	12C	CHAP	Address for subtask TCB does not point to valid TCB or TCB of immediate subtask, is not multiple of 8, or points to valid task that has terminated
	22C	CHAP	Address of TCB of subtask not multiple of 8, higher than highest main storage, or does not have the same protection key as macro instruction
Overlay super- visor (SVC 2D)	12D		Words 3 and 4 of segment table invalid
	22D		Address in segment table or entry table outside storage for job step
	32D		Wrong length record or I/O error when loading segment
	C2D		Invalid scatter record.

Completion Code Summary (Part 9 of 10)

Group	Completion Code	Operation or Macro Instruction	Explanation
Overlay supervisor (SVC 2D) (Cont.)	D2D		Invalid record type found when loading segment
	E2D		Invalid address found when loading segment
DEQ (SVC 30)	130	DEQ without RET=HAVE	DEQ for resource not enqueued by prior ENQ
	230	DEQ	Invalid length specified for name representing resource
	330	DEQ	Reset-must-complete (RMC) specified in problem program state
	430	DEQ	Invalid parameter list
	530	DEQ	Task does not yet control resource specified
TEST OPEN (SVC 31)	131	TEST OPEN	Control section containing TESTSTRAN statements modified before being opened
	331	TEST OPEN	No program entry point specified
	431		Symbol table and control dictionaries unreadable
	531		No DD for data set for unedited TESTSTRAN data
EOV (SVC 37)	137	End of volume	I/O error in label processing
	237	End of volume	Verification error in label processing; tape label block count not same as DCB block count; interrupt during command chaining
	337	End of data set	No address in DCBEODAD field
	437	End of volume	Protection keys different in TCBPKF field of TCB and DEBDEBID field of DEB
	537	End of volume for concatenated data set	Specified device being used for another data set
	637	End of volume	I/O error in writing tape mark, tape positioning, reading label, sensing for file protection ring; DCB bit does not indicate concatenation of unlike attributes
	737	End of volume or allocation of secondary quantity	I/O error; DSCB not found for multi-volume or concatenated data set
	837	End of volume for sequential data set	I/O error in reading or writing JFCB from or onto direct access
	937	End of volume	For second or succeeding volume, DSCB for password data set not found or operator entered incorrect password twice; I/O error in reading or writing counter in password data set
	B37	End of volume	Volume must be demounted from a device allocated to the data set, but system unable to dismount volume.
D37	Output operation	More space needed but no secondary quantity specified in SPACE in DD	

Completion Code Summary (Part 10 of 10)

Group	Completion Code	Operation or Macro Instruction	Explanation
EOV (SVC 37) (Cont.)	E37	Output operation	More space needed but no more volumes specified in SER, volume count, or REF in DD; more space needed but unavailable in partitioned data set, additional space would require another volume or 17 extents
ENQ (SVC 38)	138	ENQ without RET=TEST, USE, or HAVE	Second ENQ without intervening DEQ
	238	ENQ	Invalid length for resource name
	338	ENQ	Set-must-complete (SMC) specified in problem program state
	438	ENQ	Invalid parameter list
DETACH (SVC 3E)	13E	DETACH	Subtask being detached not yet terminated
	23E	DETACH	Address of subtask TCB is not multiple of 8, is higher than highest main storage, does not have same protection key as macro instruction, or does not point to valid TCB or TCB of immediate subtask
	33E	DETACH	Subtask being detached not yet terminated (STAE=YES was specified)
CHKPT	13F		Error during execution of checkpoint restart
RDJFCB (SVC 40)	140	RDJFCB	I/O error in reading JFCB
	240	RDJFCB	No pointer to JFCB in DCB exit list
SWAP (SVC 55)	155		SVC 85 (in decimal) issued by user's task, but is restricted for use by Dynamic Device Reconfiguration.
System Restart	2F3		Job was being executed when system failure occurred; a system restart was performed
Rollout/ Rollin	2FE		I/O error in rolling in a job step
	2FF		Abnormal termination at request of User Appendage III
Supervisor Call (SVC nn)	Fnn	SVC instruction	Invalid operand, nn, in SVC instruction

System Completion Codes

Completion Code	The completion code consists of a system code and a user code. The system code is supplied by the control program and is printed as a 3-digit hexadecimal number; the user code is supplied by the task and is printed as a 4-digit decimal number.
Program Producing Code	Completion codes are issued by the control program or problem program to indicate why a task was abnormally terminated. Abnormal termination occurs when the control program or a problem program issues an ABEND macro instruction. In the first case, the control program detected an error condition serious enough to prevent a task from performing its work. In the second case, the task detected an error that indicated it was not performing its work correctly. For example, a program may be producing a grand total by successive additions to the total. After each addition, the intermediate total could be compared to a value that should never be exceeded. If the intermediate total exceeds the value, the task could request an abnormal termination.
Audience and Where Produced	For programmer: SYSPRINT data set.
Completion Code Format	The system and user codes appear together in the task completion code field (TCBCMP) of the task control block (TCB) for the terminated task. For an abnormal termination by the control program, the system code is one of the codes listed in this publication. The user code is 0000. The system code tells the programmer the nature of the error that the control program found. For abnormal termination by the user, the system code is 000. The user code is the completion code specified in the ABEND macro instruction.
Comments	In systems with MFT, abnormal termination of a task causes abnormal termination of the job step. In systems with MVT, abnormal termination of the highest level task in a job step causes abnormal termination of the job step. Abnormal termination of a subtask terminates only the subtask itself and its subtasks. Subtask termination is indicated by the completion code in the event control block (ECB), specified when the subtask was attached, and the TCBCMP field of the task control block. In systems with MVT, an abnormally terminated subtask at a low level can indirectly cause abnormal termination of a job step. To do so, each subtask in the job step must abnormally terminate itself upon finding a completion code meaning abnormal termination of a lower level subtask; eventually, the highest level task terminates abnormally, thus, abnormally terminating the job step. To terminate the job step with the completion code for the original error in a subtask, each subtask must use its subtask's completion code as its own completion code.
Problem Determination	Refer to the fold-out in part VI of this publication for problem determination instructions.

001 Explanation: The error was detected during execution of (1) a BSAM, BISAM, or BDAM CHECK macro instruction, or (2) a QSAM GET or PUT macro instruction.
An input/output error condition was encountered:

- In case (1), the control program found that the data control block (DCB) did not contain the address of a SYNAD routine;

therefore, control could not be given to a SYNAD routine and the task was abnormally terminated.

- In case (2), the DCBEROPT field of the data control block contained the terminate (ABE) option; therefore, the task was abnormally terminated. (Possibly the result of a GET after EOD.)

Programmer Response: In case (1), specify the address of an error analysis routine to be given control when an input/output error is detected. (This can be provided by the problem program or by the SYNAD operand of the DCB macro instruction.) Then execute the job step again.

In case (2), if desired, specify ACC or SKP in the EROPT operand of the DCB macro instruction. Then execute the job step again.

Problem Determination: Table I, items 1, 2, 3, 5a, 15, 29.

002 Explanation: The error occurred while the control program was processing a sequential data set with BSAM or QSAM, creating a direct organization data set, or opening an ISAM data set for QISAM load mode:

1. The record to be transferred was greater than 32,768 bytes.
2. If chained scheduling was the selected option, then the record exceeded the maximum track length of the direct access device being used.
3. If the record format specified track overflow, then the record to be written exceeded the stated blocksize.
4. If a direct access data set was being created and the record format specified track overflow, then the block to be written could not be contained in one extent.
5. Too many tracks were specified for cylinder overflow.
6. The record descriptor word (RDW) of a variable length record contains an invalid length.
The length (including data characters and any control characters) must be less than 32,769 and greater than 4.
7. The Block Descriptor Word or Record (segment) Descriptor Word was invalid. (i.e., BDW less than 9 bytes or RDW less than 4 bytes.)
8. If the record to be transferred is larger than the track capacity and track overflow has not been specified.

Programmer Response: Probable user error. In the first case, the access methods cannot be used since the record length exceeds the maximum buffer length of the access methods.

In the second case, do not specify chained scheduling in the OPTCD operand of the DCB macro instruction. Then execute the job step again.

In the third case, change the BLKSIZE operand of the DCB macro instruction to reflect the actual blocksize of the data set being processed. Then execute the job step again.

In the fourth case, change the allocation of the data set to ensure that each of the extents is large enough to contain a block of data. (The CONTIG subparameter of the SPACE parameter of the DD statement can be used to ensure a contiguous extent of requested size.) Then execute the job step again.

In the fifth case, change the CYLOFL operand of the DCB macro instruction to reflect the correct number of tracks. Then execute the job step again.

In the sixth case, check the first word of the variable length record to insure that it contains a valid length.

In the eighth case, do not specify a record size greater than the track capacity for the device unless track overflow has been specified.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

003 Explanation: The error occurred during End of Block processing using either BSAM or QSAM. An input/output error occurred during the processing of a data set associated with a 3525 reader/punch. The contents of register 15 indicate the nature of the error:

Register 15 Contents in Hexadecimal	Explanation
'01'	The error occurred because of a READ input/output sequence error.
'02'	The error occurred because of a PUNCH input/output sequence error.
'03'	The error occurred because of a PRINT input/output sequence error.

System Action: The system terminates the task.

Programmer Response: Probable user error. Specify the I/O macro instruction in the proper sequence and rerun the job.

Problem Determination: Table I, items 1, 5a, 15, 16, 29.

004 Explanation: The error occurred during OPEN processing using either BSAM or QSAM because:
• A conflicting or invalid DCB parameter (FUNC or related parameter) is specified. The contents of register 15 indicate the nature of the error:

Register 15 Contents in Hexadecimal	Explanation
'01'	An invalid DCB FUNC parameter is specified.
'02'	An invalid combination of DCB FUNC parameter and CNTRL macro is specified.
'03'	Conflicting data set access methods are specified.
'04'	An invalid DCB is specified for a 3505 or 3525.
'05'	An invalid format card or an invalid device was specified with Optical Mark Read (OMR). Register 15 contains a return code of X'05'.

- A data protection image was not found. This is indicated by a X'06' return code in register 15.

The image was not found because:

1. It is not in the SYS1.IMAGELIB data set.
2. The volume containing SYS1.IMAGELIB is not mounted.
3. The SYS1.IMAGELIB data set is not cataloged.

System Action: In all cases, the system terminates the task.

Programmer Response: Probable user error. In all cases, verify the referenced fields and rerun the job.

Problem Determination: Table I, items 1, 5a, 15, 16, 29.

- 008 Explanation: The error occurred during execution of a SYNAD routine. The routine was given control following execution of a BSAM CHECK macro instruction while creating a direct organization data set.

The SYNAD routine attempted to terminate by returning control to the control program routine for the CHECK macro instruction, but found that the save area, pointed to by register 13, was destroyed.

Programmer Response: Probable user error. Correct the SYNAD routine so that the control program save area is not destroyed. Then execute the job step again.

Problem Determination: Table I, items 1, 3, 5b, 15, 29.

- 013 Explanation: The error occurred during execution of an OPEN macro instruction. This system completion code is accompanied by message IEC141I. Refer to the explanation of message IEC141I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC141I.

Problem Determination: Table I, items 1, 3, 5b, 15, 29.

- 020 Explanation: The error occurred during execution of a BDAM OPEN macro instruction.

The control program found that the DCBMACRF field of the data control block did not contain an A, K, or I, or an attempt was made to open a BDAM data set which contained zero extents.

System Action: The system terminated the task.

Programmer Response: Probable user error. In the first case, make sure that A, K, or I is specified in the MACRF operand of the DCB macro instruction. Verify that the DCBMACRF

field was not incorrectly modified by the problem program before the opening process. After making corrections, reassemble the program and execute the job step again.

In the second case, create the data set before attempting to open it as a BDAM file.

Problem Determination: Table I, items 1, 3, 5b, 15, 29.

- 025 Explanation: The error occurred during processing using BDAM.

The control program found an invalid address in the data control block (DCB). The invalid address specified a location outside the boundaries of the main storage assigned to the task.

The data control block address field that is in error is DCBSQND, which contains the address of the last or only input/output block (IOB) in the queue.

System Action: The system terminated the task, but did not produce a dump.

Programmer Response: Probable user error. Locate and correct the problem program error that incorrectly modified the data control block field. Then execute the job step again.

Problem Determination: Table I, items 1, 3, 15, 19, 29.

- 026 Explanation: The error occurred during a BDAM input/output operation for which exclusive control of a block was requested.

The control program found that control information associated with the exclusive control of blocks was incorrectly modified:

- The DCBXARG field of the data control block (DCB) did not specify the address of the READ exclusive module.
- The Read exclusive module, built by the Open routine, did not indicate the exclusive control status of the data control block.

Programmer Response: Verify that the DCBXARG field or the Read exclusive module was not modified by the problem program.

After making corrections, reassemble the program and execute the job step again.

Problem Determination: Table I, items 1, 3, 5a, 7ab, 15, 29.

- 030 Explanation: The error occurred during execution of a BISAM or QISAM OPEN macro instruction.

The control program found that the DCBMACRF field of the data control block (DCB) did not indicate a valid mode of operation for BISAM or QISAM. The DCBMACRF field is set up by the MACRF operand of the DCB macro instruction or by the problem program before the data control block is opened.

Programmer Response: Probable user error. Make sure that a valid mode of operation is specified in the MACRF operand of the DCB macro instruction. Verify that the DCBMACRF field was not incorrectly set up or modified by the problem program. After making corrections, reassemble the program and execute the job step again.

Problem Determination: Table I, items 1, 3, 5b, 15, 29.

031 Explanation: An input/output error occurred during processing using QISAM. The control program attempted to pass control to an error analysis (SYNAD) routine, but found that the DCBSYNAD field of the data control block did not contain the address of a valid SYNAD routine. The task was abnormally terminated.

The DCBEXCD1 and DCBEXCD2 fields of the data control block indicate the possible causes of the original error:

DCBEXCD1:

Bit	Meaning
0	Lower key limit not found.
1	Invalid device address for lower limit.
2	Space not found.
3	Invalid request.
4	Uncorrectable input error.
5	Uncorrectable output error.
6	Block could not be reached (input).
7	Block could not be reached (update).

DCBEXCD2:

Bit	Meaning
0	Sequence check.
1	Duplicate record.
2	DCB closed when error detected.
3	Overflow record.
4	PUT: length field of record greater than length indicated in DCBLRECL field of the data control block.
5-7	(Reserved bits)

Programmer Response: Examine the DCBEXCD1 and DCBEXCD2 fields of the data control block to determine the cause of the error. Specify the address of an error analysis routine to be given control when an input/output error is detected. (This can be provided by the problem program or by the SYNAD operand of the DCB macro instruction.) Then execute the job step again.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

032 Explanation: The error occurred during execution of a BISAM or QISAM OPEN macro instruction.

The control program found that the DCBMACRF field of the data control block (DCB) did not contain valid information for ISAM.

Programmer Response: Probable user error. Make sure that valid information is specified in the MACRF operand of the DCB macro instruction. Verify that the DCBMACRF field was not incorrectly modified by the problem program before the opening process.

After making corrections, reassemble the program and execute the job step again.

Problem Determination: Table I, items 1, 3, 5b, 15, 29.

033 Explanation: The error occurred during execution of an OPEN macro instruction for an indexed sequential data set:

- An input/output error occurred while reading the highest level index.
- An input/output error occurred while searching for the end-of-file mark following the last data record in the prime and independent overflow areas. The DCBLPDA and DCBLIOV fields of the data control block (DCB) contain, respectively, the addresses of the last records in the prime and independent overflow areas.
- The DCBMSHI field of the data control block contained an address that either specified a location outside the boundaries of the main storage assigned to the task or had a storage protection key other than that specified in the task control block (TCB).

Programmer Response: Verify that the DCBLPDA, DCBLIOV, and DCBMSHI fields were not incorrectly specified or modified by the problem program. After making corrections, reassemble the program and execute the job step again.

Problem Determination: Table I, items 1, 3, 5b, 15, 29.

034 Explanation: The error occurred during execution of a BISAM OPEN macro instruction.

The control program found that the DCBSMSI and DCBMSHI fields of the data control block (DCB) indicated a main storage area too small to contain the highest level index for the data set.

The size of the main storage area that should be reserved for the highest level index is placed in the DCBNCRHI field of the data control block when the data set is created for QISAM load mode.

Programmer Response: Probable user error. The error can be corrected by one of the following:

- Provide a sufficient main storage area by proper specification of the DCBSMSI and DCBMSHI fields.
- Provide no main storage area and either do not specify the contents of the DCBSMSI and DCBMSHI fields or set the fields to zero. The highest level index can then be processed without being loaded into main storage.

After making corrections, reassemble the program and execute the job step again.

Problem Determination: Table I, items 1, 3, 5b, 15, 29.

035 Explanation: The error occurred during execution of a BISAM OPEN macro instruction.

The control program found that new records were to be added to the data set, but the

DCBMSWA and DCBSMSW fields of the data control block (DCB) indicated a main storage area too small to contain one track from the prime area.

Programmer Response: Probable user error. The error can be corrected by one of the following:

- Provide a sufficient area by proper specification of the DCBMSWA and DCBSMSW fields. The minimum DCBSMSW field must indicate one track capacity plus one record.
- For fixed-length records, provide no main storage area and either do not specify the contents of the DCBMSWA and DCBSMSW fields or set the fields to zero. A main storage work area is required only for variable-length records.

After making corrections, reassemble the program and execute the job step again.

Problem Determination: Table I, items 1, 3, 5b, 15, 29.

036 Explanation: The error occurred during execution of a BISAM or QISAM OPEN macro instruction.

The control program found that no space was allocated on a direct access device as the prime area for the data set:

- In QISAM load mode, during data set generation, the SPACE parameter of the DD statement did not specify a primary quantity.
- The data set control block (DSCB) for the data set was incorrectly modified by the problem program.

Programmer Response: Probable user error. In the first case, the data set should be dumped sequentially and recreated using QISAM load mode. The job should be restarted with a primary quantity specified in the SPACE parameter of the DD statement. If the prime area is to span more than one volume, the number of volumes and the number of units required should be specified.

In the second case, verify that the data set control block was not incorrectly modified by the problem program. After making corrections, reassemble the program and execute the job step again.

Problem Determination: Table I, items 1, 3, 5b, 15, 29.

037 Explanation: The error occurred during execution of a BISAM or QISAM OPEN macro instruction.

The control program found that the buffers supplied by the programmer were inadequate for the records to be processed:

- If the buffers were acquired by use of the BUILD macro instruction, either the BUFNO operand of the DCB macro instruction was not specified or the BUFL operand specified too small a value.
- If the buffers were acquired by use of the GETPOOL macro instruction, the buffer length operand specified too small a value.

Programmer Response: Probable user error. Specify the buffers correctly. Then execute the job step again.

Problem Determination: Table I, items 1, 3, 5b, 15, 29.

038 Explanation: The error occurred during execution of an OPEN macro instruction for QISAM load mode.

The control program found that the space on a direct access device which had been allocated for the index area was either exhausted or occupied more than one volume. The index for an ISAM data set must reside on one volume.

Programmer Response: Probable user error. If a new data set is being created, the job must be restarted with larger space allocation specified in the SPACE parameter of the DD statement.

If an old data set is being updated, the data set should be dumped sequentially, the old data set scratched, and the data set recreated from the sequential data set using QISAM load mode. The job should be restarted with larger space allocation specified in the SPACE parameter of the DD statement.

Problem Determination: Table I, items 1, 3, 5b, 15, 29.

039 Explanation: The error occurred in scanning a data set using QISAM.

The end of the data set (EOD) was reached. The control program found that the DCBEODAD field of the data control block (DCB) did not contain an end-of-data-set exit routine address.

Programmer Response: Probable user error. Make sure that the address of a routine to be given control when the end of the data set is reached is specified either in the EODAD operand of the DCB macro instruction or in the problem program before the end of the data set is reached. Then reassemble the program and execute the job step again.

Problem Determination: Table I, items 1, 3, 5b, 15, 29.

03A Explanation: The error occurred during execution of a BISAM or QISAM CLOSE macro instruction.

A format 2 data set control block (DSCB), read from a direct access device into main storage, was updated from various fields of the data control block (DCB). When an attempt was made to write the updated data set control block back to the direct access device, an input/output error occurred.

Programmer Response: Rerun the job.

Problem Determination: Table I, items 1, 3, 5a, 15, 25b, 29.

03B Explanation: The error occurred during execution of an OPEN macro instruction for an indexed sequential data set. No records

could be processed because one of the following error conditions existed:

1. The format 2 data set control block (DSCB) indicated that the data set had not been created.
2. The format 2 DSCB indicated that the data control block had not been closed after the data set had been created.
3. The DCBRKP field of the data control block was not valid.
4. The DCBKEYLE field of the data control block was zero.
5. A QISAM data control block was being opened in preparation for a PUT operation, but the OPEN macro had not been invoked for output.

Programmer Response: In cases 1 and 2, make sure that the data set has been properly created and that the creating task closes the data control block.

In case 3, make sure that the value of the DCBRKP field in the data control block, when added to the value in the DCBKEYLE field, does not exceed the value in the DCBLRECL field; if variable length records are used, make sure that the value of the DCBRKP field is not less than 4.

In case 4, make sure that the DCBKEYLE field in the data control block does not contain zero.

In case 5, make sure that OUTPUT is specified as option 1 in the OPEN macro instruction.

In all cases, execute the job step again.

Problem Determination: Table I, items 1, 3, 5b, 15, 29.

03D Explanation: The error occurred during execution of (1) a QISAM or BISAM OPEN macro instruction or (2) a BDAM OPEN macro instruction:

One of the following occurred:

- In case (1), the DD statement did not specify an indexed sequential organization (which can be specified by a DSORG=IS or DSORG=ISU subparameter of the DCB parameter).
- In case (1), if the data set resides on multiple volumes, either the volume serial numbers in the SER subparameter of the VOLUME parameter of the DD statement were not in proper sequence, or not all volume serial numbers were specified. The serial number of the volume containing the index must be listed first. The number of volumes and the number of units allocated must be the same, and all volumes must be mounted.
- In case (2), the volume serial numbers in the SER subparameter of the VOLUME parameter of the DD statement were not in proper sequence.

This system completion code is sometimes accompanied by message IEC156I. If so, refer to the explanation of message IEC151I in this publication for complete information about the task that was terminated and for an

explanation of the return code (rc in the message text) in register 15.

Programmer Response: Probable user error. Correct the DCB parameter or SER subparameter, as necessary, and execute the job step again.

If this system completion code is accompanied by message IEC156I, respond as indicated in the message.

Problem Determination: Table I, items 1, 3, 5b, 15, 29.

03E Explanation: The error occurred during execution of an OPEN macro instruction for an indexed sequential data set.

The DCBMACRF field of the data control block (DCB) indicated that records were to be loaded, but the format 2 data set control block (DSCB) indicated that the data set had previously been loaded.

The loading of an indexed sequential data set must be completed during the initial OPEN/PUT/CLOSE cycle for that data set. An indexed sequential data set which has been opened and closed for loading may be subsequently loaded if no data was created.

Possibly, an attempt was made to add records with resume load to the prime area of an ISAM data set containing variable length records.

Programmer Response: Probable user error. Data may be added to the existing data set by using the WRITE KEY NEW (MACRF=WA operand of the DCB macro instruction) function of BISAM, or the existing data set and additional data may be merged and loaded for a newly allocated data set.

After making corrections, execute the job step again.

Problem Determination: Table I, items 1, 3, 5b, 15, 29.

040 Explanation: The error occurred during execution of an OPEN macro instruction for a TCAM line group data set.

The contents of register 0 indicate the nature of the error:

Register 0
Contents in
Hexadecimal

	<u>Explanation</u>
01	Not enough main storage is available to build a data extent for a line group data set.
02	Incompatible stations are specified in the same line group.
03	The "Device Class" field of the first unit control block (UCB) for a station in the line group specifies something other than telecommunications or graphics.
04	An unsupported control unit was specified for this line group.
05	The adapter-type and model-code bits in a UCB specify something

- 06 other than the lines specified by the DD statements for this line group.
- 07 The device characteristics specified for the stations in this line group are not the correct ones for these stations.
- 08 Insufficient main storage is available to build a line control block for a line group.
- 09 Insufficient main storage is available to build a station control block for a switched line.
- 0A The binary-synchronous interface specified in the data control block does not agree with that specified in a unit control block for a line in this group.
- 0B No valid UCB addresses were found for this line group; all UCB addresses checked were zero.
- 0C The sum of the header prefix size plus the number of bytes reserved in the first buffer of each message by the RESERVE= operand in the line group DCB macro instruction is equal to or greater than the size of the buffers assigned to lines in the group for input; thus, there is no room in the buffers for data.
- 0D No data set has been specified for disk or main storage queueing for a terminal.
- 0E There are no lines in the line group; that is, one or more of the lines in the group have not been opened because of some other error.
- 0F A relative line of zero has been specified.

- 0A operand of the DCB macro instruction against the bit settings specified in the UCBS for each line in this line group.
- 0B Specify DD statements with valid UNIT= operands.
- 0C Specify a larger buffer size for input on the BUFSIZE= and BUFIN= operands of the line group DCB macro instruction; reassemble and rerun the job. If a DD statement source is used to specify this operand, no assembly is required.
- 041 Explanation: The error occurred during execution of an OPEN macro instruction for a TCAM message queues data set.

The contents of register 0 indicate the nature of the error:

Register 0
Contents in
Hexadecimal

- | <u>Hexadecimal</u> | <u>Explanation</u> |
|--------------------|--|
| 01 | An incorrect length address vector table (AVT) has been specified to support disk message queueing. Disk queueing has been specified in a DCB macro instruction defining a message queues data set, but the INTRO macro instruction which generates the AVT was coded DISK=NO. |
| 02 | The keylength specified by the KEYLEN= operand of the INTRO macro instruction and the keylength specified in the IEDQDATA DD statement of the IEDQXA utility used to format the message queues data set are not equal. |
| 03 | Dissimilar disk types have been defined for message queueing. |
| 04 | The OPTCD= operand for this DCB specifies something other than reusable or non-reusable disk queueing. |
| 05 | A GETMAIN macro instruction was issued by TCAM to obtain main storage to build a data extent block for a message queues data set, but insufficient main storage was available to satisfy the request. |
| 06 | A GETMAIN macro instruction was issued by TCAM to obtain main storage to build input/output blocks for a message queues data set, but insufficient main storage was available to satisfy the request. |
| 07 | The message queues data set was allocated but not formatted correctly; the last record number written on a track is zero. |

System Action: If a user ABEND exit is provided in the EXLST= operand of the DCB macro instruction for the data set, the routine is given control. If it returns, or if no user ABEND exit is provided, the task is terminated.

Programmer Response: Probable user error. No action is required if a user ABEND exit has been provided in the EXLST= operand of the DCB macro instruction for the line group data set. When the program is next reassembled, a user completion code should be supplied in register 15. For a more immediate fix, the contents of register 0 indicate the action to be taken:

Contents of
Register 0 in
Hexadecimal

- | <u>Hexadecimal</u> | <u>Response</u> |
|--------------------|---|
| 01,07-08 | Specify a larger region or partition size of the JOB statement for the MCP. |
| 02,00,0E | Set up the line groups correctly; reassemble and rerun the MCP. |
| 03-06 | Check the addresses specified in the line group DD statements to be sure that the line addresses are valid. |
| 09 | Check the type of interface specified in the INVLST= |

System Action: If a user ABEND exit is provided in the EXLST= operand of the DCB macro instruction for the data set, the

routine is given control. If it returns, or if no user ABEND exit is provided, the task is terminated.

Programmer Response: Probable user error. No action is required if a user ABEND exit has been provided in the EXLST= operand of the DCB macro instruction for the message queues data set. When the program is next reassembled, a user completion code should be supplied in register 15. For a more immediate fix, the contents of register 0 indicate the action to be taken:

Contents of Register 0 in Hexadecimal

	<u>Response</u>
01	Specify DISK=YES in the INTRO macro instruction; assemble and execute again.
02	Reassemble the job with the proper length specified in the KEYLEN= operand of the INTRO macro instruction and rerun the MCP, or restart the TCAM job and override the KEYLEN= value by entering REPLY xx,'K=nn,U' to the message IED002A, or reformat the disk to the proper key length using the IEDQXA utility and rerun the MCP.
03	Ensure that the disk types specified for message queuing are similar.
04	Check and correct the contents of the DCB field.
05,06	Specify a larger region or partition size on the JOB statement for the MCP.
07	Re-format the data set by means of the IEDQXA utility and rerun the MCP job.

042 Explanation: An error occurred while running with the telecommunications on-line test executive (TOTE). The TOTE subtask has terminated.

Programmer Response: The MCP should be run without TOTE.

Problem Determination: Table I, items 5a, 10, 29.

043 Explanation: The error occurred during execution of an OPEN macro instruction for a TCAM application program data set. The contents of register 0 indicate the nature of the error:

Register 0 Contents in Hexadecimal

	<u>Explanation</u>
01	An OPEN macro for a TCAM application program data set has been issued but there is no Message Control Program (MCP) active in the system.
02	The QNAME= parameter of the DD statement associated with an input or output DCB for an application program is not the name of a process entry defined in the terminal table.

- 03 A process entry named by the QNAME= parameter of a DD statement associated with an application program is currently being used by another application program.
- 04 Insufficient main storage was available in the MCP to build internal control blocks associated with the application program interface.
- 05 Insufficient main storage was available in the application program work area to build internal control blocks.

System Action: If a user ABEND exit is provided in the EXLST= operand of the DCB macro for the data set, the routine is given control. If it returns, or if no user ABEND exit is provided, the task terminates.

Programmer Response: Probable user error. No action is required if a user ABEND exit has been provided in the EXLST= operand of the DCB macro for the application program data set. The contents of register 0 indicate the action to be taken:

Contents of Register 0 in Hexadecimal

	<u>Response</u>
01	Verify that an MCP is active before attempting to start an application program.
02	Recode the QNAME= parameter specifying the name of a valid process entry.
03	Recode the QNAME= parameter specifying another valid process entry.
04	Specify a larger region or partition size on the JOB statement for the MCP.
05	Specify a larger region or partition size on the JOB statement for the application program.

044 Explanation: The error occurred during execution of the FE Common Write (COMWRITE) task. The COMWRITE task has been terminated.

The contents of register 3 indicate the nature of the error:

Register 3 Contents in Hexadecimal

	<u>Explanation and Technical Information</u>
01	Permanent I/O error on output device. Register 7 contains user ID; register 8 contains address of failing DECB.
02	STAE routine failed. Register 15 contains the return code.
03	User parameter list is incorrect, and output required was specified. Register 7 contains the address of the parameter list saved in COMWRITE. Register 11 contains the address of the error message.
05	OPEN failed on the output DCB.

Programmer Response: Response depends upon the contents of register 3:

<u>Register 3</u>	<u>Response</u>
01	Check the status of the recording medium. If it is valid, call IBM for hardware support.
02	Call IBM for hardware support.
03	Probable user error. Verify the parameter list.
04	Probable user error. Invalid device specified. Correct the specification.
05	Probable user error. Missing DD statement. Include the DD statement and rerun the job.

045 Explanation: The error occurred during execution of a TCAM Message Control Program (MCP). The MCP is terminated.

The contents of the low-order byte of register 15 indicate the nature of the error.

Register 15
Contents in
Hexadecimal

	<u>Explanation</u>
01	I/O has been requested on a non-reusable disk record that is beyond the capacity of the data set. The non-reusable disk data set cannot be wrapped.
02	Logical read error caused by the reusable disk receiving a heavy burst of new traffic, causing unsent messages to be overlaid before they can be copied to the alternate destination queue.
03	Logical read error while trying to fetch a message for transmission to a terminal.
04	The copy subtask needed to copy messages from one data set to another has not been loaded by the disk open. A multiple-route or distribution list message has been enqueued to go to dissimilar message queue types. The copy subtask is needed to put the message on the queue. Caused by failure to open successfully a disk message queue DCB.
05	I/O has been requested on an unopened disk message queues data set.
06	FEATURE=(, ,NOTIMER) has been specified on the INTRO macro instruction, but a function requiring the system timer has been called.
07	A message longer than the reusable disk data set has been entered.

Programmer Response: Probable user error. To determine the action for a specific reason code, follow these procedures based on the contents of the low-order byte of register 15.

<u>Register 15</u>	<u>Response</u>
01	Either specify a larger data set or request that closedown occur at an earlier point.
02,03,07	Specify a larger data set or one that occupies more than one extent. For further suggested corrections, refer to the publication <u>IBM System/360 Operating System: TCAM Programmer's Guide and Reference Manual</u> , GC30-2024.
04,05	Before issuing the line opens, test for successful open of the message queues data set.
06	Specify FEATURE=(, ,TIMER), reassemble and rerun the MCP.

Problem Determination: Table I, items 5a, 10, 29. Obtain a listing of the message queues data set.

046 Explanation: The TCAM MCP has been terminated but an application program data set is still open. The application program data set is scheduled to be terminated with a system completion code of 046.

System Action: The application program is terminated.

Programmer Response: Follow the programmer response for the system completion code provided with the termination of the MCP.

056 Explanation: The error occurred during execution of the graphic attention service routine for the IBM 2250 Display Unit, Model 1, or the IBM 2260 Display Station.

The routine referred to an invalid unit control block (UCB). The routine obtained the reference to the unit control block through a data control block (DCB).

The user gives the routine the addresses of data control blocks through the poll list address in the first operand of the ANALYZ macro instruction or the address of one data control block through the list item address in the first operand of the GSERV macro instruction. The DCBDEBAD field in the data control block points to a data extent block (DEB), which in turn points to the unit control block.

The unit control block is used by the control program to obtain information about an input/output device; each unit control block is associated with one input/output device.

Programmer Response: Probable user error. Check the first operand in the ANALYZ or GSERV macro instruction to make sure that it specified the poll list address or list item address correctly. If the first operand was correct, make sure that the macro-expansion and the data control block were not incorrectly modified by program errors. After correcting the error, execute the job step again.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

057 Explanation: The error occurred during execution of the graphic attention service routine for the IBM 2250 Display Unit, Model 1, or the IBM 2260 Display Station.

The routine referred to a unit control block (UCB) that was associated with other than a graphic device. The routine obtained the reference to the unit control block through a data control block (DCB).

The user gives the routine the addresses of data control blocks through the poll list address in the first operand of the ANALYZ macro instruction or the address of one data control block through the list item address in the first operand of the GSERV macro instruction. The DCBDEBAD field in the data control block points to a data extent block (DEB), which in turn points to the unit control block.

The unit control block is used by the control program to obtain information about an input/output device; each unit control block is associated with one input/output device.

Programmer Response: Probable user error. Check the first operand in the ANALYZ or GSERV macro instruction to make sure that it specified the poll list address or list item address correctly. If the first operand was correct, make sure that the macro-expansion and the data control block were not incorrectly modified by program errors. After correcting the error, execute the job step again.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

061 Explanation: The error was detected during execution of a CLOSE macro instruction for a graphic data control block.

The graphic CLOSE executor issued a DAR macro instruction for a graphic attention control block (GACB) which was not specified (via a SPAR macro instruction) by the closing task.

System Action: Abnormal termination occurred for the task that issued the SPAR macro instruction for the graphic attention control block.

Programmer Response: Probable user error. Issue a DAR macro instruction for the graphic attention control block in the task which issued the SPAR macro instruction before the closing task issues the CLOSE macro instruction. Then execute the job step again.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

062 Explanation: The error occurred during execution of a routine of the graphic subroutine package (GSP) for FORTRAN IV, COBOL, and PL/I.

A condition was encountered that produced a return code equal to or greater than the value specified by the programmer as the "null" argument in the call to the INGSP

subroutine. The GSPARRAY field in the GSPCB identifies the return code produced, register 2 contains the address of the status table entry last invoked, and register 3 contains the address of the GSPARRAY field.

Programmer Response: Determine the condition that caused the job step to be abnormally terminated and alter the program accordingly. Then, execute the job step again.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

063 Explanation: During execution of a problem program, the 2250 operator depressed the alphameric keyboard CANCEL key causing the Graphic Cancel Routine to be activated. Then, as a response to a display produced by the routine, the 2250 operator used the light pen to terminate the program, either with or without an abnormal termination dump.

Programmer Response: Determine from the 2250 operator the condition that caused him to terminate the program, and respond accordingly.

090 Explanation: The error occurred during execution of a BTAM OPEN macro instruction.

An OPEN routine found that a device other than a communications device was allocated to the data control block (DCB) being opened; that is, the device class code in the unit control block (UCB) for the device allocated to the data control block was not equal to hexadecimal 40.

Programmer Response: Either the UNIT parameter of the DD statement for the communications device is incorrect or the unit control block generated during system generation is invalid. Check for improper specification of the UNIT parameter or the IODEVICE macro instruction used in generating the system. Also, check for program errors that could have improperly modified control information. After correcting the error, execute the job step again.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

091 Explanation: The error occurred during execution of a BTAM OPEN macro instruction.

An OPEN routine found an invalid or unsupported type of transmission control unit specified in the unit control block (UCB) for the device allocated to the data control block (DCB) being opened.

Programmer Response: Check for improper specification of the IOCTRL macro instruction used in generating the system. Also, check for program errors that could have improperly modified control information. After correcting the error, execute the job step again.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

092 Explanation: The error occurred during execution of a BTAM OPEN macro instruction.

An OPEN routine found an invalid or unsupported type of terminal control or terminal adapter specified in the unit control block (UCB) for the device allocated to the data control block (DCB) being opened.

Programmer Response: Check for improper specification of the ADAPTER parameter in the IODEVICE macro instruction used in generating the system. Also, check for program errors that could have improperly modified control information. Correct the error, and execute the job step again.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

093 Explanation: The error occurred during execution of a BTAM OPEN macro instruction.

An OPEN routine found an invalid or unsupported type of terminal specified in the unit control block (UCB) for the device allocated to the data control block (DCB) being opened.

Programmer Response: Check for improper specification of the UNIT parameter in the IODEVICE macro instruction used in generating the system. Also, check for program errors that could have improperly modified control information. Correct the error, and execute the job step again.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

094 Explanation: The error occurred during execution of a BTAM OPEN macro instruction.

An OPEN routine found an invalid or unsupported optional feature or mode of operation specified in the unit control block (UCB) for the device allocated to the data control block (DCB) being opened.

Programmer Response: Check for improper specification of the FEATURE parameter in the IODEVICE macro instruction used in generating the system. Also, check for program errors that could have improperly modified control information. Correct the error, and execute the job step again.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

095 Explanation: The error occurred during execution of a BTAM OPEN macro instruction.

An OPEN routine found that the lines allocated to the line group did not have identical terminal types and/or optional features.

Programmer Response: Determine which line group contains different terminals and redefine its lines through DD statements or a new system generation.

Problem Determination: Table I, items 1, 3, 5a, 29.

096 Explanation: The error occurred during execution of a BTAM OPEN macro instruction.

An OPEN routine found that dynamic buffer allocation had been specified in the DCBBFTEK field of the data control block (DCB). However, the OPEN routine could not dynamically allocate buffers because the data control block specified neither the address of a buffer pool control block (in the DCBBUFCB field) nor the number and length of the buffers (in the DCBBUFNO and DCBBUFL fields).

Programmer Response: Correct the error by (1) providing a buffer pool and specifying the address of its control block in the DCBBUFCB field, (2) specifying the number and length of the buffers in the DCBBUFNO and DCBBUFL fields, or (3) handling buffering in the program and deleting the BFTEK=D operand in the DCB macro instruction or DCB parameter of the DD statement. Then execute the job step again.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

097 Explanation: The error occurred during execution of a BTAM OPEN macro instruction.

The open routine required an additional entry in the device I/O directory; however, the directory was already full. Since the last system start, the maximum number of device types have already been opened. Normally, the maximum number of device types is 16.

Programmer Response: Additional space in the device I/O directory can be provided by changing one statement in the Read/Write routine. The statement following the one labeled IOD must be changed. The duplication factor must be increased to correspond to the number of different device types being used. The new Read/Write routine must be reassembled and link edited to SVCLIB with RENT, NE, and DC as parameters. The IEHIOSUP program must then be executed.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

098 Explanation: The error occurred during execution of a BTAM OPEN macro instruction. Dual Communication Interface B or Dual Code Feature B was specified. However, the transmission control unit was not a 2701, the transmission control unit was not the Dual Communication Interface, or the Dual Code Feature was not specified in the unit control block (UCB).

Programmer Response: Probable user error. Correct program errors and execute the job step again.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

0A0 Explanation: The error occurred during execution of a QTAM OPEN macro instruction. The DCBTRMAD field in the data control block (DCB) had not been filled before the system attempted to open the block. (Register 2

contains the address of the data control block in error.)

System Action: The system terminated the task, but did not produce a dump.

Programmer Response: Reassemble the program, specifying the TRMAD parameter in the DCB macro instruction or filling the DCBTRMAD field in the data control block before the OPEN macro instruction is executed. Then execute the job step again.

Problem Determination: Table I, items 3, 15, 29.

0A1 Explanation: The error occurred during execution of a QTAM OPEN macro instruction that specified the data control block (DCB) for the main storage-process queue.

The DCBSOWA field in the data control block had not been filled before the system attempted to open the block. (Register 2 contains the address of the data control block in error.)

System Action: The system terminated the task, but did not produce a dump.

Programmer Response: Reassemble the program, specifying the SOWA parameter in the DCB macro instruction or filling the DCBSOWA field in the data control block before the OPEN macro instruction is executed. Then execute the job step again.

Problem Determination: Table I, items 3, 15, 29.

0A2 Explanation: The error occurred during execution of a QTAM OPEN macro instruction that specified the data control block (DCB) for the main storage-process queue.

The data definition name specified in the name field of the DD statement or as an entry in the terminal table is not the name of the process entry in the terminal table. (Register 2 contains the address of the data control block in error.)

System Action: The system terminated the task, but did not produce a dump.

Programmer Response: Reassemble the program, specifying the correct data definition name in the DD statement or terminal table. Then execute the job step again.

Problem Determination: Table I, items 3, 15, 29.

0A3 Explanation: The error occurred during execution of the QTAM message control program.

QTAM used all available space in the message queues data set.

Programmer Response: Execute the job again.

Problem Determination: Table I, items 3, 15, 29.

0A4 Explanation: The error occurred in using the checkpoint data set during QTAM processing.

The contents of register 15 indicate the nature of the error:

Register 15
Contents in
Hexadecimal

	<u>Interpretation</u>
04	The error occurred during an attempt to open the checkpoint data set. Insufficient space was allocated for the data set.
08	An uncorrectable input/output error occurred during an attempt either to set up the format of the checkpoint data set or to close the checkpoint data set.

Programmer Response: If insufficient space was allocated for the data set, increase the size of the SPACE parameter on the DD statement describing the checkpoint data set. Then execute the job step again.

Problem Determination: If an uncorrectable input/output error occurred, see Table I, items 3, 15, 29.

0A5 Explanation: The error occurred during execution of a QTAM OPEN macro instruction issued by a message processing program.

The open routine attempted to open a data control block (DCB) for a main-storage process queue or a main-storage destination queue that had previously been opened. (Register 2 contains the address of the data control block in error.)

System Action: The message processing program was terminated with a dump.

Programmer Response: Make sure that a message processing program does not attempt to open a data control block for a main storage queue which had previously been opened either by itself or by another message processing program.

Problem Determination: Table I, items 19, 29. Save the message processing program listings.

0A6 Explanation: The error occurred during execution of (1) a QTAM OPEN macro instruction or (2) a QTAM CLOSE macro instruction.

This error condition occurred for either of 2 reasons:

- In case (1), the data control block (DCB) for the direct access message queues data set was opened after a data control block for another QTAM data set was opened.
- In case (2), the data control block for the direct access message queues data set was closed while a data control block for a main-storage process queue or a main-storage destination queue was still open.

System Action: Either the message control program or the message processing program was terminated with a dump.

Programmer Response: The error, in case (1), can be corrected by one of the following:

- Correcting an invalid DD statement for the direct access device.
- Changing the message control program to open the data control block for the direct access message queues data set before opening any other data control block in that program.
- Opening the data control block for the direct access message queues data set before any message processing program opens any QTAM data control block. Then execute the job step again.

The error, in case (2), can be corrected by closing all the data control blocks in the message processing programs before closing the data control block for the direct access message queues data set in the message control program. Then execute the job step again.

Problem Determination: Table I, items 15, 16, 29.

0A7 Explanation: The error occurred during execution of a QTAM OPEN macro instruction:

- The data control block (DCB) for the checkpoint data set was opened before the data control block for the direct access message queues data set was opened.
- An uncorrectable disk error occurred when rewriting canceled header labels on the disk as part of the restart function.

System Action: The message control program was terminated with a dump.

Programmer Response: In the first case, correct an invalid DD statement for the direct access devices or change the message control program to open the data control block for the direct access message queues data set before opening the data control block for the checkpoint data set. Then execute the job step again.

Problem Determination: Table I, items 18, 29.

0B0 Explanation: An uncorrectable input/output error occurred when the job scheduler attempted to read from or write in the SYS1.SYSJOBQE data set on a direct access device.

Possibly, the SYS1.SYSJOBQE data set resided on a bad track.

System Action: The system terminated the task, but did not produce a dump.

Programmer Response: Use another volume or change units.

Problem Determination: Table I, items 2, 8a, 29.

0Cx Explanation: A program interruption occurred during execution of any instruction other than those listed under completion codes 0F1 and 0F2. When the interruption occurred, the program had not specified a routine to handle this type of program interruption.

The last digit of this completion code is a hexadecimal number that indicates the cause of the program interruption:

<u>Last Digit</u>	<u>Program Interruption Cause</u>
0	<u>Imprecise or multiple-imprecise program interruption:</u> on the Model 91 or the Model 195, a program exception (or series of program exceptions) was detected during execution of an instruction that cannot be precisely identified by the instruction address in the current program status word (PSW). (The instruction-length code is 0.)
1	<u>Operation exception:</u> an operation code is not assigned or the assigned operation is not available on the particular model. (The operation is suppressed. The instruction-length code is 1, 2, or 3.)
2	<u>Privileged-operation exception:</u> a privileged operation is encountered in the problem state. (The operation is suppressed. The instruction-length code is 1 or 2.)
3	<u>Execute exception:</u> the subject instruction of EXECUTE is another EXECUTE. (The operation is suppressed. The instruction-length code is 2.)
4	<u>Protection exception:</u> the key of an instruction halfword or an operand in storage does not match the protection key in the PSW. (The operation is suppressed on a store violation, except in the case of STORE MULTIPLE, READ DIRECT, TEST AND SET, and variable-length operations, which are terminated. Except for EXECUTE, which is suppressed, the operation is terminated on a fetch violation. The instruction-length code is 0, 2, or 3.)
5	<u>Addressing exception:</u> an address specifies any part of data, an instruction, or a control word outside the available storage for the particular installation. (In most cases, the operation is terminated for an invalid data address. Data in storage remain unchanged, except when designated by valid addresses. In a few cases, an invalid data address causes the instruction to be suppressed - AND (NI), EXCLUSIVE OR (XI), OR (OI), MOVE (MVI), CONVERT TO DECIMAL, DIAGNOSE, EXECUTE, and certain store operations (ST, STC, STH, STD, and

STE). The operation is suppressed for an invalid instruction address. The instruction-length code normally is 1, 2, or 3; but may be 0 in the case of a data address.)

6 Specification exception: one of the following occurred:

- A data, instruction, or control-word address does not specify an integral boundary for the unit of information.
- The R_1 field of an instruction specifies an odd register address for a pair of general registers that contains a 64-bit operand.
- A floating-point register address other than 0, 2, 4, or 6 is specified.
- The multiplier or divisor in decimal arithmetic exceeds 15 digits and sign.
- The first operand field is shorter than or equal to the second operand field in decimal multiplication or division.
- The block address specified in SET STORAGE KEY or INSERT STORAGE KEY has the four low-order bits not all zero.
- A PSW with a nonzero protection key is encountered when protection is not installed.

(The operation is suppressed. The instruction-length code is 1, 2, or 3.)

7 Data exception: one of the following occurred:

- The sign or digit codes of operands in decimal arithmetic or editing operations or in CONVERT TO BINARY are incorrect.
- Fields in decimal arithmetic overlap incorrectly.
- The decimal multiplicand has too many high-order significant digits.

(The operation is terminated. The instruction-length code is 2 or 3.)

8 Fixed-point-overflow exception: a high-order carry occurs or high-order significant bits are lost in fixed-point add, subtract, shift, or sign-control operations.

(The operation is completed by ignoring the information placed outside the register. The interruption may be masked by PSW bit 36. The instruction-length code is 1 or 2.)

9 Fixed-point-divide exception: a quotient exceeds the register size in fixed-point division, including division by zero, or the result of CONVERT TO BINARY exceeds 31 bits.

(Division is suppressed. Conversion is completed by ignoring the information placed outside the

register. The instruction-length code is 1 or 2.)

A Decimal-overflow exception: the destination field is too small to contain the result field in a decimal operation.

(The operation is completed by ignoring the overflow information. The interruption may be masked by PSW bit 37. The instruction-length code is 3.)

B Decimal-divide exception: a quotient exceeds the specified data field size.

(The operation is suppressed. The instruction-length code is 3.)

C Exponent-overflow exception: the result characteristic in floating-point addition, subtraction, multiplication, or division exceeds 127 and the result fraction is not zero.

(The operation is completed. The fraction is normalized, and the sign and fraction of the result remain correct. The result characteristic is made 128 smaller than the correct characteristic. The instruction-length code is 1 or 2.)

D Exponent-underflow exception: the result characteristic in floating-point addition, subtraction, multiplication, halving, or division is less than zero and the result fraction is not zero.

(The operation is completed. The setting of the exponent-underflow mask (PSW bit 38) affects the results of the operation. When the mask bit is zero, the sign, characteristic, and fraction are set to zero, making the result a true zero. When the mask bit is one, the fraction is normalized, the characteristic is made 128 larger than the correct characteristic, and the sign and fraction remain correct. The instruction-length code is 1 or 2.)

E Significance exception: the result of a floating-point addition or subtraction has an all-zero fraction.

(The operation is completed. The interruption may be masked by PSW bit 39. The manner in which the operation is completed is determined by the mask bit. The instruction-length code is 1 or 2.)

F Floating-point-divide exception: division by a floating-point number with zero fraction is attempted.

(The operation is suppressed. The instruction-length code is 1 or 2.)

If bit 15 of the old program PSW (PSW at entry to ABEND) is on, the problem program had control when the interruption occurred. The correct register contents are reflected under the heading "REGS AT ENTRY TO ABEND" in an ABEND/SNAP dump. In a stand-alone dump, register contents can be found in the register save area for ABEND's SVRB.

Programmer Response: Probable user error. Determine if the problem program or control program was in error. If the problem program contained an error, correct it and execute the job step again.

Problem Determination: Table I, items 5a, 16, 23, 29.

OF1 Explanation: A program interruption occurred during execution of an instruction in the input/output interruption handler of the control program. The applicable program status word (PSW) can be found at hexadecimal location 28. (In systems with MFT, this program status word is valid only if the first four digits are 0004.)

The interruption was caused by the problem program if:

- An access method routine in the problem program storage area was overlaid.
- An input/output block (IOB), data control block (DCB), or data extent block (DEB) was modified after an EXCP macro instruction was issued, but prior to the completion of an event.

Programmer Response: Determine if the parameters supplied by the problem program were incorrect or if the computer generated an incorrect address. If incorrect parameters were supplied, correct them and execute the job step again.

Problem Determination: Table I, items 5a, 16, 23, 29. Table II, Format 1: trace option - TRACE=IO.

OF2 Explanation: A program interruption occurred during execution of an instruction in a Type I SVC routine. Probably, the interruption was caused by incorrect parameters passed to the Type I SVC routine.

Programmer Response: Probable user error. Determine if the parameters supplied by the problem program were incorrect or if an SVC routine was added incorrectly to the control program.

Problem Determination: Table I, items 1, 5a, 16, 23, 29. If a DAR dump was produced, have it available. Table II, Format 1: trace option - TRACE=SVC.

OF3 Explanation: A machine-check interruption occurred. Either system environment recording routine SER1 or MCH was specified during system generation. The control program was able to abnormally terminate the job step after this machine-check interruption and continue processing with other job steps.

System Action: The system terminated the job step, but did not produce a dump.

Programmer Response: Probable hardware error. If the data on external storage devices is still valid, execute the job step again.

Problem Determination: Table I, items 2, 18, 30.

OF5 Explanation: A program interruption occurred while loading the transient area for a type 3 or 4 SVC. Probably, the interruption was caused by invalid parameters in the work area used to load the SVC.

Programmer Response: Probable user error. Ensure that the parameters in the work area, which resides in unprotected main storage, have not been incorrectly modified by a program in the same partition. After making corrections, execute the job step again.

Problem Determination: Table I, items 5a, 16, 23, 29.

100 Explanation: The control program found that a device to be used was not operational.

Programmer Response: If the device was taken offline, the device should be varied online or another device used. Then the job step should be executed again.

If a device was specified that was not operational, an unallocated device should be specified in the UNIT parameter of the DD statement describing the data set to be processed. Then the job should be executed again. Otherwise, or if a permanent input/output error is indicated, rerun the job.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

101 Explanation: The error occurred during execution of a WAIT macro instruction.

The problem program specified more events than there were event control blocks (ECB).

Programmer Response: Probable user error. Change the number of events specified so that it is less than or equal to the number of event control blocks. If the specification was correct, make sure it was not incorrectly modified. Correct the error, and execute the job step again.

Problem Determination: Table I, items 1, 3, 5b, 15, 29.

102 Explanation: The error occurred during execution of a POST macro instruction.

The control program found an invalid event control block (ECB) address.

Programmer Response: Probable user error. Make sure that the event control block address specified is a valid main storage address and that it was not incorrectly modified.

For a system with the storage protection feature, make sure that the event control block address is in the same protection area as the task waiting for the block to be posted and the task attempting to post the block. Correct the error and execute the job step again.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

- 103 Explanation: The error occurred when a task attempted to terminate normally with a RETURN macro instruction or a branch to the return address in register 14. The ATTACH macro instruction that initiated the task specified that an event control block (ECB) should be posted at task termination.

The control program found one of the following:

- The specified event control block was already posted.
- The request block (RB) address in the event control block was invalid.

Programmer Response: Probable user error. Correct program errors that incorrectly modified the event control block. Such an error could be a POST macro instruction that erroneously specified the event control block used to indicate task termination. Recompile and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 104 Explanation: The error occurred during the execution of a GETMAIN macro instruction for a program operating in the supervisor mode. The program requested more bytes of main storage from a local system queue area than were available.

Programmer Response: Probable user error. If this code occurs frequently, installation action is needed to increase the space allowed for a local system queue area. More local system queue area in the TSO user region should be specified at START TS or by using the MODIFY TS command for the TSO region start.

Problem Determination: Table I, items 2, 29.

- 106 Explanation: The error occurred during execution of a LINK, LOAD, ATTACH, or XCTL macro instruction.

An error was detected by the control program when it attempted to fetch the requested program into main storage.

Technical Information: The contents of register 15 indicate the nature of the error:

Register 15
Contents in
Hexadecimal

Interpretation

C In a system with MVT, the control program found that the scatter data placed by the linkage editor in a table in the load module was invalid.

- D In a system with MFT, the control program found an invalid record type in the load module.
- E In any system, the control program found an invalid address in the load module.
- F In any system, an uncorrectable input/output error occurred. At the time of abnormal termination, the contents of general purpose register 6 plus X'400' is the address of the IOB ECB, the post code of which may prove helpful in isolating the problem. (For discussion of the post codes see IBM System/360 Operating System: Input/Output Supervisor, Program Logic Manual, GY28-6616.) Note: the storage area related to the IOB ECB may be free unless the dump is taken immediately after the ABEND macro instruction is issued.

Programmer Response: If register 15 contains a X'C', process the program by the linkage editor again, and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29. Table II, Format 1: trace option - TRACE=SYS.

If register 15 contains either a X'D' or X'E', it is a probable user error. Make sure that the load request in the problem was specified correctly and was not incorrectly modified. After making corrections, execute the job step again.

Problem Determination: Table I, items 1, 5a, 10c, 29. Table II, Format 1: trace option - TRACE=SYS.

If register 15 contains a X'F', resubmit the job.

Problem Determination: Table I, items 30. Table II, Format 1: trace option - TRACE=IO.

- 10A Explanation: The error occurred during the execution of a GETMAIN macro instruction for a program operating in the supervisor mode. The program requested more bytes of main storage from a local system queue area than were available.

Programmer Response: Probable user error. If this code occurs frequently, installation action is needed to increase the space allowed for a local system queue area. More local system queue area in the TSO user region should be specified at the START TS or by using the MODIFY TS command for the TSO user region start.

Problem Determination: Table I, items 2, 29.

- 113 Explanation: The error occurred during execution of an OPEN macro instruction or an OPEN macro instruction with a TYPE=J operand. This system completion code is accompanied by message IEC142I. Refer to the explanation of message IEC142I in this publication for complete information about the task that was

terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC142I.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

- 117 Explanation: The error occurred during execution of a BSAM CLOSE macro instruction with a TYPE=T operand. This system completion code is accompanied by message IEC218I. Refer to the explanation of message IEC218I in this publication for complete information of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC218I.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

- 122 Explanation: The operator canceled the job and requested a dump. The job may have been canceled because it appeared to be in a loop or because it was waiting for resources that were not immediately available (e.g., direct access space or devices). Perhaps the job was canceled to correct a system interlock condition (e.g., two tasks enqueued on a resource without an intervening dequeue), or the job may have violated a procedure established for your installation. There are many reasons why an operator might cancel a job. There may be nothing wrong with your program.

System Action: The system terminates the job and produces a dump to the data set described by the SYSABEND or SYSUDUMP DD statement in the canceled job step.

Programmer Response: Find out why the operator canceled your job, make any necessary corrections, and resubmit the job.

Problem Determination: Table I, items 1, 2, 5a or b, 16, 23, 29.

- 128 Explanation: The error was detected during execution of an EXTRACT macro instruction.

The address of the list in which the control program was to store the task control block (TCB) fields was invalid. The beginning address for the list did not define a fullword boundary, or the list did not begin and end within the storage assigned to the job step. (The beginning address of the list is specified in the first operand of the macro instruction; the length of the list is determined by the number of fields requested.)

Programmer Response: Probable user error. Determine if the first operand of the macro instruction was specified correctly or if program errors had incorrectly modified the EXTRACT macro-expansion. After making corrections, recompile and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 12A Explanation: The error was detected during execution of an ATTACH macro instruction.

In a GSPV or GSPL operand, the macro instruction specified that a subpool was to be given to the subtask being created. The attaching task owned the subpool, but had previously shared it with other subtasks through SHSPV and/or SHSPL operands. A task is not permitted to give an owned subpool to a subtask if it is sharing the subpool with one or more other subtasks.

Programmer Response: Probable user error. Change the ATTACH macro instruction to specify the subpool in an SHSPV or SHSPL operand. Recompile and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 12C Explanation: The error was detected during execution of a CHAP macro instruction.

The address of the task control block (TCB) for the subtask whose priority was to be changed was invalid. This address was specified in the second operand of the CHAP macro instruction. The address was invalid for one of the following reasons:

- It was not a valid TCB address.
- The valid task control block at the address was not associated with a subtask of the task issuing the macro instruction.
- It was not a multiple of 4.
- The valid task has terminated.

Programmer Response: Probable user error. Change the address specification and ensure that it and the task control block were not incorrectly modified by the problem program. Recompile and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 12D Explanation: The error occurred during execution of an overlay program.

The overlay supervisor found that words 3 and 4 of the segment table were incorrect.

Programmer Response: Probable user error. Check for program errors that caused the segment table to be incorrectly modified. Correct the program, linkage edit, and execute the job step again.

Problem Determination: Table I, items 1, 5a, 9, 29.

- 130 Explanation: The error occurred during execution of a DEQ macro instruction.

The DEQ macro instruction specified a resource not previously specified by an ENQ macro instruction under the same task. That is, the program had not requested control of a resource it was attempting to release. The DEQ macro instruction did not contain a RET=HAVE operand.

Programmer Response: Probable user error. Check the DEQ macro instruction for incorrect qname or rname operands, or specify RET=HAVE in the DEQ macro instruction, or add an ENQ macro instruction before the DEQ macro instruction, or delete the DEQ macro instruction. Recompile and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 137 Explanation: The error occurred at an end-of-volume on a magnetic tape. This system completion code is accompanied by message IEC022I. Refer to the explanation of message IEC022I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC022I.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

- 138 Explanation: The error occurred during execution of an ENQ macro instruction.

Two ENQ macro instructions were issued for the same resource in the same task without an intervening DEQ macro instruction. The second ENQ macro instruction did not specify TEST, USE, or HAVE in its RET operand.

Programmer Response: Probable user error. Specify RET=TEST, RET=USE, or RET=HAVE in the second ENQ macro instruction, or add a DEQ macro instruction between the 2 ENQ macro instructions, or delete one of the ENQ macro instructions. Recompile and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 13E Explanation: The error occurred during execution of a DETACH macro instruction.

The macro instruction specified the address of a task control block (TCB) for a subtask that had not yet terminated.

System Action: The system did not produce a dump.

Programmer Response: Probable user error. Determine if the macro instruction correctly specified the address or if program errors incorrectly modified it.

If it was correctly specified and was not incorrectly modified, add a WAIT macro instruction to the program immediately before the DETACH macro instruction. This WAIT macro instruction should specify the event control block (ECB) established by the ECB operand of the ATTACH macro instruction that creates the subtask.

After making corrections, recompile and execute the job step again.

Problem Determination: Table I, items 1, 16, 23, 29.

- 13F Explanation: An error occurred during execution of a checkpoint restart.

System Action: The system did not produce a dump.

Programmer Response: Respond as indicated by message IHJ007I, which appears on the console.

- 140 Explanation: The error occurred during execution of a RDJFCB macro instruction. This system completion code is accompanied by message IEC154I. Refer to the explanation of message IEC154I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC154I.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

- 14F Explanation: The error occurred during execution of the STATUS macro instruction.

The routine attempted to execute the STATUS macro instruction for other than the STOP or START function and was not key zero.

Programmer Response: Probable user error. Correct the program errors making sure that the STATUS macro is not being used for other than the STOP or START function. Then execute the job step again.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

- 155 Explanation: An SVC 85, which is authorized for use by Dynamic Device Reconfiguration (DDR) only, has been illegally issued by a user's task. DDR has abnormally terminated the user's task.

Programmer Response: Probable user error. Make sure that no program except DDR issues SVC 85.

Problem Determination: Table I, items 5a, 16, 23, 29.

- 160 Explanation: The error occurred during the processing of a user attention exit for a time sharing task. The control program's record of the attention exit routine was invalid.

System Action: The job step was abnormally terminated.

Programmer Response: Resubmit the job. Abnormal termination of the job step may be intercepted by specifying STAE exit and retry routines to reestablish the failing task. The STAE macro instruction must be reissued in either the STAE exit or retry routines to reestablish to user exit routine to handle attention interruptions.

Problem Determination: Table I, items 1, 2, 5a, 7c, 29. Also, retain the terminal listing or record what is currently displayed on the graphics device. Make sure that a TSO Dump DD statement was included for failing start TSO procedures. Execute the IMDPRDMP service aid, specifying TSO options, after restarting the system. The input to IMDPRDMP is the dump tape from TSO Dump. Save the formatted output.

- 16D **Explanation:** The error occurred during execution of one of the extended SVC routers (ESR), SVCs 109, 116, and 117. An invalid ESR code was detected in register 15.

This error is the result of:

- The function invoked not being included in the system.
- The BSR code passed to SVC 109, 116, or 117 having no related function.

Programmer Response: In the first case, make sure that the item being invoked has been included in the system. In the second case, correct the ESR code, and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 1B0 **Explanation:** The system conversion routine has encountered an invalid TTR for an address in the SYS1.SYSJOBQE data set.

System Action: The system terminated the task without allowing access to the SYS1.SYSJOBQE data set.

Programmer Response: Attempt to execute the failing job again. At the next convenient time the system should be restarted and the queue reformatted.

Problem Determination: Table I, items 2, 8a, 16, 29.

- 200 **Explanation:** The error was detected when an input/output operation was requested and the storage protection keys of the input/output block, the event control block and the data control block were not the same as the protection key field in the Data extent block. (This condition is checked for systems with MVT only.)

If an abnormal termination dump with a trace table is available, the address of the applicable input/output block is:

- In register 1 of the EXCP (SVC 0) most recently issued before the abnormal termination occurred.
- In register 2 in the section of the dump labeled REGS AT ENTRY TO ABEND.

Programmer Response: Probable user error. Verify that the blocks were not incorrectly modified by the problem program. If the EXCP access method is being used, make sure that the input/output block and the event control block are correctly built.

After making corrections, execute the job step again.

Problem Determination: Table I, items 1, 3, 5b, 15, 19, 29.

- 201 **Explanation:** The error occurred during execution of a WAIT macro instruction.

The macro-expansion contained an invalid event control block (ECB) address.

Programmer Response: Probable user error. Make sure that the event control block address specified is a valid main storage address and that it was not incorrectly modified.

For systems with the storage protection feature, make sure that the event control block address is in the same protection area as the task waiting for the block to be posted.

Correct the error and execute the job step again.

Problem Determination: Table I, items 1, 3, 5b, 15, 19, 29.

- 202 **Explanation:** The error occurred during execution of a POST macro instruction.

The control program found an invalid request block (RB) address in the 3 low-order bytes of the event control block (ECB) specified by the problem program.

The address of the request block is placed in the event control block during execution of a WAIT macro instruction. This address must remain in the event control block until a POST macro instruction places a post code or zeros in the event control block. The request block is a control block used for internal purposes by the control program.

Programmer Response: Probable user error. Make sure that the contents of the event control block were not modified after the WAIT macro instruction and before the POST macro instruction.

For systems with the storage protection feature, make sure that the event control block and the request block are in the same protection area as the task waiting for the block to be posted and the task attempting to post the block.

Correct the error and execute the job step again.

Problem Determination: Table I, items 1, 3, 5a, 15, 19, 29.

- 207 **Explanation:** The error occurred during execution of an asynchronous exit routine.

The routine attempted to execute an XCTL macro instruction. Such a routine can terminate only by issuing a RETURN macro instruction.

Programmer Response: Probable user error. Rewrite the asynchronous exit routine to terminate correctly. Then execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 20A Explanation: While freeing or replacing a region, the main storage supervisor found that storage was still allocated to the requesting task.

Programmer Response: Rerun the job.

Problem Determination: Table I, items 1, 5a, 16, 23, 29. Table II, Format 2: trace option keyword(s) - TRACE=SVCP, event keyword(s) - SVC=0A,END.

- 213 Explanation: The error occurred during execution of an OPEN macro instruction for a data set on a direct access device. This system completion code is accompanied by message IEC143I. Refer to the explanation of message IEC143I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC143I.

Problem Determination: Table I, items 1, 3, 5a, 15, 25b, 29.

- 214 Explanation: The error occurred during execution of a CLOSE macro instruction for a data set on magnetic tape. This system completion code is accompanied by message IEC210I. Refer to the explanation of message IEC210I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC210I.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

- 217 Explanation: The error occurred during execution of a BSAM CLOSE macro instruction with a TYPE=T operand. This system completion code is accompanied by message IEC219I. Refer to the explanation of message IEC219I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC219I.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

- 222 Explanation: The operator canceled the job. The job may have been canceled because it appeared to be in a loop or because it was waiting for resources that were not immediately available (e.g., direct access space or devices). Perhaps the job was canceled to correct a system interlock condition (e.g., two tasks enqueued on a resource without an intervening dequeue). Or

the job may have violated a procedure established for your installation. There are many reasons why an operator might cancel a job. There may be nothing wrong with your program.

System Action: The system terminates the job.

Programmer Response: Find out why the operator canceled your job, make any necessary corrections.

Problem Determination: Table I, items 1, 2, 5a or b, 16, 23, 29. Rerun the job making sure the operator enters the command CANCEL jobname, DUMP.

- 228 Explanation: The error was detected during execution of an EXTRACT macro instruction.

The location of the input parameter list was invalid. (The input parameter list, ordinarily created through expansion of the standard or MF=L form of the EXTRACT macro instruction, describes the function to be performed.) The starting address provided indicated that the parameter list did not begin either on a fullword boundary or within the area of storage assigned to the job step.

Programmer Response: Probable user error. Correct the program so that the address of the input parameter list is valid, recompile and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 22A Explanation: The error was detected during execution of an ATTACH macro instruction.

A GSPV, GSPL, SHSPV, or SHSPL operand specified a subpool number greater than 127. The subpools above 127, that is, subpools 128 through 255, are supervisor subpools. A problem program is not permitted to use these subpools.

Programmer Response: Probable user error. Change the macro instruction to specify a problem program subpool (1 through 127). If the macro instruction had been specified correctly, check for program errors that incorrectly modified it. Recompile and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29. Table II, Format 2: trace option keyword(s) - TRACE=SVCP, event keyword(s) - SVC=42,END.

- 22C Explanation: The error was detected during execution of a CHAP macro instruction.

The address of the task control block (TCB) for the subtask whose priority was to be changed was invalid. This address was specified in the second operand of the CHAP macro instruction.

The address was invalid for one of the following reasons:

- It was not a multiple of 4.

- It was higher than the highest address in main storage.
- It was not in storage assigned to the job step.

Programmer Response: Probable user error. Change the CHAP macro instruction to specify a valid pointer to the task control block, and ensure that the specification was not incorrectly modified by the problem program. Recompile and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29. Table II, Format 2: trace option keyword(s) - TRACE=SVCP, event keyword(s) - SVC=44,END.

- 22D Explanation: The error occurred during execution of an overlay program.

The overlay supervisor found an invalid address in the segment table or the entry table. The address pointed to a location outside the boundaries of the main storage assigned to the job step.

Programmer Response: Probable user error. Check for program errors that caused the segment table or entry table to be incorrectly modified. Correct the program, linkage edit, and execute the job step again.

Problem Determination: Table I, items 1, 5a, 9, 16, 29.

- 230 Explanation: The error occurred during execution of a DEQ macro instruction.

An invalid length was specified for the name length representing a resource. The length was specified in the rname length operand of the DEQ macro instruction, was supplied by the assembler program, or was contained in the byte immediately preceding the resource name.

Programmer Response: Probable user error. Correct the invalid macro instruction or the program errors that incorrectly modified the length. Recompile and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 237 Explanation: The error occurred at an end-of-volume. This system completion code is accompanied by message IEC023I. Refer to the explanation of message IEC023I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC023I.

Problem Determination: Table I, items 1, 3, 5a, 15, 19, 29.

- 238 Explanation: The error occurred during execution of an ENQ macro instruction. An invalid length was specified for the name representing the resource. This length was specified in the rname length operand of the ENQ macro instruction, was supplied by the assembler program, or was contained in the byte immediately preceding the resource name.

Programmer Response: Probable user error. Correct the invalid macro instruction or the program errors that incorrectly modified the length. Recompile and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 23E Explanation: The error was detected during execution of a DETACH macro instruction.

The address of the task control block (TCB) for the subtask to be detached was invalid. This address was specified in the DETACH macro instruction.

The address was invalid for one of the following reasons:

- It was not a multiple of 4.
- It was higher than the highest address in main storage.
- It was not in storage assigned to the job step.
- It was not a valid TCB address.
- The valid task control block was not for a subtask of the task issuing the macro instruction.

Programmer Response: Probable user error. Change the DETACH macro instruction to specify a valid address of the TCB, and ensure that it was not incorrectly modified by the problem program. Recompile and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 240 Explanation: The error occurred during execution of a RDJFCB macro instruction. This system completion code is accompanied by message IEC155I. Refer to the explanation of message IEC155I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC155I.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

2F3 Explanation: In systems with MFT or MVT, the job was being executed when system failure occurred. A system restart was performed; a system job queue entry for the job existed at the time of failure.

Programmer Response: If results of the job are unsatisfactory, resubmit the job or job steps, as desired.

2FE Explanation: A permanent input/output error occurred while attempting to rollin a job step.

System Action: The job step was abnormally terminated.

Programmer Response: Probable hardware error. Resubmit the job.

Problem Determination: Table I, items 1, 5a, 16, 23, 29. Table II, Format 1: trace option - TRACE=IO.

2FF Explanation: The job step was abnormally terminated at the request of User Appendage III (the request for ABEND appendage). No dump is produced.

Programmer Response: Rerun the job.

Problem Determination: Table I, items 1, 5a, 23, 29.

300 Explanation: The error was detected when an input/output operation was requested and the storage protection key of the data extent block was not zero (MVT) or not the same as the protection key field in the task control block; or the number of extents as found in the DEB is less than the number of extents as found in the M field of the IOB.

If an abnormal termination dump with a trace table is available, the address of the applicable input/output block is:

- In register 1 of the EXCP (SVC0) most recently issued before the abnormal termination occurred.
- In register 2 in the section of the dump labeled REGS AT ENTRY TO ABEND.

Programmer Response: Probable user error. Verify that the Data Control Block contains the address of the DEB. After making corrections, execute the job step again.

Problem Determination: Table I, items 1, 3, 5b, 15, 19, 29.

301 Explanation: The error occurred during execution of a WAIT macro instruction.

The macro instruction specified an event control block (ECB) whose wait flag was already on. This indicated that a previous WAIT macro instruction was already waiting for posting of the event control block.

Programmer Response: Probable user error. Change the problem program to eliminate a double wait on a single event. If no double

wait is found, make sure that the event control block was not incorrectly modified by the program. Then execute the job step again.

Problem Determination: Table I, items 1, 3, 5a, 15, 19, 29.

305 Explanation: The error occurred during execution of a FREEMAIN macro instruction:

- The specified subpool could not be found.
- The SP parameter was specified, but the main storage area to be released was not within the subpool specified.
- The SP parameter was not specified, but the main storage area to be released was not within subpool zero.
- The SP parameter was specified correctly, but the boundaries of the storage area to be freed were not completely described by a descriptor queue element (DQE).

Programmer Response: Probable user error. Determine if the A operand and the LV or LA operand specify an area within the subpool. If the area as specified is within the subpool, check for program errors that incorrectly modified the FREEMAIN macro-expansion. After making corrections, execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

308 Explanation: The error occurred during execution of a LOAD macro instruction.

A problem program specified a program to be loaded by an entry point whose location was given to the control program by an IDENTIFY macro instruction.

Programmer Response: Probable user error. Rewrite the problem program to name an entry point specified during linkage editing as a member name or alias. Then execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

30A Explanation: The error occurred during execution of an R-form FREEMAIN macro instruction:

- The SP=(0) parameter was specified, but the length in the three low-order bytes of register 0 was not zero.
- The specified subpool could not be found.
- The SP parameter was specified, but the main storage area to be released was not within the subpool specified.
- The SP parameter was not specified, but the main storage area to be released was not within subpool zero.
- The SP parameter was specified correctly, but the boundaries of the storage area to be freed were not completely described by a descriptor queue element (DQE).

Programmer Response: Probable user error. Determine if the A operand and LV operand specify an area within the subpool. If the area as specified is within the subpool, check for program errors that incorrectly modified the FREEMAIN macro-expansion. After

making corrections, execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 313 Explanation: The error occurred during execution of an OPEN macro instruction for a data set on a direct access device. This system completion code is accompanied by message IEC144I. Refer to the explanation of message IEC144I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC144I.

Problem Determination: Table I, items 1, 3, 5a, 15, 25b, 29.

- 314 Explanation: The error occurred during the execution of a CLOSE macro instruction for a data set on a direct access device. This system completion code is accompanied by message IEC211I. Refer to the explanation of message IEC211I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC211I.

Problem Determination: Table I, items 1, 3, 5a, 15, 25b, 29.

- 317 Explanation: The error occurred during execution of a BSAM CLOSE macro instruction with a TYPE=T operand for a data set on a direct access device. This system completion code is accompanied by message IEC220I. Refer to the explanation of message IEC220I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC220I.

Problem Determination: Table I, items 1, 3, 5a, 15, 25b, 29.

- 322 Explanation: Execution of a job, job step, or cataloged procedure step took longer than the time specified in:
- The TIME parameter of the EXEC or JOB statement.
 - The standard time limit specified in the cataloged procedure for the SYSIN reader, if the TIME parameter was not specified in the EXEC or JOB statement.

System Action: The system abnormally terminated the job, job step, procedure, or procedure step.

Programmer Response: Check for program errors, such as endless loops, that would cause the job step, procedure, or procedure step to take too long. Correct any such

errors. If no errors are found, specify a longer time in the TIME parameter. Then execute the job again.

Problem Determination: Table I, items 1, 5a, 7b, 26d, 29.

- 328 Explanation: The error was detected during execution of an EXTRACT macro instruction.

The task control block (TCB) specified in the second operand of the macro instruction was not for an immediate subtask of the task issuing the EXTRACT macro instruction.

Programmer Response: Probable user error. Change the EXTRACT macro instruction to specify a task control block for an immediate subtask. If the macro instruction was specified correctly, check for program errors that incorrectly modified the EXTRACT macro-expansion. After making corrections, recompile and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 32A Explanation: The error occurred during execution of an ATTACH macro instruction issued by a program executing in the supervisor state..

The requesting task attempted to give its job pack queue, which contained one or more active programs, to the newly created task. (A program is considered active if its contents directory entry (CDE) contains a use count greater than zero.)

Programmer Response: Probable user error. Ensure that the job pack queue is not given to the new task or that the job pack queue contains only contents directory entries with a use count of zero. Then execute the job step again.

Problem Determination: Table I, items 5a, 16, 23, 29. Table II, Format 2: trace option keyword(s) - TRACE=SVCP, event keyword(s) - SVC=42,END.

- 32D Explanation: The error occurred during execution of an overlay program.

A record of an incorrect length was found or an uncorrectable input/output error occurred in loading a segment from the library.

Programmer Response: Linkage edit the program again and execute the job step again.

Problem Determination: Table I, items 1, 5a, 9, 29.

- 330 Explanation: The error occurred during execution of a DEQ macro instruction.

The DEQ macro instruction was issued by a task in problem state and specified the reset-must-complete (RMC) option. This option can be specified only in supervisor state.

Programmer Response: Probable user error. Change the DEQ macro instruction so that reset-must-complete is not specified. Recompile and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 331 Explanation: The error occurred during execution of the TESTRAN interpreter with a program that was being tested.

Control was given to a TEST OPEN statement. The second operand of the statement did not specify an address in the problem program to which control could be returned.

System Action: The system terminated the task, but did not produce a dump.

Programmer Response: Probable user error. Provide the necessary address. Alternatively, prevent execution of this statement, and list the address in the OPTEST operand of another TEST OPEN statement. Then execute the job step again.

Problem Determination: Table I, items 1, 3, 4, 5b, 29.

- 337 Explanation: The error occurred when the end of a data set was reached. This system completion code is accompanied by message IEC024I. Refer to the explanation of message IEC024I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC024I.

Problem Determination: Table I, items 1, 3, 5b, 15, 21, 29.

- 338 Explanation: The error occurred during execution of an ENQ macro instruction.

The ENQ macro instruction was issued by a task in problem program state, and specified the set-must-complete (SMC) option. This option is valid only in the supervisor state.

Programmer Response: Probable user error. Change the ENQ macro instruction so that the set-must-complete option is not specified. Recompile and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 33E Explanation: A DETACH macro instruction specifying the STAE=YES operand has been issued by the originating task, but the specified subtask has not completed execution.

System Action: The subtask is abnormally terminated. If the STAE macro instruction had been issued by the subtask, the specified exit routine will be given control during abnormal termination processing. However, if the STAE exit routine specified a retry

routine, the retry routine will not be given control.

Programmer Response: Probable user error. Ensure that the DETACH macro instruction is not issued until the specified subtask has completed execution. This may be done by specifying the ECB operand in the ATTACH macro instruction that created the subtask, and issuing a WAIT macro instruction specifying this ECB before issuing the DETACH macro instruction.

After making corrections, recompile and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 400 Explanation: The error was detected when an input/output operation was requested and the DEBDCBAD field of the data extent block (DEB) did not contain the same data control block (DCB) address as the IOBDCBPT field of the input/output block (IOB).

The control program found that one of the blocks was incorrectly modified or, when using the EXCP access method, the programmer incorrectly built the input/output block or the event control block.

If an abnormal termination dump with a trace table is available, the address of the applicable input/output block is:

- In register 1 of the EXCP (SVC 0) most recently issued before the abnormal termination occurred.
- In register 2 in the section of the dump labeled REGS AT ENTRY TO ABEND.

Programmer Response: Probable user error. Verify that the blocks were not incorrectly modified by the problem program. If the EXCP access method is being used, make sure that the input/output block correctly built.

After making corrections, execute the job step again.

Problem Determination: Table I, items 1, 3, 5a, 15, 19, 29.

- 406 Explanation: The error occurred during execution of a LINK, ATTACH, or XCTL macro instruction.

This error condition occurred for either of 2 reasons:

- The requested program was marked by the linkage editor as "only loadable." The program was produced by a linkage editor execution for which the EXEC statement contained OL in the PARM parameter field.
- In systems with MFT, problem program specified a program to be loaded by an entry point whose location was given to the control program by an IDENTIFY macro instruction.

Programmer Response: Probable user error. Rewrite the problem program so that it specifies only loading, but not execution, of the "only loadable" program, or so that it names an entry point specified during linkage

editing as a member name or alias. Then recompile and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 40A Explanation: The error was detected during execution of an R-form FREEMAIN macro instruction.

The macro instruction specified the release of all subpool zero storage. The entire subpool zero cannot be released by problem programs, that is, programs with storage protection keys other than zero.

Programmer Response: Probable user error. If the FREEMAIN macro instruction was intended to release subpool zero, remove it from the program. The control program automatically releases subpool zero when a job step terminates.

If the FREEMAIN macro instruction was not intended to release subpool zero, correct the macro instruction or program errors that incorrectly modified it.

After making corrections, execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 413 Explanation: The error occurred during execution of an OPEN macro instruction for a data set on magnetic tape or on a direct access device. This system completion code is accompanied by message IEC145I. Refer to the explanation of message IEC145I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC145I.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

- 414 Explanation: The error occurred during execution of a CLOSE macro instruction for a data set on a direct access device. This system completion code is accompanied by message IEC212I. Refer to the explanation of message IEC212I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC212I.

Problem Determination: Table I, items 1, 3, 5a, 15, 25b, 29.

- 417 Explanation: The error occurred during execution of a BSAM CLOSE macro instruction with a TYPE=T operand for a data set on a direct access device. This system completion code is accompanied by message IEC221I. Refer to the explanation of message IEC221I in this publication for complete information

about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC221I.

Problem Determination: Table I, items 1, 3, 5a, 15, 25b, 29.

- 422 Explanation: The job required too much queue space in the SYS1.SYSJOBQE data set for initiation.

The space reserved for each initiator was specified either during system generation or in the t parameter of the reply to message IEF423A.

Programmer Response: Divide the steps of the terminated job into two or more jobs or, the next time the system is started, specify that (1) the format of the SYS1.SYSJOBQE data set be changed (F in the Q parameter of the SET command) and (2) a larger t parameter be used in the reply to message IEF423A.

Problem Determination: Table I, items 7ab, 8a, 17b, 29.

- 425 Explanation: The error occurred during execution of a SEGWT macro instruction in an overlay program.

The SEGWT macro instruction specified loading of an exclusive segment.

Programmer Response: Probable user error. Either combine the two exclusive segments into one segment, or reorganize the overlay structure so that the exclusive segments become inclusive. Then execute the job step again.

Problem Determination: Table I, items 1, 5a, 9, 29.

- 42A Explanation: The error was detected during execution of an ATTACH macro instruction.

The ECB operand specified an invalid address for the event control block (ECB) to be posted when the subtask terminates. The address was invalid for one of the following reasons:

- It was not on a fullword boundary.
- It was higher than the highest address in main storage.
- It was not in the storage assigned to the job step.

Programmer Response: Probable user error. Change the ATTACH macro instruction to specify the correct ECB, and ensure that the specification was not incorrectly modified by the problem program. Recompile and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 430 Explanation: The error occurred during execution of a DEQ macro instruction.

The control program found that the parameter list created from the macro instruction was invalid.

Programmer Response: Probable user error. Correct the DEQ macro instruction specification or the program errors that incorrectly modified the parameter list. Recompile and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 431 Explanation: The error occurred during execution of the TESTRAN interpreter with a program that was being tested.

The symbol table and control dictionaries of a program could not be read.

Programmer Response: Probable user error. Repeat the linkage editing of the program to recreate the symbol table and control dictionaries. Then execute the job step again.

Problem Determination: Table 1, items 1, 3, 4, 5b, 29.

- 437 Explanation: The error occurred at an end-of-volume. This system completion code is accompanied by message IEC025I. Refer to the explanation of message IEC025I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC025I.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

- 438 Explanation: The error occurred during execution of an ENQ macro instruction.

The control program found that the parameter list created from the macro instruction was invalid.

Programmer Response: Probable user error. Correct the specification of the macro instruction or the program errors that incorrectly modified the parameter list. Recompile and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 500 Explanation: The error was detected when an input/output operation was requested and the Data Extent Block did not contain the address of a valid unit control block, or the UCBID field of the unit control block (UCB), pointed to by the DEBUCBAD field of the data extent block did not contain hexadecimal FF.

The control program found that one of the blocks was incorrectly modified or, when using the EXCP access method, the programmer incorrectly built the input-output block or the event control block.

If an abnormal termination dump with a trace table is available, the address of the applicable input/output block is:

- In register 1 of the EXCP (SVCO) most recently issued before the abnormal termination occurred.
- In register 2 in the section of the dump labeled REGS AT ENTRY TO ABEND.

Programmer Response: Probable user error. Verify that the blocks were not incorrectly modified by the problem program. If the EXCP access method is being used, make sure that the input/output block and the event control block are correctly built.

After making corrections, execute the job step again.

Problem Determination: Table I, items 1, 3, 5b, 15, 19, 29.

- 504 Explanation: The error was detected during execution of a GETMAIN macro instruction that requested allocation of one or more areas of main storage. The macro instruction contained an LA operand (address of a list of lengths) and an A operand (address of a list of beginning addresses for the areas).

The length list and the address list occupied overlapping storage locations.

Programmer Response: Probable user error. Correct the macro instruction or program errors that incorrectly modified the parameter lists. Then execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 505 Explanation: The error was detected during execution of a FREEMAIN macro instruction that requested release of one or more areas of main storage. The macro instruction contained an LA operand (address of a list of lengths) and an A operand (address of a list of beginning addresses for the areas).

The length list and the address list occupied overlapping storage locations.

Programmer Response: Probable user error. Correct the macro instruction or program errors that incorrectly modified the parameters. Then execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 506 Explanation: The error occurred during execution of a LINK, XCTL, ATTACH, or LOAD macro instruction in an overlay program. If the requested program had been loaded, not enough main storage would have remained for the overlay supervisor.

Programmer Response: Probable user error. Reduce the size of the entire program or of the overlay segment. If this is not possible, change the program from an overlay program to a dynamically loaded program or donot execute the program with the TESTRAN

interpreter. Then recompile and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29. Table II, Format 1: trace option - TRACE=SYS.

- 513 Explanation: The error occurred during execution of an OPEN macro instruction for a data set on magnetic tape. This system completion code is accompanied by message IEC146I. Refer to the explanation of message IEC146I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC146I.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

- 514 Explanation: The error occurred during execution of a CLOSE macro instruction. This system completion code is usually accompanied by message IEC231I. Refer to the explanation of message IEC231I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC231I.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

- 522 Explanation: All of the tasks in a job step were in an SVC wait state for thirty consecutive minutes or, in systems with system management facilities, for the time specified in the JWT parameter.

The event control block (ECB) specified in the wait request was never posted. This could be the result of waiting on the wrong ECB or not posting the correct ECB.

Programmer Response: Correct any errors and execute the job step again. If no errors are found and a thirty minute wait is legitimate for that particular job step, specify TIME=1440 on the EXEC statement to bypass all job step timing.

Problem Determination: Table I, items 7ab, 29. Execute the IEBPTPCH utility program to list the reader procedure that was used for this job, if SMF is not being used and the TIME parameter was not specified on the EXEC statement.

- 52A Explanation: The error occurred during the execution of an ATTACH macro instruction. Although the STAI operand was not specified in this ATTACH macro instruction, a STAI operand had been specified for an ancestor task in the task tree structure. However, if this program is executing in a TSO environment, there was not sufficient Local System Queue Area available to propagate the STAI environment to the subtask specified by

this ATTACH macro instruction. If this program is not executing in a TSO environment, there was not sufficient System Queue Area to propagate the STAI environment.

System Action: The subtask is not attached, and the task that issued the ATTACH macro instruction is abnormally terminated.

Programmer Response: Notify the system programmer at the installation and resubmit the job.

Problem Determination: Table I, items 1, 2, 5a, 7a, 29. If the problem persists in a TSO environment, have the terminal sheet available.

- 530 Explanation: The error was detected during execution of a DEQ macro instruction.

A DEQ macro instruction was issued in an asynchronous exit routine for a resource previously enqueued by another routine in the same task. However, the task had not yet received control of the resource.

Programmer Response: Probable user error. Correct the program so that the DEQ macro instruction is issued only after the task has control of the resource. If possible, avoid issuing the DEQ macro instruction in the exit routine. Recompile and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 604 Explanation: The error occurred during execution of a GETMAIN macro instruction.

The control program found one of the following:

- An erroneous address or length was contained in a free queue element.
- The address in the A or LA operand specified a location outside the main storage assigned to the task, or was not a multiple of 4.
- The address of the parameter list for the macro instruction was erroneous. This address was in register 1.

Specifications for free areas are contained in the free area queue, which is composed of queue elements defining each free area; a queue element appears in the first 8 bytes of its free area.

Programmer Response: Probable user error. Check for program errors that incorrectly modified the free area queue, or the parameter list. Make sure that the address given by the A or LA operand was not incorrectly specified or modified. After making corrections, execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 605 Explanation: The error occurred during execution of a FREEMAIN macro instruction.

The control program found one of the following:

- An erroneous address or length was specified in a free queue element.
- The address in the A or LA operand specified a location outside the boundaries of the main storage assigned to the task, or was not a multiple of 4.
- The address of the parameter list for the macro instruction was erroneous. This address was in register 1.

Specifications for free areas are contained in the free area queue, which is composed of queue elements defining each free area; a queue element appears in the first 8 bytes of its free area.

Programmer Response: Probable user error. Check for program errors that incorrectly modified the free area queue or the parameter list. Make sure that the address given by the A or LA operand was not incorrectly specified or modified. After making corrections, execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 606 Explanation: The error occurred during execution of a LINK, XCTL, ATTACH, or LOAD macro instruction.

Not enough main storage was available to load the requested program.

Programmer Response: Probable user error. Reduce the size of the program or change it to an overlay program or on a system with MFT, increase the region size request on the EXEC statement. Then recompile and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 60A Explanation: The error occurred during execution of either an R-form FREEMAIN macro instruction or an R-form GETMAIN macro instruction.

The control program found one of the following:

- An invalid address or length was specified in a free queue element (FQE).
- The address of the parameter list was invalid.

Specifications for free areas are contained in the free area queue, which is composed of queue elements defining each free area; a queue element appears in the first 8 bytes of its free area.

Programmer Response: Probable user error. Check for program errors that incorrectly modify the free area queue. After making corrections, execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 613 Explanation: The error occurred during execution of an OPEN macro instruction for a data set on magnetic tape. This system

completion code is accompanied by message IEC147I. Refer to the explanation of message IEC147I in this publication for complete information about the job that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC147I.

Problem Determination: Table I, items 1, 3, 5a, 15, 29, 12

- 614 Explanation: The error occurred during execution of a CLOSE macro instruction for a data set on a direct access device. This system completion code is accompanied by message IEC214I. Refer to the explanation of message IEC214I in this publication for complete information about the job that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC214I.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

- 622 Explanation: Initiation of execution of a task entered from a TSO terminal was terminated for one of the following reasons:
1. The system encountered one of the following errors while constructing control blocks for TSO:
 - a. A GETMAIN macro instruction was not executed because not enough main storage was available.
 - b. A multiple-step procedure was found.
 - c. An OBTAIN macro instruction was not executed because the data set being sought did not exist.
 - d. The prompting task terminated abnormally.
 - e. An input/output error was encountered while reading the SYS1.SYSJOBQE data set.
 2. The operator issued a STOP TSO command.
 3. The terminal user signaled ATTN after the allocation process had completed.
 4. The user submitting the job disconnected his terminal from the system.

System Action: In cases 1 and 2, the system issued terminal messages that describe the error conditions.

Programmer Response: In the first case, respond to the terminal messages that accompany this termination.

- For case 1a, specify a larger region size and attempt to execute the job again.
- For case 1b and 1c, specify a different procedure or consult your system programmer. Attempt to execute the job again.
- For cases 1d and 1e, consult your system programmer.

In the second case, attempt to execute the job again when TSO is started.

In the third case, attempt to execute the job again, make sure that you do not signal ATTN inadvertently.

In the fourth case, attempt to execute the job again when the terminal is reconnected to the system.

In all cases, have the terminal sheet available or record the current display on the graphics device before calling IBM for programming support.

62A Explanation: The error occurred during execution of the ATTACH macro instruction in an MFT system with subtasking. The maximum number of tasks allowable already existed in the system when the ATTACH request was issued.

Technical Information: The maximum allowable number of tasks for a particular MFT system with subtasking is determined at system initialization, and depends on how much system queue area is available. The maximum number of tasks is recorded (in hexadecimal) in the CVTTSKS field in the Communications Vector Table (CVT). The addresses of all existing Task Control Blocks (TCBs) are contained in the TCB table whose starting address can be determined by adding 4 to the contents of the CVTIXAVL in the CVT.

Programmer Response: Probable user error. Determine whether all existing tasks are in fact required, then take one of these actions:

- If an excessive number of tasks was created unintentionally (for example, through a program loop), correct the problem program and resubmit the job.
- If all existing tasks are required and the maximum number of tasks for your system is less than 255, it may be possible to increase that value by restarting the system and making more system queue space available.
- If the maximum number of tasks cannot be increased or is already at its absolute limit (255), modify the problem program to reduce the number of times that the ATTACH macro instruction is invoked; if you cannot modify the problem program, submit the job for execution when few other tasks are active in the system.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

637 Explanation: The error occurred at an end-of-volume for a data set on magnetic tape or an end-of-volume during concatenation. This system completion code is accompanied by message IEC026I. Refer to the explanation of message IEC026I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC026I.

Problem Determination: Table I, items 1, 3, 5a.

704 Explanation: The error occurred during execution of an LU-or LC-form GETMAIN macro instruction in an MFT system.

The LU and LC forms, which indicate a list of areas to be allocated, are valid only in an MVT system.

Programmer Response: Probable user error. Rewrite the problem program so that it specifies allocation of only one area at a time. Then execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

705 Explanation: The error occurred during execution of an L-form FREEMAIN macro instruction in an MFT system.

The L-form, which indicates a list of areas to be released, is valid only in an MVT system.

Programmer Response: Probable user error. Rewrite the problem program so that it specifies release of only one area at a time. Then execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

706 Explanation: The error occurred during execution of a LINK, XCTL, ATTACH, or LOAD macro instruction.

The requested load module was marked by the linkage editor as not executable.

Programmer Response: Probable user error. Correct the errors that were found by the linkage editor in the load module, have the module edited by the linkage editor again, recompile, and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

713 Explanation: The error occurred during execution of an OPEN macro instruction for a data set on magnetic tape or on a direct access device. This system completion code is accompanied by message IEC148I. Refer to the explanation of message IEC148I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC148I.

Problem Determination: Table I, items 1, 2, 3, 5a, 15, 29.

714 Explanation: The error occurred during execution of a CLOSE macro instruction for a data set on magnetic tape. This system completion code is accompanied by message IEC215I. Refer to the explanation of message IEC215I in this publication for complete information about the task that was terminated and for an explanation of the return code (re in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC215I.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

- 717 Explanation: The error occurred during execution of a BSAM CLOSE macro instruction with a TYPE=T operand for a data set on magnetic tape. This system completion code is accompanied by message IEC222I. Refer to the explanation of message IEC222I in this publication for complete information about the task that was terminated and for an explanation of the register 15.

Programmer Response: Respond as indicated in message IEC222I.

Problem Determination: 1, 3, 5a, 15, 29.

- 722 Explanation: The output limit specified by the OUTLIM keyword on the SYSOUT DD statement was exceeded.

Programmer Response: Probable user error. Check for input/output loops and verify that the OUTLIM value does not conflict with any installation requirements. Otherwise, increase the OUTLIM value on the SYSOUT DD statement.

Problem Determination: Table I, items 1, 5a, 7ab, 29.

- 737 Explanation: The error occurred at an end-of-volume or during allocation of a secondary quantity or direct access storage as requested in the SPACE parameter of the DD statement for the data set. This system completion code is accompanied by message IEC027I. Refer to the explanation of message IEC027I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC027I.

Problem Determination: If the data set does exist on the specified volumes and the problem recurs, see Table I, items 1, 3, 5a, 15, 25b, 29.

- 804 Explanation: The error occurred during execution of (1) a GETMAIN macro instruction with a mode operand of EU or VU or (2) a language processor.

Either more main storage was requested than was available or, in systems with MFT, a request was issued for zero bytes of main storage.

Programmer Response: Probable user error. In the first case, make sure that sufficient storage is available when the storage request is executed. Then check for program errors that incorrectly modified the storage request and the free area queue. If necessary, request a smaller amount of storage. Then execute the job step again.

In the second case, if the processor is assigned main storage during system generation, make sure that there is no conflict with the REGION parameter specified in the cataloged procedure. If the BLKSIZE parameter is changed to increase system performance, make sure that the REGION parameter is also changed. (The REGION parameter can be overridden in a JOB or EXEC statement. Another alternative is to specify SIZE in the PARM parameter of the processor EXEC statement.) Check for these conflicts and modify the procedure or system generation accordingly.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- 806 Explanation: An error occurred during execution of a LINK, XCTL, ATTACH, or LOAD macro instruction, in which the EP or EPLOC operand was specified. The error was detected by the control program routine for the BLDL macro instruction.

Technical Information: The contents of register 15 indicate the nature of the error:

- 04 - The program whose entry point was specified in the EP or EPLOC operand was not found in the indicated source (private library, job library, or link library.)
- 08 - An uncorrectable input/output error occurred when the BLDL control program routine attempted to search the directory of the library that contained the program whose entry point was specified in the EP or EPLOC operand. At the time of abnormal termination, the contents of general purpose register 6 plus X'138' points to the address of the IOB ECB, the post code of which may prove helpful in isolating the problem. (For a discussion of the post codes see IBM System/360 Operating System: Input/Output Supervisor, Program Logic Manual, GY28-6616.) Note: The storage related to the IOB ECB may be free unless the dump is taken immediately after the ABEND macro instruction is issued. In systems with MFT and MVT, registers 2 and 3 contain the name of the requested module.

Programmer Response: If register 15 contains a X'04' it is a probable user error. Make sure that the requesting program was not incorrectly modified. Make sure that the source was indicated correctly and that the indicated library does contain the requested program. Correct the error, and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 25c, 29. If register 15 contains a X'08', see Table II, Format 1: trace option - TRACE=IO. If the problem recurs, call IBM for hardware support.

- 80A Explanation: The error occurred during execution of either an R-form GETMAIN macro instruction, or a GETMAIN macro with a mode operand of EU or VU.

Either more main storage was requested than was available or, in systems with MFT, a request was issued for zero bytes of main storage.

Programmer Response: Probable user error. Make sure that sufficient storage is available when the storage request is executed. Then check for program errors that incorrectly modified the storage request and the free queue element. If necessary, change the problem program to request a smaller amount of storage. Then execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

813 Explanation: The error occurred during execution of an OPEN macro instruction for a data set on magnetic tape. This system completion code is accompanied by message IEC149I. Refer to the explanation of message IEC149I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC149I.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

837 Explanation: The error occurred at an end-of-volume for a sequential data set. This system completion code is accompanied by message IEC028I. Refer to the explanation of message IEC028I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC028I.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

905 Explanation: The error occurred during execution of a FREEMAIN macro instruction.

The address of the storage area to be released was not on a double-word boundary (a multiple of 8).

Programmer Response: Probable user error. Check the addresses specified for areas to be released. They may have been incorrectly specified or modified. After making corrections, execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

906 Explanation: The error occurred during execution of a LINK macro instruction.

This macro instruction caused the count of requestors waiting to use a reenterable or serially reusable load module to exceed 255.

Programmer Response: Probable user error. Check for program errors, such as endless loops, that would cause macro instruction(s) requesting the same load module to be executed too often. After making

corrections, recompile and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

90A Explanation: The error occurred during execution of an R-form FREEMAIN macro instruction.

The address of the storage area to be released was not on a doubleword boundary (a multiple of 8).

Programmer Response: Probable user error. Check the addresses specified for areas to be released. They may have been incorrectly specified or modified. Correct the error, and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

913 Explanation: The error occurred during execution of an OPEN macro instruction or during end-of-volume for a password protected data set after the operator attempted to enter a password in response to message IEC310A. This system completion code is accompanied by message IEC150I. Refer to the explanation of message IEC150I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC150I.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

A03 Explanation: The error occurred when a task attempted to terminate normally with a RETURN macro instruction or a branch to the return address in register 14. The task had initiated one or more subtask(s) that had not terminated.

Programmer Response: Probable user error. Change the program so that, before termination of the task, all its subtasks will terminate. A task can determine that its subtasks have terminated by specifying ECB operands in the ATTACH macro instructions that initiate the subtasks and then issuing WAIT macro instruction(s) that specify the event control blocks representing the subtask terminations.

If WAIT macro instruction(s) had been issued and had indicated that all subtasks had terminated, check for program errors that incorrectly modified the WAIT macro instructions or event control blocks.

After making corrections, recompile and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

A05 Explanation: The error occurred during execution of a FREEMAIN macro instruction.

The control program found that the address and length specifications in the release request defined an area to be freed that overlapped a free area in main storage. Specifications for free areas are contained in the free area queue, which is composed of queue elements defining each free area; a queue element appears in the first 8 bytes of its free area.

Programmer Response: Probable user error. Check for program errors that incorrectly modified the free area queue or the release request. Make sure the release request was correctly specified. Correct the error, and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- A06 Explanation: The error was detected during execution of either a LINK, LOAD, XCTL or ATTACH macro instruction.

This macro instruction requested a serially reusable load module; however, a prior request for the same load module was already queued for the task issuing this macro instruction.

Programmer Response: Probable user error. Change the program to wait until the serially reusable load module is executed before issuing the LINK, LOAD, XCTL or ATTACH macro instruction for the load module. After making corrections, recompile and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- A0A Explanation: The error occurred during execution of an R-form FREEMAIN macro instruction.

The control program found that the address and length specifications in the release request defined an area to be freed that overlapped a free area in main storage.

Programmer Response: Probable user error. Check for program errors that incorrectly modified the free area queue or the release request. Make sure the release request was correctly specified. Correct the error and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- A13 Explanation: The error occurred during execution of an OPEN macro instruction for a data set on a 1403 printer with the universal character set (UCS) special feature. This system completion code is accompanied by message IEC151I. Refer to the explanation of message IEC151I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC151I.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

- A14 Explanation: The error occurred during execution of a CLOSE macro instruction for a data set on a direct access device. This system completion code is accompanied by message IEC216I. Refer to the explanation of message IEC216I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC216I.

Programmer Response: Re-execute the job step.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

- B04 Explanation: The error occurred during execution of a GETMAIN macro instruction.

A subpool number greater than 127 was specified.

Programmer Response: Probable user error. Make sure that the storage request was specified correctly and was not incorrectly modified. Correct the error, and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- B05 Explanation: The error occurred during execution of a FREEMAIN macro instruction.

A subpool number greater than 127 was specified.

Programmer Response: Probable user error. Make sure that the release request was specified correctly and was not incorrectly modified. After making corrections, execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

- B06 Explanation: During input/output activity, a system error task operating on behalf of a user task was abnormally terminating. Rather than have the system error task fail, the supervisor reinstated the error task and abnormally terminated the user task.

Programmer Response: Retry the task.

Problem Determination: Table I, items 5a, 16, 23, 29.

- BOA Explanation: The error occurred during execution of an R-form GETMAIN or FREEMAIN macro instruction.

A subpool number greater than 127 was specified.

Programmer Response: Probable user error. Make sure that the request was specified correctly and was not incorrectly modified.

Correct the error, and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

B13 Explanation: The error occurred during execution of an OPEN macro instruction for a data set on a 1403 printer with the universal character set (UCS) special feature. This system completion code is accompanied by message IEC152I. Refer to the explanation of message IEC152I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC152I.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

B14 Explanation: The error occurred during execution of a CLOSE macro instruction for a partitioned data set opened for output to a member. This system completion code is accompanied by message IEC217I. Refer to the explanation of message IEC217I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC217I.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

B37 Explanation: The error was detected by the end-of-volume routine. This system completion code is accompanied by message IEC030I. Refer to the explanation of message IEC030I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC030I.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

C03 Explanation: The error occurred when a task attempted to terminate normally with a RETURN macro instruction or a branch to the return address in register 14.

The control program could not close one of the task's data sets that was still open at termination, because the data control block (DCB) for the data set had been erroneously modified. The TCBDEB field of the task control block (TCB) for the terminating task points to the data extent block (DEB) associated with the erroneous DCB. Examples of how the DCB could be erroneously modified are:

- A program containing an open DCB issued an XCTL macro instruction.

- A program freed main storage that contained an open DCB.
- The system program modified the DCB incorrectly.

(Note: In an ABEND dump, the TCBDEB field points to the DEB for the SYSABEND or SYSUDUMP data set, which in turn points to the DEB associated with the erroneous DCB.)

Programmer Response: Probable user error. Correct the program error that incorrectly modified the data control block. After making the corrections, recompile and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

C04 Explanation: The error occurred during execution of a GETMAIN macro instruction in systems with MVT.

The control program encountered an invalid storage hierarchy specification. The specification may have been modified during program execution or the assembled specification may have been incorrect.

Programmer Response: Probable user error. Check for program errors that incorrectly modified the hierarchy specification. Correct the error, and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

C06 Explanation: A transient area task, operating in behalf of a user task, was in the process of terminating abnormally. Rather than have the transient area task fail, the supervisor reinstated the transient area task and abnormally terminated the user task.

Programmer Response: Rerun the job.

Problem Determination: Table I, items 16, 23, 29. Table II, Format 1: trace option - TRACE=SYS.

C13 Explanation: The error occurred during execution of an OPEN macro instruction for a concatenated partitioned or a graphics data set. This system completion code is accompanied by message IEC153I. Refer to the explanation of message IEC153I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC153I.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

C2D Explanation: The error occurred during execution of an overlay program. The control program found an invalid scatter record when attempting to load a segment of the overlay program.

Programmer Response: Linkage edit the program again, and execute the job step again.

Problem Determination: Table I, items 1, 5a, 9b, 29.

D03 Explanation: The error occurred when a task attempted to terminate normally with a RETURN macro instruction or a branch to the return address in register 14.

Resources acquired through ENQ macro instructions had not been released before termination. All resources acquired through ENQ macro instructions must be released through DEQ macro instructions before task termination.

Programmer Response: Probable user error. Change the program to include DEQ macro instructions for all resources named in ENQ macro instructions. If DEQ macro instructions were coded, check for program errors that incorrectly modified the DEQ macro-expansions, the queue control block (QCB), or the queue elements. After making corrections, recompile and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

D05 Explanation: The error occurred during execution of a FREEMAIN macro instruction.

A task invoked a system function which, in turn, issued a FREEMAIN macro instruction. However, the FREEMAIN macro instruction attempted to free system queue space storage that was not owned by the task.

For example, a task issues a CLOSE macro instruction for a data set that it does not own. During execution of the CLOSE macro instruction, a FREEMAIN macro instruction is issued.

Programmer Response: Probable user error. Change the program to ensure that no requests for system functions result in the issuance of an invalid FREEMAIN macro instruction. After making corrections, execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

DOA Explanation: The error occurred during execution of an R-form FREEMAIN macro instruction.

A task invoked a system function which, in turn, issued an R-form FREEMAIN macro instruction. However, the FREEMAIN macro instruction attempted to free system queue space storage that was not owned by the task.

For example, a task issues a CLOSE macro instruction for a data set that it does not own. During execution of the CLOSE macro instruction, a FREEMAIN macro instruction with an R operand is issued.

Programmer Response: Probable user error. Change the program to ensure that no requests for system functions result in the issuance of an invalid FREEMAIN macro instruction. After making corrections, execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

D0D Explanation: An error occurred while ABEND was handling an abnormally terminating subtask for the job step task. ABEND was reentered invalidly; therefore the environment of the abnormal termination was altered to include all tasks in the job step. A frequent cause for this condition is that a task has overlaid a Free Queue Element (FQE) in a subpool (probably subpool 251) not belonging to or shared by one of the abnormally terminating tasks.

The system completion code of the subtask originally scheduled for abnormal termination can be found in the user completion code subfield (the low-order 12 bits) of the TCBCMP field of the job step task control block (TCB). If the user completion code subfield is zero, the subtask terminated as the result of a user-invoked ABEND macro instruction.

Note: This system completion code may be accompanied by one of several system messages, which may contain the user completion code from the TCBCMP field of the TCB. If this code is in decimal, it must be converted to hexadecimal to be meaningful.

System Action: ABEND attempts to terminate the job step. A SYSUDUMP or SYSABEND dump may be provided; a dump may also have been taken to the SYS1.DUMP data set.

Programmer Response: Make sure that none of the tasks in the job step has overlaid an FQE. Determine the system completion code for the original subtask, as described above. Take any necessary corrective action and execute the job step again. If the problem recurs, call IBM for programming support.

D13 Explanation: The error occurred during execution of an OPEN macro instruction for a graphic data control block.

The data control block (DCB) was associated with a device other than a graphic device. The device was specified by the name subparameter of the UNIT parameter of the DD statement for the graphic data set.

Programmer Response: Probable user error. Determine if the DD statement correctly specified a graphic device. If it did, make sure that the data control block or other control information was not incorrectly modified by program errors. If it did not, change the DD statement to specify the correct device. Determine if the OPEN macro instruction specified the correct data control block address. If it did, make sure that the macro-expansion was not incorrectly modified by program errors. If it did not, change the macro instruction to specify the

correct data control block. After correcting the error, execute the job step again.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

D14 Explanation: The error occurred during execution of a CLOSE macro instruction for a graphic data control block.

The graphic device to be closed was previously opened by another task.

Programmer Response: Probable user error. Issue the CLOSE macro instruction within the same task that issues the OPEN macro instruction, or remove the invalid CLOSE macro instruction. Then execute the job step again.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

D23 Explanation: The error occurred during execution of a WTO or WTOR macro instruction for one of the following reasons:

- The parameter list supplied to the WTO macro instruction does not begin on a halfword boundary, or the parameter list supplied to the WTOR macro instruction does not begin on a fullword boundary.
- The text length was equal to or less than zero.
- No buffers were available.

Programmer Response: Probable user error. Correct the program issuing the WTO or WTOR macro instruction, recompile, and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

D2D Explanation: The error occurred during execution of an overlay program.

The control program found an invalid record type when attempting to load a segment of the overlay program.

Programmer Response: Linkage edit the program again, and execute the job step again.

Problem Determination: Table I, items 1, 5a, 9, 29.

D37 Explanation: The error occurred when an output operation to a direct access device was requested. This system completion code is accompanied by message IEC031I. Refer to the explanation of message IEC031I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC031I.

Problem Determination: Table I, items 1, 3, 5a, 15, 25b, 29.

E04 Explanation: The error occurred during execution of a GETMAIN macro instruction for a program executing in the supervisor mode.

More bytes of main storage were requested from the system queue area (SQA) than were available. However, since there were at least 288 bytes available, the task could be abnormally terminated.

Programmer Response: Resubmit the job. If this code occurs frequently, installation action is needed to increase the space allowed for the system queue; more space should be specified at system generation or in response to message IEA101A at IPL time.

Problem Determination: Table I, items 2, 29.

E0D Explanation: (MVT only). While handling an abnormally terminating subtask of the job step task, ABEND required 512 decimal bytes of main storage. This amount was not available from subpool 252, so ABEND used storage in the user's region that had been allocated to the job step and changed the environment of the abnormal termination to include all tasks in the job step.

The system completion code of the subtask originally scheduled for abnormal termination can be found in the user completion code subfield (the low-order 12 bits) of the TCBCMP field of the job step task control block (TCB). If the user completion code subfield is zero, the subtask terminated as the result of a user-invoked ABEND macro instruction.

Note: This system completion code may be accompanied by one of several system messages, which may contain the user completion code from the TCBCMP field of the TCB. If this code is in decimal, it must be converted to hexadecimal to be meaningful.

System Action: The job step is terminated. No SYSUDUMP or SYSABEND dump is taken after the abnormal termination environment is altered to include all tasks in the job step. If a dump had been taken when the original subtask terminated, that dump is available. It will not, however, directly reflect the conditions that produced the E0D system completion code.

Programmer Response: Increase the region size and execute the job step again. (Note: If possible, correct the errors in the original subtask as indicated by the subtask's system completion code (described in the explanation above). Execute the job step again.) If the problem recurs, refer to the documentation for the subtask's system completion code in this publication and take the appropriate action before calling IBM for programming support.

E13 Explanation: The error occurred during execution of an OPEN macro instruction for a graphic data control block.

The DCBGNCPL field in the data control block contained zero or a number greater than 99. This field specifies the maximum number of

input/output macro instructions that can be issued before a WAIT macro instruction must be issued; the value specified in the field must be 1 through 99 inclusive.

Programmer Response: Probable user error. Determine if a correct value was specified for the DCBGNCPC field. This value could come from (1) the GNCPC operand in the DCB macro instruction that created the data control block, (2) the GNCPC subparameter in the DCB parameter of the DD statement for the data set (provided that the GNCPC operand in the macro instruction specified zero), or (3) modification by the user's program. If a correct value was specified, make sure that the specification or the data control block was not incorrectly modified by program errors. If an incorrect value was specified, change the specification. After correcting the error, execute the job step again.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

E23 Explanation: The error occurred during processing of a WTOR macro instruction.

The address of the event control block (ECB), the address of the request block (RB) in the ECB, or of the main storage area for the reply was invalid.

Programmer Response: Probable user error. Correct the macro instruction or program errors that incorrectly modified the macro-expansion. Recompile and execute the job step again.

Problem Determination: Table I, items 1, 5a, 16, 23, 29.

E2D Explanation: The error occurred during execution of an overlay program.

The control program found an invalid address when attempting to load a segment of the overlay program.

Programmer Response: Linkage edit the program again, and execute the job step again.

Problem Determination: Table I, items 1, 5a, 9, 29.

E37 Explanation: The error occurred when an output operation was requested. The data set was on a direct access or magnetic tape device. This system completion code is accompanied by message IEC032I. Refer to the explanation of message IEC032I in this publication for complete information about the task that was terminated and for an explanation of the return code (rc in the message text) in register 15.

Programmer Response: Respond as indicated in message IEC032I.

Problem Determination: Table I, items 1, 3, 5b, 15, 29.

Fnn Explanation: The error occurred during the execution of an invalid supervisor call (SVC) instruction.

The last 2 digits of this completion code are the operand of the supervisor call instruction in hexadecimal.

Programmer Response: Probable user error. Make sure that the supervisor call instruction was not incorrectly modified. Check the operand against the valid codes for the control program being used, and determine if the SVC that was issued had been generated into the system. Correct the error, and execute the job step again.

Problem Determination: Table I, items 5a, 16, 23, 29.

PART II: WAIT STATE CODES

Wait State Code	The wait state code is found in the program status word (PSW) when the computer is in wait state.
Program Producing Code	Input/output supervisor, IPL and NIP programs, machine-check handler, supervisor, and system environment recording routines SER0 and SER1.
Audience and Where Produced	For operator: displayed in console lights.
Program Status Word Format	<p>YYYYYYYYxxxxzzz</p> <p>YYYYYYYY Left half of program status word. This half has two forms:</p> <p>FF0s0000 No tasks ready in system. (Not an error condition.) 000s0000 System wait state caused by an error condition.</p> <p>In each of the above forms, s represents bits 12-15 (the AMWP bits).</p> <p>xxxxzzz Right half of program status word. The wait state code, zzz, indicates the error condition.</p>
Comments	If the system enters a wait state during IPL or NIP execution and the explanation of the wait state resulted from an input/output error, the operator should display the contents of register 10 in the console lights. Register 10 will contain the unit address of the last device referenced in an input/output operation. Since this device could be the source of the error, the operator should, if possible, disable or demount the device before starting the system again.
Problem Determination	Refer to the fold-out in part VI of this publication for problem determination instructions.

001 Explanation: During execution of the IPL program or the nucleus initialization program (NIP), a "not operational" condition code was produced in response to a Test I/O instruction that was issued to determine the current status of the volume containing the nucleus being loaded. (If NIP, the fourth byte of the program status word is hexadecimal FF.)

Operator Response: Probable user error. Ensure that the device on which the volume was mounted is ready. If the problem recurs, call IBM for programming support.

002 Explanation: During execution of the IPL program or the nucleus initialization program (NIP), an input/output operation was not initiated; the channel status word (CSW) was stored; and the channel was not busy. (If NIP, the fourth byte of the program status word is hexadecimal FF.)

Operator Response: Probable hardware error. Start the system again. If the problem recurs, call IBM for hardware support.

003 Explanation: During execution of the IPL program or the nucleus initialization program (NIP), an input/output operation was not initiated, because no UCB was found for the IPLed device, an invalid storage configuration for MVT was found, or a not operational

response was received from an SIO macro instruction. (In the first two cases, a message describing the situation will precede the wait state code.) The channel status word (CSW) was not stored, and the channel was not busy. (If NIP, the fourth byte of the program status word is hexadecimal FF.)

Operator Response: Probable hardware error. Start the system again. If the problem recurs, call IBM for hardware support.

004 Explanation: During execution of the IPL program or the nucleus initialization program (NIP), an input/output operation was not initiated; the channel status word (CSW) was not stored and the channel was not busy following execution of a Test I/O instruction. (If NIP, the fourth byte of the program status word is hexadecimal FF.)

Operator Response: Probable hardware error. Start the system again. If the problem recurs, call IBM for hardware support.

005 Explanation: During execution of the IPL program or the nucleus initialization program (NIP), an input/output interruption occurred because of a unit check.

If IPL, the fourth byte of the program status word is hexadecimal 00. The address of the

channel command word (CCW) causing the original unit check was placed at hexadecimal location 4C. The first four sense bytes describing the unit check were placed at hexadecimal location 54.

If NIP, the fourth byte of the program status word is hexadecimal FF. The result of a sense operation to determine the cause of the unit check was not one of the following:

- No record found.
- File mask violation.
- End of cylinder.
- Track condition check.

Operator Response: Probable hardware error. Restart the system.

Problem Determination: Table I, items 11, 17b, 29.

- 006 Explanation: During execution of the IPL program or the nucleus initialization program (NIP), one or more of the following occurred:
- An interface control check.
 - A channel control check.
 - A channel data check.
 - A program check.
 - A channel chaining check.

(If NIP, the fourth byte of the program status word is hexadecimal FF.)

Operator Response: Probable user error. Restart the system.

Problem Determination: Table I, items 11, 17b, 29.

- 007 Explanation: During execution of the nucleus initialization program (NIP), a console was not available.

Operator Response: Probable user error. Ensure that the device is available.

Problem Determination: Table I, items 11, 17b, 29.

- 008 Explanation: During execution of the nucleus initialization program (NIP), an input/output interruption occurred because of a unit check. The unit check indicates that a record was not found.

This code also appears if an unformatted direct access volume is mounted on an online device or if the volume label is on an alternate track (defective track 0 at DASDI).

Operator Response: Probable user error. Ensure that there are no unformatted volumes on an online direct access device, and restart the system.

Problem Determination: Table I, items 11, 17b, 29.

- 009 Explanation: During execution of the nucleus initialization program (NIP), an input/output interruption occurred because of a unit check. The unit check indicates that a file mask violation occurred in response to a TIO macro instruction.

Operator Response: Probable hardware error. Restart the system.

Problem Determination: Table I, items 11, 17b, 29.

- 00A Explanation: The SYS1.LINKLIB was not found in the catalog.

Operator Response: Notify the system programmer.

Programmer Response: Probable user error. Insure that the SYS1.LINKLIB is in the catalog and restart the system.

Problem Determination: Table I, items 30.

- 00F Explanation: A volume has been IPLed that does not contain IPL text.

Operator Response: Probable user error. Correct the load unit switches to address the correct volume to be IPLed. Verify that the correct volume is mounted. Press the LOAD key and continue.

Problem Determination: Table I, items 11, 29.

- 010 Explanation: During execution of the nucleus initialization program (NIP), an input/output interruption occurred because of a unit check. The unit check indicates that an end of cylinder occurred before the record being searched for was found.

Operator Response: Probable user error. Restart the system.

Problem Determination: Table I, items 11, 17b, 29.

- 011 Explanation: During execution of the nucleus initialization program (NIP), an input/output interruption occurred because of a unit check. The unit check indicates that a track condition check occurred.

Operator Response: Probable hardware error. Restart the system.

Problem Determination: Table I, items 11, 17b, 29.

- 012 Explanation: During nucleus initialization, the prefix switches on both central processing units were set in the same position, causing both units to use the same prefixed storage area.

Operator Response: Probable user error. Set one of the prefix switches in the opposite position, and restart the system. If the problem recurs, call IBM for programming support.

- 015 Explanation: During nucleus initialization, it was determined that the storage box enable/disable switches were not set in the same position on both central processing units.

Operator Response: Probable user error. Set the storage enable/disable switches so that each box in a multiprocessor configuration

either can or cannot be used by both central processing units. If the problem recurs, call IBM for programming support.

- 016 Explanation: During nucleus initialization, the uppermost 4K bytes of storage malfunctioned and could not be used for the permanent storage area.

Operator Response: Probable hardware error. Redial the storage boxes so that a different box has the highest address range, and start the system again. If the problem recurs, call IBM for hardware support.

- 017 Explanation: During execution of the IPL program or the nucleus initialization program (NIP), a unit check occurred while executing a sense instruction. The sense instruction had been issued to clarify a previous unit check condition. (If NIP, the fourth byte of the program status word is hexadecimal FF.)

Operator Response: Probable hardware error. Restart the system.

Problem Determination: Table I, items 11, 17b, 29.

- 018 Explanation: During execution of the IPL program, the nucleus was found to be too big for the machine size; the space available for relocation dictionary (RLD) records was exceeded.

Operator Response: Probable user error. Report this message to the programmer.

Programmer Response: Regenerate the system and decrease the size of the nucleus by removing options. If the problem recurs, call IBM for programming support.

- 019 Explanation: During execution of the IPL program, a program interruption occurred because a machine malfunction made the area containing the IPL program unusable.

Operator Response: Probable hardware error. Restart the system. If the problem recurs, call IBM for hardware support.

- 020 Explanation: During execution of the nucleus initialization program (NIP), the multiprocessing initialization module (IEAMP650) could not be loaded from the SYS1.LINKLIB data set for one of the following reasons:

- (1) The multiprocessing initialization module was not found in the SYS1.LINKLIB data set.
- (2) A permanent input/output error occurred during the directory search for the multiprocessing initialization module.

- (1) Operator Response: Probable user error. Restart the system. If the problem recurs, report the condition to the programmer responsible for the system.

Programmer Response: Make sure that module IEAMP650 is in SYS1.LINKLIB.

Problem Determination: Table I, items 11, 17b, 29.

- (2) Operator Response: Probable hardware error. Restart the system.

Problem Determination: Table I, items 11, 17b, 29.

- 021 Explanation: During nucleus initialization, an input/output interruption occurred on teleprocessing or graphics console following an EXCP operation.

Register 1 contains a pointer to the input/output block (IOB) for the failing EXCP operation.

Operator Response: Probable hardware error. Restart the system. If the problem recurs, call IBM for hardware support.

- 0E2 Explanation: During processing by the supervisor, either a machine-check interruption or a channel failure occurred, but neither system environment recording routine, SER0 or SER1, is in the operating system.

Operator Response: Probable hardware error. Restart the system.

Problem Determination: Table I, items 2, 12, 30.

- A01 Explanation: This wait state code is associated with message IGF003W. MCH has encountered an unexpected machine-check interruption during its error recovery attempt.

System Action: Enter wait state.

Operator Response: Probable hardware error. If 'S' is present in the associated message, execute the System Environment Record Edit and Print (SEREP) program to record the machine environment, then restart the system. If 'S' is not present, restart the system and execute the IFCEREPO program.

Problem Determination: Table I, items 14, 30.

- A02 Explanation: A second machine-check interruption occurred while handling a machine-check interruption within either RMS/85, 155, or 165. No message will be issued.

System Action: Enter wait state.

Operator Response: Probable hardware error. Execute the System Environment Record Edit and Print (SEREP) program to record the machine environment; restart the system and execute the IFCEREPO program.

Problem Determination: Table I, items 14, 30.

- A03 Explanation: This wait state code is associated with message IGF004W. A program interruption occurred during MCH processing.

System Action: Enter wait state.

Operator Response: Probable hardware error. If 'S' is present in the associated message, execute the System Environment Record Edit and

WSC

Print (SEREP) program to record the machine environment, then restart the system. If 'S' is not present, restart the system and execute the IFCEREPO program.

Problem Determination: Table I, items 14, 30.

A04 Explanation: This wait state code is associated with message IGF006W. The MCH Resident Nucleus module (IGFNUC00) was unable to load a scheduled MCH transient module. MCH operation must terminate.

System Action: Enter wait state.

Operator Response: Probable hardware error. If 'S' is present in the associated message, execute the System Environment Record Edit and Print (SEREP) program to record the machine environment, then restart the system. If 'S' is not present, restart the system and execute the IFCEREPO program.

Problem Determination: Table I, items 14, 30.

A05 Explanation: This wait state code is associated with message IGF002W. MCH has encountered a nonretryable recoverable failure within a supervisor area.

System Action: Enter wait state.

Operator Response: Probable hardware error. If 'S' is present in the associated message, execute the System Environment Record Edit and Print (SEREP) program to record the machine environment, then restart the system. If 'S' is not present, restart the system and execute the IFCEREPO program.

Problem Determination: Table I, items 14, 30.

A06 Explanation: This wait state code is associated with message IGF001W. MCH has encountered a nonrecoverable failure within a supervisor area.

System Action: Enter wait state.

Operator Response: Probable hardware error. If 'S' is present in the associated message, execute the System Environment Record Edit and Print (SEREP) program to record the machine environment, then restart the system. If 'S' is not present, restart the system and execute the IFCEREPO program.

Problem Determination: Table I, items 14, 30.

A07 Explanation: This wait state code is associated with message IGF006W MCH was attempting to create a pending I/O interruption (both CE and DE pending) from the SYSRES device while performing its termination procedures. An SIO was issued with CC=0 expected, but a CC=1, 2, or 3 was received.

System Action: Enter wait state.

Operator Response: Probable hardware error. If 'S' is present in the associated message, execute the System Environment Record Edit and Print (SEREP) program to record the machine environment, then restart the system. If 'S'

is not present, restart the system and execute the IFCEREPO program.

Problem Determination: Table I, items 14, 30.

A08 Explanation: This wait state code is associated with message IGF006W. Same as wait state code A07 except a CC=0 was received from the SIO. A TCH was then issued expecting a CC=1 (interruption pending) but receiving a CC=0 or 3.

System Action: Enter wait state.

Operator Response: Probable hardware error. If 'S' is present in the associated message, execute the System Environment Record Edit and Print (SEREP) program to record the machine environment, then restart the system. If 'S' is not present, restart the system and execute the IFCEREPO program.

Problem Determination: Table I, items 14, 30.

A09 Explanation: This wait state code is associated with message IGF006W. MCH successfully created a pending SYSRES interruption but in attempting to clear it via a TIO, a CC=2, or 3 was received instead of a CC=1.

System Action: Enter wait state.

Operator Response: Probable hardware error. If 'S' is present in the associated message, execute the System Environment Record Edit and Print (SEREP) program to record the machine environment, then restart the system. If 'S' is not present, restart the system and execute the IFCEREPO program.

Problem Determination: Table I, items 14, 30.

A0A Explanation: This wait state code is associated with message IGF013W. MCH was entered as the result of a channel-check condition. MCH has produced a channel inboard record. (CCH has not been able to complete its functions, or CCH is not in the system).

System Action: Enter wait state.

Operator Response: Probable hardware error. If 'S' is present in the associated message, execute the System Environment Record Edit and Print (SEREP) program to record the machine environment, then restart the system. If 'S' is not present, restart the system and execute the IFCEREPO program.

Problem Determination: Table I, items 14, 30.

A0B Explanation: This wait state code is associated with message IGF012W. MCH determined that a machine-check interruption occurred during Channel-Check Handler processing.

System Action: Enter wait state.

Operator Response: Probable hardware error. If 'S' is present in the associated message, execute the System Environment Record Edit and Print (SEREP) program to record the machine environment, then restart the system. If 'S'



is not present, restart the system and execute the IFCEREPO program.

Problem Determination: Table I, items 14, 30.

A0D Explanation: This wait state code is associated with message IGF010W. MCH determined that the machine is not an IBM System/360 Model 65, 65 Multiprocessor, or 85.

System Action: Enter wait state.

Operator Response: Probable hardware error. Execute the System Environment Record Edit and Print (SEREP) program to record the machine environment, then restart the system.

Problem Determination: Table I, items 14, 30.

A0E Explanation: This wait state code is associated with message IGF011W. MCH determined that it has not been properly initialized by NIP.

System Action: Enter wait state.

Operator Response: Probable hardware error. Execute the System Environment Record Edit and Print (SEREP) program to record the machine environment, then restart the system.

Problem Determination: Table I, items 14, 30.

A10 Explanation: This wait state code is associated with message IGF006W. An I/O error occurred while MCH was clearing the channel path to an I/O device. The error occurred in module IGFASROA, while clearing the SYSRES device or the active system console.

System Action: Enter wait state.

Operator Response: Probable hardware error. If 'S' is present in the associated message, execute the System Environment Record Edit and Print (SEREP) program to record the machine environment, then restart the system. If 'S' is not present, restart the system and execute the IFCEREPO program.

Problem Determination: Table I, items 14, 30.

A12 Explanation: This wait state code is associated with message IGF006W. An I/O error occurred while MCH was clearing the channel path to an I/O device. The error occurred while clearing a job library device for the refresh loader.

System Action: Enter wait state.

Operator Response: Probable hardware error. If 'S' is present in the associated message, execute the System Environment Record Edit and Print (SEREP) program to record the machine environment, then restart the system. If 'S' is not present, restart the system and execute the IFCEREPO program.

Problem Determination: Table I, items 14, 30.

A13 Explanation: This wait state code is associated with message IGF014W. An I/O error occurred while MCH was clearing the channel path to an I/O device.

System Action: Enter wait state.

Operator Response: Probable hardware error. If 'S' is present in the associated message, execute the System Environment Record Edit and Print (SEREP) program to record the machine environment, then restart the system. If 'S' is not present, restart the system and execute the IFCEREPO

Problem Determination: Table I, items 14, 30.

A14 Explanation: This wait state code is associated with message IGF015W. An unexpected error occurred while MCH was making a recovery attempt.

System Action: Enter wait state.

Operator Response: Probable hardware error. If 'S' is present in the associated message, execute the System Environment Record Edit and Print (SEREP) program to record the machine environment, then restart the system. If 'S' is not present, restart the system and execute the IFCEREPO program.

Problem Determination: Table I, items 14, 30.

A15 Explanation: A machine-check interruption occurred while MCH was saving the system environment.

System Action: Enter wait state.

Operator Response: Probable hardware error. Execute the System Environment Record Edit and Print (SEREP) program to record the machine environment, then restart the system.

Problem Determination: Table I, items 14, 30.

A16 Explanation: This wait state code is associated with message IGF050WS1. The error has occurred in the Time of Day Clock.

System Action: Enters wait state.

Operator Response: Probable hardware error. If 'S' is present, execute the SEREP program for the model. If 'S' is not present, restart the system and schedule the IFCEREPO program.

Problem Determination: Table I, items 14, 30.

A21 Explanation: The two central processing units of a Model 65 Multiprocessing System, while operating in multisystem mode, experienced simultaneous or nearly simultaneous machine checks or, after one central processing unit experienced a machine check and began executing MCH, the second central processing unit experienced a machine check while spinning in its time out loop.

Operator Response: Probable hardware error. Execute the System Environment Record Edit and Print (SEREP) program to record the machine environment, then restart the system.

Problem Determination: Table I, items 14, 30.

A22 Explanation: In a Model 65 Multiprocessing System with both central processing units operating in multisystem mode, the central

processing unit executing MCH failed to complete recovery processing before the time out on the second central processing unit expired.

Operator Response: Probable hardware error. Execute the System Environment Record Edit and Print (SEREP) program to record the machine environment, then restart the system.

Problem Determination: Table I, items 14, 30.

B01 Explanation: The 3211 utility has completed normally.

Operator Response: Verify the printed image and restart the system.

B02 Explanation: This wait state code is issued by the 3211 utility. A control card is missing or out of order. The JOB and END control cards must be the first and last cards respectively. The DFN, UCS, and FCB statements can be included in any order.

Operator Response: Correct the control card sequence, insert any missing cards, and rerun the program.

Problem Determination: Table I, items 11, 29.

B03 Explanation: This wait state code is issued by the 3211 utility. The JOB statement is incorrect.

Operator Response: Correct the JOB statement and rerun the program.

Problem Determination: Table I, items 11, 29. Have the 3211 utility and control cards available.

B04 Explanation: This wait state code is issued by the 3211 utility. The DFN statement is incorrect.

Operator Response: Correct the DFN statement and rerun the program.

Problem Determination: Table I, items 11, 29. Have the 3211 utility and control cards available.

B05 Explanation: This wait state code is issued by the 3211 utility. The UCS statement is incorrect.

Operator Response: Correct the UCS statement and rerun the program.

Problem Determination: Table I, items 11, 29. Have the 3211 utility and control cards available.

B06 Explanation: This wait state code is issued by the 3211 utility. The FCB statement is incorrect.

Operator Response: Correct the FCB card and rerun the program.

Problem Determination: Table I, items 11, 29. Have the 3211 utility and control cards available.

B07 Explanation: This wait state code is issued by the 3211 utility. The END statement is incorrect.

Operator Response: Correct the END statement and rerun the program.

Problem Determination: Table I, items 11, 29. Have the 3211 utility and control cards available.

B0A Explanation: This wait state code is issued by the 3211 utility. An external interrupt has occurred. The interrupt key was pressed.

Operator Response: Rerun the program.

B0B Explanation: This wait state code is issued by the 3211 utility. A program check interrupt has occurred.

Problem Determination: Table I, items 11, 29. Have the 3211 utility and control statements available.

B0C Explanation: This wait state code is issued by the 3211 utility. A machine check interrupt has occurred.

Operator Response: Execute the SEREP program and save the output. Rerun the job.

Problem Determination: Table I, items 14, 30.

B11 Explanation: This wait state code is issued by the 3211 utility. The reader is not on line. This will occur when the reader's control unit has no power or when the control unit has been switched off the I/O interface.

Operator Response: Put the specified control unit online and rerun the program. If the error recurs, call IBM for hardware support.

B12 Explanation: This wait state code is issued by the 3211 utility. The reader is not ready.

Operator Response: Ready the reader and rerun the program.

B13 Explanation: This wait state code is issued by the 3211 utility. The reader is not ready.

Operator Response: If the error condition is not apparent, display location 3 for sense information. (An interpretation of sense bit settings can be found in the component description manual for the control unit being used.) Correct the faulty condition and clear the reader check. Rerun the program. If reader checks occur frequently, use a card guide to check for off-punched cards. If the cards are punched correctly and are in good condition and readchecks continue, call IBM for hardware support.

B14 Explanation: This wait state code is issued by the 3211 utility. A reader channel error has occurred.

Operator Response: Probable hardware error. Rerun the job.

Problem Determination: Table I, items 12, 30.

B15 Explanation: This wait state code is issued by the 3211 utility. No device end is indicated on the reader.

Operator Response: Probable hardware error. Rerun the job.

Problem Determination: Table I, items 12, 30.

B19 Explanation: This wait state code is issued by the 3211 utility. The printer is not on line. This will occur when the printer's control unit has no power, when the control unit has been switched off the I/O interface or when the control unit is not a part of the system.

Operator Response: Ensure that the address of the printer specified in the DFN statement is correct. Ensure that the control unit is online, and rerun the job. If the error recurs, call IBM for hardware support.

B1B Explanation: This wait state code is issued by the 3211 utility. A unit check has occurred on the printer.

Operator Response: If the error condition is not apparent, display low core location 2-7 for sense information. (An interpretation of sense bit settings can be found in the publication IBM 3211 Printer and 3811 Control Unit Component Description, GA24-3343.) Correct the faulty condition and rerun the job. If the problem recurs, call IBM for hardware support.

B1C Explanation: This wait state code is issued by the 3211 utility. A printer channel error has occurred.

Operator Response: Probable hardware error. Rerun the job.

Problem Determination: Table I, items 12, 30.

B1D Explanation: This wait state code is issued by the 3211 utility. No device end is indicated on the printer.

Operator Response: Probable hardware error. Rerun the job. If the error recurs, call IBM for hardware support.

D01 Explanation: The error occurred for one of the following reasons:
• During execution of the Abnormal Termination (ABTERM) program, an invalid recursion to ABTERM occurred; that is, ABTERM failed while processing the terminating program.
• Entry to ABTERM occurred because the wait task terminated abnormally.

System Action: The system entered a wait state.

Operator Response: Probable operating system error; restart the system.

Note: This wait state should occur only if programming support has modified ABTERM.

Problem Determination: Table I, items 11, 29.

E02 Explanation: A permanent input/output error occurred while the IBM 2250 Display Unit was being used as the primary console. At the time the error occurred, no alternate console was available.

System Action: The sense bytes are placed in the two high-order bytes of register 15 and the status bytes are placed in the two low-order bytes of register 15. Then the system is placed in a wait state.

Operator Response: If an alternate console is available, start the system again, using the alternate console. If an alternate console is not available, call IBM for programming support.

E04 Explanation: The error occurred during execution of a GETMAIN macro instruction for a program executing in the supervisor mode. More bytes of main storage were requested from the system queue area (SQA) than were available. However, since there were less than 288 bytes available, the task could not be abnormally terminated.

Operator Response: Resubmit the job. If this code occurs frequently, installation action is needed to increase the space allowed for the system queue; more space should be specified at system generation or in response to message IEA101A during system IPL.

Problem Determination: Table I, items 11, 29.

F05 Explanation: System environment recording routine SER0 or SER1 wrote an environment record about a machine malfunction that caused an unrecoverable error.

System Action: The routine attempted to ring the console alarm and then placed the system in wait state.

Operator Response: Probable hardware error. Restart the system.

Problem Determination: Table I, items 2, 18, 30.

F06 Explanation: A second machine-check interruption occurred while system environment recording routine SER0 or SER1 was writing an environment record about a prior machine malfunction. The environment record was written.

System Action: The routine attempted to ring the console alarm and then placed the system in wait state.

Operator Response: Probable hardware error. Execute the System Environment Record Edit and Print (SEREP) program to record the machine environment, then restart the system.

Problem Determination: Table I, items 2, 14, 18, 30. 14, 18, 30.

F07 Explanation: Machine-check interruptions are occurring so frequently that system environment recording routine SER0 or SER1 cannot write a meaningful environment record.

System Action: The routine attempted to ring the console alarm and then placed the system in wait state.

Operator Response: Probable hardware error. Execute the System Environment Record Edit and Print (SEREP) program to record the machine environment, then restart the system.

Problem Determination: Table I, items 2, 14, 30.

F08 Explanation: System environment recording routine SER0 could not write an environment record in the SYS1.LOGREC data set because of uncorrectable input/output or channel errors associated with the system residence device.

System Action: The routine attempted to ring the console alarm and then placed the system in wait state.

Operator Response: Probable hardware error. Execute the System Environment Record Edit and Print (SEREP) program to record the machine environment, then restart the system.

Problem Determination: Table I, items 2, 14, 30.

F09 Explanation: System environment recording routine SER0 or SER1 could not write an environment record in the SYS1.LOGREC data set because either the data set is full or an error exists in the header record.

System Action: The routine attempted to ring the console alarm and then placed the system in wait state.

Operator Response: Execute the System Environment Record, Edit and Print (SEREP) to record the machine environment. Restart the system and execute the IFCEREPO program to dump the SYS1.LOGREC data set.

Problem Determination: Table I, items 14, 30.

F0A Explanation: The resident module of system environment recording routine SER0 could not load the nonresident module from the linkage library (SYS1.LINKLIB) data set.

System Action: The SER0 routine placed the system in wait state.

Operator Response: Probable hardware error. Execute the System Environment Record Edit and Print (SEREP) program to record the machine environment, then restart the system.

Problem Determination: Table I, items 2, 14, 30.

F0D Explanation: System environment recording routine SER1 encountered an uncorrectable input/output error or a central processing unit (CPU) error or both while attempting to write an environment record in the SYS1.LOGREC data set. The environment record was not written.

System Action: The routine attempted to ring the console alarm and then placed the system in wait state.

Operator Response: Probable hardware error. Execute the System Environment Record Edit and Print (SEREP) program to record the machine environment, then restart the system.

Problem Determination: Table I, items 2, 14, 30.

F0F Explanation: System environment recording program (Model 195 SER1) encountered permanent buffer segment errors in all four segments of the high speed buffer of the Model 195.

System Action: The program recorded an environment record and then placed the system in the wait state.

Operator Response: Start the system. If the error recurs, call IBM for hardware support.

Definition: A system wait state is indicated on the operator control section of the system control panel by the wait light. No central processing unit instructions are processed while the wait light is on. A system wait state is entered when bit 14 of the current program status word (PSW) is set to 1. To exit from this state, an interruption or initial program load must occur to change the current PSW. When a condition arises such that the right half of the PSW does not match any of the explicit wait state codes listed in this publication, an uncoded wait state has occurred.

Explanation: An uncoded wait state may be the result of normal operation; for example, the system may wait for a series of specified operator actions before it can resume processing. The uncoded wait state may also be a symptom of abnormal operation; for example, the system may enter a wait state if a hardware malfunction causes an input/output interruption to be lost.

System Action: The system may exit from an uncoded wait state without operator intervention if an input/output interruption occurs, for example when a user at a terminal requests attention, or when an external interruption occurs, for example when a specified time interval has expired. Otherwise, the system continues to wait for an appropriate operator response before it can continue processing.

Operator Response: If you are able to communicate with the system through the master console device (that is, if the 1052 PROCD light turns on after you press REQUEST), perform the following actions:

- Enter a DISPLAY R command. The system will respond with message IEE110I if any operator action is required from previous messages. This would include replies to messages or mounting of volumes. If all system requests have been satisfied, you will receive message IEE111I.
- Scan the console log to make sure that all messages requiring operator action have been satisfied. For example, IEF308I suggests that the operator must redefine a partition or region size to allow enough main storage for the job scheduler's minimum operating requirements.
- The system may be waiting for work. Issue a DISPLAY A command. The system will respond with message IEE821I (MFT) or IEE102I (MVT) to list all active tasks. The system is out of work if all readers (RDR) and writers (WTR) are stopped and the number of IEF429I messages issued since the last IEF161I message is equal to the number of times you gave the START INIT command.
- The system may have exhausted direct access space, and is waiting for space to become available. In this case, issue a DISPLAY Q command. The system will respond with

message IEF869I to list the number of jobs on the output queue (SOUTQ). Direct access space will be released if you can start a WTR for each class of the output queue. In order to start a WTR, you may find it necessary to issue a HOLD Q command and possibly CANCEL some active jobs or system tasks so enough main storage is available for a WTR. You may also find it necessary to STOP RDR to prevent further use of direct access space by the reader for the input queue (JOBQ).

- Issue a DISPLAY U command. The system will respond with message IEE450I to list the status of devices in the system. The data listed will include indication of BSY (busy), MTP (mount pending), NRD (not ready), and other status information that may be useful to help you determine why the system is in the wait state. This command may cause lengthy typeout time.
- As a last resort, issue the following sequence of commands until the uncoded wait state condition is corrected:

1. If a SYS1.DUMP data set was created during or before nucleus initialization, issue the DUMP command to obtain a core image dump of the condition causing the wait. Save the output in case the uncoded wait cannot be resolved.
2. HOLD Q to prevent initiation of new jobs.
3. DISPLAY JOBNAMES to get information about job starting and stopping.
4. DISPLAY ACTIVE to get current job execution status.
5. STOP RDRs and WTRs to correct possible main storage fragmentation.
6. CANCEL jobs with DUMP (CANCEL jobname, DUMP) in reverse order of their importance.
7. DISPLAY ACTIVE to monitor the changing environment.
8. RELEASE Q to resume normal processing.

If the problem cannot be corrected or communication with the system cannot be established, do the following before calling IBM for programming support:

- Record the contents of the current PSW.
- Have the master console sheet available.
- Execute the stand-alone program IMDSADMP with the TYPE=HI option to produce a storage dump to tape. If a tape is not available, execute the stand-alone program IMDSADMP with the TYPE=LO option to produce a storage dump to a printer.
- Execute IMDPRDMP with the 'GO' option after you restart the system. The input to IMDPRDMP is the dump tape form IMDSADMP. Save the formatted dump output.

If you cannot restart the system, execute the hardware system test appropriate for your system before calling IBM for hardware support.

Definition: A loop is indicated by an endless repetition of events in a system. Meaningful work is not produced in a loop. The loop occurs when a sequence of central processing unit instructions are repeatedly executed until a terminal condition prevails (e.g., cancel by operator). A loop is recognized by:

- A steady glow in the lights of the system control panel with the SYSTEM light on;
- A rhythmic pattern in the lights of the system control panel;
- A pointless recurrence of input/output activity (e.g., tape oscillating).
- A job that does not change status for a long period of time.

Explanation: A loop can be the result of several different causes, some of which are listed here:

- A deliberate loop designed by the programmer. This might be a debugging loop built during program testing. Or it might be a loop to poll for the occurrence of some event before it will exit.
- An apparent loop. This kind of situation is not actually a loop. It can occur, for example, when a scientific data reduction program is doing a lengthy repetitive operation on a large array of numbers.
- A loop due to a logic error or coding error by the programmer.
- A loop due to a logic error in a system component.
- A loop due to incorrect setup by the operator.
- A loop due to an error in the Control Program.
- A loop due to a hardware malfunction.

System Action: The system may exit from a loop, without operator intervention, if the execution time of the program exceeds the time limit specified in the TIME parameter of the EXEC statement or the standard time limit of the RDR procedure (assuming your installation has interval timing included in the system).

Operator Response: If you are able to communicate with the system through the master console device (that is, if the 1052 PROCD light turns on after pressing REQUEST), enter DISPLAY A. The system will respond with message IEE821I (MFT) or IEE102I (MVT) to list all active tasks. Use this command frequently. Identical entries occurring on successive uses of DISPLAY A command beyond the estimated execution time of a job

indicates a possible loop. If you are reasonably certain the program is in an endless loop, enter CANCEL jobname, DUMP to terminate the job. The programmer will receive a system completion code of 122 with his output. The code will direct him to take appropriate actions. A copy of the master console sheet should accompany his output if he calls for IBM programming support.

If communication with the system cannot be established, do the following before calling IBM for programming support:

- Record the contents of the current PSW;
- Press STOP. Place the RATE switch to the INST position. Record the contents of the Instruction Counter (also called Instruction Address Register on some models) for each depression of the START pushbutton until you have instruction-stepped through the loop. If the loop is so large that it is impractical to record its entire scope, then record five sequential instruction addresses when the Instruction Counter contains a large value. You may capture the small and large ends of the loop by temporarily placing RATE to the PROCESS position, pressing START then STOP until observation of the Instruction Counter shows the desired range;
- Execute the stand-alone program IMDSADMP with the TYPE=HI option to produce a storage dump to tape. If a tape is not available, execute the stand-alone program IMDSADMP with the TYPE=LO option to produce a storage dump to a printer;
- Have the master console sheet available;
- Execute IMDPRDMP with the 'GO' option after you restart the system. The input to IMDPRDMP is the dump tape from IMDSADMP. Save the formatted dump output.

If you cannot restart the system, execute the hardware system test appropriate for your system before calling IBM for hardware support.

Programmer Response: The programmer whose job is terminated from a loop by the operator or the system (e.g., TIME expiration or program check interruption) will be directed by the documented instructions for the system completion code that accompanies his job step. This might be system completion code 122, 222, 322, or 0Cx.

PART III: NUMBERED MESSAGES

Independent Utility Messages (IBC)



Component Name	IBC
Program Producing Message	Independent utility programs: IBCDASDI (DASDI), IBCDMPRS (DUMP/RESTORE), IBCRCVRP (RECOVER/REPLACE).
Audience and Where Produced	For programmer: location specified in MSG utility control statement.
Message Format	<p>IBCnnns text IBC2nns text cuu xx ssss YYYYYYYYYYYY ~~~~~ cccchhhh</p> <p>nnn or 2nn Message serial number.</p> <p>s Type code:</p> <p>A Action; operator must perform a specific action. I Information; no operator action is required. W Wait; processing stopped until action is determined and performed.</p> <p>text 16-byte message text.</p> <p>c Channel of device in error.</p> <p>uu Unit in error.</p> <p>xx Command code.</p> <p>sss Status bytes from channel status word (CSW). YYYYYYYYYYYY ~~~~~ Sense bytes.</p> <p>ccc Cylinder address of direct access device being used when failure occurred. (This address appears only if direct access device is being used.)</p> <p>hhh Head address of direct access device being used when failure occurred. (This address appears only if direct access device is being used.)</p>
Associated Publications	<u>IBM System/360 Operating System: Utilities, GC28-6586</u>
Problem Determination	Refer to the fold-out in part IV of this publication for problem determination instructions.

Error Messages for IBCDASDI (DASDI) and IBCDMPRS (Dump/Restore)

IBC101W INVALID CARD CODE. CORRECT ERROR.
 DEPRESS INTERRUPT KEY.

Explanation: An invalid card code appears in the above card.

Programmer Response: Probable user error. Check for keypunch or multipunch errors. Correct and rerun the job.

Problem Determination: Table I, items 2, 20, 29.

IBC102A CONTROL STATEMENT ERROR. JOB TERMINATED.

Explanation: A utility control statement contains an incorrect keyword, parameter, or name field.

Programmer Response: Probable user error. Check for keypunch errors. Correct incorrect keyword, parameter, or name fields. Rerun the job.

Problem Determination: Table I, items 2, 20, 29.

IBC103A STATEMENT SEQUENCE ERROR. JOB TERMINATED.

Explanation: The utility statements are not in the proper sequence, or unnecessary utility statements are present.

Programmer Response: Probable user error. Correct control statement sequence or remove unnecessary statements and rerun the job.

Problem Determination: Table I, items 2, 20, 29.

IBC104W SVC INTERRUPT. JOB TERMINATED.

Explanation: An unknown SVC interrupt occurred. This program does not issue SVCs.

Operator Response: Re-execute the program.

Problem Determination: Table I, items 11, 15, 20, 29.

IBC105A DEFINE INPUT DEVICE.

Operator Response: Enter the following message from console typewriter:

INPUT=dddd cuu,

where dddd is the device type and cuu is the channel and unit address of the input device.

IBC106A THE VOLID IN CONTROL STATEMENT DOES NOT AGREE WITH ID IN VOL LABEL WHICH FOLLOWS. VOLID=xxx.

Explanation: The VOLID parameter in the utility control statement did not match the volume serial number found on the receiving volume (xxx).

Operator Response: Probable user error. Correct the statement or mount the correct volume and restart the program.

Problem Determination: Table I, items 2, 15, 20, 28, 29.

IBC107W TRACK ZERO BAD. JOB TERMINATED.

Explanation: The device cannot be initialized as a systems residence volume due to a defective surface on cylinder 00, track 00.

Programmer Response: This volume cannot contain IPL text as track 0 is defective. Mount another volume and rerun the job.

Problem Determination: Table I, items 2, 20, 29.

IBC108I HA OR R0 FIELD BAD.

Explanation: The home address or record zero was defective and has been moved down the track (on 2314/2319 disk and 2321 data cell only). The defective track and the alternate track assignment are listed.

IBC108W HA OR R0 FIELD BAD. JOB TERMINATED.

Explanation: The device cannot be initialized due to a bad surface area in the home address or track descriptor record areas.

Programmer Response: Mount another pack and rerun the job.

Problem Determination: Table I, items 2, 20, 29.

IBC109I TRACK CHK INDICATES TRACK IS GOOD.

Explanation: The track in question is good and no alternate was assigned.

Programmer Response: None.

IBC110I BAD TRACK cccchhhh.

Explanation: A defective track was found at the specified location (cccc is the cylinder number, hhhh is the head number).

Programmer Response: Make sure that message IBC111I was issued for each bad track.

IBC111I ALTERNATE cccchhhh
NONE

Explanation: An alternate track at the specified location is assigned to replace the defective track (cccc is the cylinder number, hhhh is the head number). If no location is specified with this message, either the defective track is in the alternate track area or the applicable device is a drum device.

Programmer Response: None.

NOTE: If an alternate track is bad and another alternate is assigned the second alternate will not indicate cchh.

IBC112W ALT TRACKS DEPLETED. JOB TERMINATED.

Explanation: The number of alternate tracks assigned has exceeded the maximum number for this device.

Programmer Response: Mount another volume and rerun the job.

Problem Determination: Table I, items 2, 20, 29.

IBC113W IMPROPER VTOC BEGIN ADDRESS. JOB TERMINATED.

Explanation: The starting address for the VTOC cannot be track 0 for any direct access device or track 1 for the 2302 or 2311 devices if IPL text is written by the program.

Programmer Response: Probable user error. Change the STRTADR parameter on the VTOCD statement to use another track.

Problem Determination: Table I, items 2, 15, 20, 29.

NOTE:

- The VTOC cannot occupy track 0.
- The VTOC cannot occupy track 1 on 2303 or 2311 volumes.
- The VTOC cannot start on an alternate track.



IBC151W MACHINE CHECK. JOB TERMINATED.

Explanation: A machine malfunction has caused a machine interrupt.

System Action: The job is terminated.

Operator Response: Execute the SEREP program and save the output. Rerun the job.

Problem Determination: Table I, items 14, 30.

IBC152W PROGRAM INTERRUPT. JOB TERMINATED.

Explanation: A program interrupt has occurred.

System Action: The job is terminated.

Operator Response: None.

Problem Determination: Table I, items 2, 11, 20, 29.

IBC153A TYPEWRITER FAILED TO READ LAST MESSAGE. DEPRESS INTERRUPT KEY.

Explanation: The console typewriter failed to read the input message.

Operator Response: Depress the console interrupt key and attempt to enter the input message again. If the problem recurs, call IBM for hardware support.

IBC154A READY READER cuu. DEPRESS INTERRUPT KEY.

Explanation: The reader identified in the message by cuu has a card jam, a transport jam, or is out of cards.

Operator Response: Correct the faulty condition, ready the reader, and depress the console interrupt key to continue the program. If the card or transport jam occurs again, reproduce the jammed cards and try again. If the problem recurs, call IBM for hardware support.

IBC155A READY PRINTER cuu. DEPRESS INTERRUPT KEY.

Explanation: The printer identified in the message text by cuu is not ready. This may be due to a forms check, an open interlock, or a depressed stop key.

Operator Response: Correct the faulty condition, ready the printer, and depress the console interrupt key to continue to program. If the problem recurs, and the printer has become not ready without a faulty condition apparent, call IBM for hardware support.

IBC156A READY TAPE cuu. DEPRESS INTERRUPT KEY.

Explanation: The tape drive on channel c, unit uu is not ready.

Operator Response: Correct the faulty condition, ready the tape drive, and depress the console interrupt key. If the problem recurs, and the tape drive had

become not ready for no apparent reason, call IBM for hardware support.

IBC157A READY DASD cuu. DEPRESS INTERRUPT KEY.

Explanation: The direct access device on channel c, unit uu is not ready.

Operator Response: Correct the faulty condition, ready the direct access drive, and depress the console interrupt key. If the problem recurs, and the direct access drive has become not ready for no apparent reason, call IBM for hardware support.

IBC158A WRONG TAPE ON cuu. MOUNT PROPER TAPE. INTERRUPT.

Explanation: The tape on the device specified by cuu does not pertain to this job.

Operator Response: Probable user error. Mount the correct tape and depress the interrupt key to continue.

Problem Determination: Table I, items 2, 20, 28, 29.

IBC159A READER CHECK. CORRECT ERROR. DEPRESS INTERRUPT KEY.

Explanation: A reader check has occurred.

Operator Response: Correct the faulty condition and clear the reader check. Ready the reader and continue the program by depressing the console interrupt key. If reader checks occur frequently, check the input cards with a card guide for off punched cards. If the cards are punched correctly and are in good condition and reader checks continue, call IBM for hardware support.

IBC160A PRINT CHECK. CORRECT ERROR. DEPRESS INTERRUPT KEY.

Explanation: A print check has occurred.

Operator Response: Clear the print check by depressing check reset on the printer. Depress interrupt key on the console to continue processing. If the problem recurs, call IBM for hardware support.

IBC161A END OF TAPE. MOUNT TAPE ON cuu. DEPRESS INTERRUPT KEY.

Explanation: End of present tape reel.

Operator Response: Mount another tape volume on the active tape device, i.e., the TODEV device for DUMP operations or the FROMDEV device for RESTORE operations. Depress the interrupt key to continue the program.

IBC162A MOUNT ANOTHER PACK ON UNIT cuu. DEPRESS INTERRUPT KEY.

Explanation: End of the present disk pack.

Operator Response: Mount another disk pack on the active disk drive, i.e., the TODEV device for DUMP operations or the FROMDEV device for RESTORE operations.

IBC163A END OF JOB.

Explanation: A normal end-of-job condition has occurred.

IBC164A VOLUME LABEL COULD NOT BE READ.

Explanation: An error was encountered while reading the standard volume label.

System Action: Volume cannot be identified; job terminates.

Programmer Response: Reinitialize the volume using the IBCDASDI utility program. Rerun the job. Under the operating system vary the device offline and run the IEHDASDR utility program with the LABEL function against the volume. If the problem recurs, call IBM for programming support.

IBC165A ATTEMPT TO RESTORE TO WRONG DEVICE

Explanation: The IBCDMPRS (DUMP/RESTORE) program attempted to restore data to a device type other than the type from which it was dumped.

System Action: Job terminates.

Programmer Response: Probable user error. Correct the TODEV operand to reflect the device previously dumped from.

Problem Determination: Table I, items 2, 15, 20, 28, 29.

IBC166A NOT A RESTORE VOL. ON cuu. MOUNT PROPER VOLUME. DEPRESS INTERRUPT KEY.

Explanation: A volume other than a restore volume is mounted on the named device.

Operator Response: Mount the correct column and depress the interrupt key.

IBC167A SEEKED BALLAST CELL. MOUNT PROPER CELL. DEPRESS INTERRUPT KEY.

Explanation: A ballast cell is mounted in the bin requested in a utility control statement.

Operator Response: Mount the proper cell and continue the program by depressing the interrupt key.

IBC168I TRACK 0 HAS AN ALTERNATE ASSIGNED. VOLUME HAS BECOME NON-IPL-ABLE

Explanation: Track 0 has been flagged as a defective track. (This volume is usable as a work volume, but not as a system residence volume.)

Diagnostic Messages for Independent Utilities

IBC201W COMMAND REJECT.

Explanation: The specified channel has rejected an incorrect channel command word (CCW) list.

Operator Response: Re-execute the program.

Problem Determination: Table I, items 11, 29.

IBC202A INTERV. REQUIRED.

Explanation: The specified device is not ready.

Operator Response: The specified device requires operator intervention to make it ready. If the device becomes not ready for no apparent reason, call IBM for hardware support.

IBC203W BUS. OUT CHECK.

Explanation: A bus out check has occurred on the specified channel.

Operator Response: Probable hardware error.

Problem Determination: Table I, items 12, 30.

IBC204W EQUIPMENT CHECK.

Explanation: An equipment failure has occurred.

Operator Response: Probable hardware error. If the error recurs, call IBM for hardware support.

IBC205W DATA CHECK.

Explanation: A solid data check has occurred on the specified device.

Operator Response: Probable hardware error. If the problem recurs, call IBM for hardware support.

IBC206W OVERRUN.

Explanation: An overrun check has occurred on the specified channel.

Programmer Response: Rerun the job. If the problem recurs, call IBM for hardware support.

IBC207W FLAGGED TRACK.

Explanation: A track condition check has occurred on the specified device.

Programmer Response: Rerun the job. If the problem recurs, call IBM for hardware support.

IBC208W DATA CONV. CHECK.

Explanation: A data converter check has occurred on the specified device.

Operator Response: Move data to another device and rerun the job. If the problem recurs, call IBM for hardware support.

IBC209W END OF CYLINDER.

Explanation: An unusual end of cylinder condition has occurred on the specified device.

Programmer Response: Rerun the job. If the problem recurs, call IBM for hardware support.

IBC210W INVALID ADDRESS.

Explanation: An invalid address has been issued to the specified device.

Programmer Response: Determine if the cccchhhh address shown in the message is valid for the device indicated.

Problem Determination: Table I, items 2, 13, 29.

IBC211W NOT AVAILABLE.

Explanation: The specified device is not attached to the system.

Operator Response: Ensure that the ENABLE/DISABLE switch on the device and/or control unit is in the ENABLE position. If the problem recurs, call IBM for hardware support.

IBC212W READ DATA CHECK.

Explanation: A permanent read data check has been detected on the specified tape unit.

Operator Response: Clean tape unit Read/Write heads and rerun the job. If the error recurs, call IBM for hardware support.

IBC213W COUNT FIELD CHECK.

Explanation: A data check has occurred in the count field of the specified direct access device.

Operator Response: Move the volume to another device and rerun the job. If the problem recurs, call IBM for hardware support.

NOTE: Do not move the volume to more than one other device. Bad volumes may cause damage to devices.

IBC214W TRACK OVERRUN.

Explanation: A track overrun condition has occurred.

Operator Response: Rerun the job.

Problem Determination: Table I, items 11, 29.

IBC215W FILE PROTECTED.

Explanation: The specified device is file protected.

Operator Response: If the volume is to be read only, no response is necessary. If the volume is to be written on and the device is a tape unit, install a file protect ring. If the problem recurs, call IBM for hardware support.

IBC216W DASD-END OF FILE.

Explanation: An unusual end of file has occurred on the specified direct access storage device.

Operator Response: Move the volume to another device and rerun the job. If the problem recurs, call IBM for programming support.

NOTE: Do not move the volume to more than one other device. Bad volumes may cause damage to devices.

IBC217W NO RECORD FOUND

Explanation: Two index markers were detected during a CCW chain, and the record being sought was not found.

Operator Response: Probable hardware error. If the error occurred while restoring a volume using the IBCDMPRS utility, execute the IBCDASDI or IEHDASDR utility (specifying the ANALYZE function) to reinitialize the volume; then, rerun the job.

If the error occurred while using the IBCDASDI utility or IBCDMPRS to dump a volume, rerun the job.

If the error recurs, call IBM for hardware support.

IBC218W INVALID ERROR.

Explanation: An invalid error return has occurred.

Operator Response: Rerun the job. If the problem recurs, call IBM for programming support.

IBC219W WRONG ERROR.

Explanation: The error return is valid but is not associated with the specified device.

Operator Response: Rerun the job. If the problem recurs, call IBM for programming support.

IBC220W CHAN. CTRL ERROR.

Explanation: A channel control check has occurred on the specified channel.

IBC

Operator Response: Probable hardware error. Rerun the job.

Problem Determination: Table I, items 12, 30.

IBC221W INTERFACE ERROR.

Explanation: An interface control check has occurred on the specified channel.

Operator Response: Probable hardware error. Rerun the job.

Problem Determination: Table I, items 12, 30.

IBC222W CHAN. DATA CHECK.

Explanation: A channel data check has occurred on the specified channel.

Operator Response: Probable hardware error. Rerun the job.

Problem Determination: Table I, items 12, 30.

IBC223W DASD OVERFLOW.

Explanation: An overflow incomplete condition has occurred on the specified direct access device.

Operator Response: Probable hardware error. Rerun the job. If the problem recurs, call IBM for hardware support.

IBC224W PROGRAM CHECK.

Explanation: A program check has occurred due to an incorrect channel command word (CCW).

Operator Response: Rerun the job.

Problem Determination: Table I, items 11, 13, 20, 29.

IBC225W PROTECTION CHECK.

Explanation: A protection check has occurred on the specified device.

Operator Response: Rerun the job.

Problem Determination: Table I, items 11, 29.

IBC226W UNIT EXCEPTION.

Explanation: A unit exception has occurred on the specified unit.

Operator Response: None.

IBC227W INCORRECT LENGTH.

Explanation: A wrong length record condition has occurred on the specified unit.

Operator Response: Rerun the job If the problem recurs, call IBM for programming support.

IBC228W CHAINING CHECK.

Explanation: A chaining check has occurred on the specified channel.

Operator Response: Probable hardware error.

Problem Determination: Table I, items 11, 30.

IBC229W COMMAND SEQ. ERR.

Explanation: An invalid sequence of channel command words (CCWs) was issued.

Operator Response: Probable hardware error. Rerun the job.

Problem Determination: Table I, items 11, 30.

IBC230W SEEK CHECK ERROR.

Explanation: An invalid SEEK address was issued, or a unit malfunction caused a SEEK check.

Operator Response: Probable hardware error. Rerun the job.

Problem Determination: Table I, items 2, 20, 30.

IBC231W WRITE DATA CHECK.

Explanation: A permanent write data check has occurred on the specified tape unit.

Operator Response: Clean the Read/Write heads of the indicated tape unit and rerun the job. If the problem recurs, call IBM for hardware support.

IBC232W TAPE -- LOAD POINT.

Explanation: A tape at load point condition has occurred on the specified tape unit.

Operator Response: None.

IBC233W NOISE RECORD.

Explanation: A noise record was found on the specified tape unit.

Operator Response: Clean the Read/Write heads of the specified tape unit and rerun the job.

Problem Determination: Table I, items 28, 30.

IBC234W MISSING ADR-MARK.

Explanation: A missing address marker has occurred on the specified device.

Operator Response: None. If the problem recurs, call IBM for hardware support.



IBC235W BLANK TRACK.

Explanation: A blank track has been encountered on the specified data cell.

IBC236W 3 BLANK CYLINDERS.

Explanation: Three blank cylinders have been encountered during the analysis of a strip.

Operator Response: Probable hardware error. Call IBM for hardware support.

NOTE: The message usually indicates that a 2321 failed to 'pick' a strip.

IBC237W 3 BLANK STRIPS.

Explanation: Three blank strips have been encountered within one subcell.

Operator Response: Probable hardware error. Call IBM for hardware support.

NOTE: The message usually indicates that a 2321 failed to 'pick' a strip.

IBC238W 3 BLANK SUBCELLS.

Explanation: Three blank subcells have been encountered within a cell.

Operator Response: Probable hardware error. Call IBM for hardware support.

NOTE: This message usually indicates that a 2321 failed to 'pick' a strip.

IBC239W 3 BLANK TRACKS.

Explanation: Three blank tracks have been encountered within one cylinder.

Programmer Response: Probable hardware error. If the problem recurs, call IBM for hardware support.

NOTE: This message usually indicates that a 2321 failed to 'pick' a strip.

IBC242W INVALID TRK FMT.

Explanation: An attempt was made to write data exceeding track capacity on the specified device.

Operator Response: Rerun the job.

Problem Determination: Table I, items 11, 29.

IBC243W WRITE INHIBITED.

Explanation: The WRITE INHIBIT switch is probably set on in the control unit to inhibit execution of write commands.

Programmer Response: Check the status of the WRITE INHIBIT switch:

- If the WRITE INHIBIT switch is set on to inhibit execution of write commands and the disk pack should be written on, set the switch off and rerun the job.

- If the write inhibit switch is set on to intentionally inhibit execution of write commands, follow the procedures established by your installation.
- If the WRITE INHIBIT switch is set off to allow execution of write commands, rerun the job.

Problem Determination: Table I, items 2, 13, 30.

IBC249W I/O ERROR, JOB TERMINATED.

Explanation: This message follows all messages that describe input/ output error conditions.

Error Messages For IBCRCVRP (Recover/Replace)

IBC300I TRACK HAD BAD {R0|HA}

Explanation: An error was encountered while reading either the home address (HA) or the track descriptor record (R0).

Programmer Response: Run the IBCDASDI utility program and reinitialize the volume. Restore the data using the IBCDMPRS utility program. If the problem recurs, call IBM for hardware support.

IBC301I ADDRESS MARKER MISSING AFTER XXX

Explanation: The RECOVER routine found that an address marker was missing after the specified record.

IBC302I UNEXPECTED EOF INTERRUPT. EOP

Explanation: The key length and data length of each record was compared against the actual key and data available in each record on the track. A zero data length in a count field indicated EOF but there was data available in that record, therefore an unexpected end of file was generated.

System Action: End of pass (EOP). Processing of the control statement terminates. The RECOVER program continues to the next statement.

Programmer Response: If R0 is the bad record, reinitialize the pack with the IBCDASDI utility program. If the record is other than R0 use the IBCDMPRS utility program to restore the volume.

Problem Determination: Table I, items 2, 13, 20, 29.

IBC303I TRACK HAS HA AND R0 ONLY. EOP

Explanation: Track has only home address and track descriptor record, and was not flagged as a bad track.

System Action: The RECOVER routine continues to the next control card. There is no need to replace data on this track.

IBC304I DATA TRACK bbbbccchhhh ON ALT.
bbbbccchhhh

Explanation: The specified data track has been assigned this alternate.

IBC305I HA IS BAD or XXX HAS BAD {KEY|DATA|KEY AND DATA} or XXX HAS BAD {COUNT|ADDRESS MARK} LIST OF BAD RECORD FOLLOWS. ASSUME RECORD SIZE REST OF TRACK

Explanation: An error was encountered while reading the home address or the key and/or data fields of the specified record (XXX); or the specified record has a bad count or a missing address mark.

System Action: In the last case, the remaining portion of track is listed (in hexadecimal) on the message output device.

Programmer Response: Use the IBCDMPRS utility program to dump the volume, and reinitialize the volume using the IBCDASDI program. If the problem recurs, call IBM for hardware support.

Programmer Response: Probable user error.

IBC306I ALT. TRACK bbbbccchhhh ORIGINAL
bbbbccchhhh

Explanation: The REPLACE routine has assigned the specified alternate track to receive the data from the original defective track.

System Action: The data recovered from the bad track is merged with the replacement data and written on the alternate. The original track is flagged as defective.

IBC307I VTOC ON BAD TRACK, POSSIBLY CANNOT ASSIGN ALTERNATE

Explanation: The bad track contains the VTOC DSCB which has the alternate track information.

System Action: The REPLACE program assigns an alternate track if the VTOC DSCB record containing the alternate track information is not defective. If the record is defective, the alternate track cannot be assigned.

Programmer Response: Use the IBCDMPRS utility program to dump the volume, and reinitialize the volume using the IBCDASDI program. If the problem recurs, call IBM for hardware support.

IBC400A JOB TERMINATED

Explanation: Appends REPLACE routine error messages that are accompanied by termination of the job.

IBC401A DOES NOT MEET DATA CARD ID OR FORMAT REQUIREMENTS

Explanation: Data card is not in correct format.

System Action: Job terminates.

Programmer Response: Probable user error. Correct the format of the data statement and rerun the job.

Problem Determination: Table I, items 2, 13, 20, 29.

IBC402A I/D PARAMETER ON DATA CARD DOES NOT MATCH INSERT RECORD PARAMETER

System Action: Job terminates.

Programmer Response: Probable user error. Either supply the correct record number or put the data records in the proper order. Reload the program and execute the REPLACE routine.

Problem Determination: Table I, items 2, 13, 20, 29.

IBC403A KEY AND/OR DATA FIELD LENGTH DOES NOT EQUAL COUNT FIELD REQUIREMENTS

Explanation: Either too much or not enough data was supplied in the data record.

System Action: Job terminates.

Programmer Response: Probable user error. Supply the correct number of replacement data bytes (including key), reload the program, and execute the REPLACE routine.

Problem Determination: Table I, items 2, 13, 20, 29.

IBC404A DATA CARD HAS INVALID CHARACTER

Explanation: An invalid hexadecimal character was found in the data card.

System Action: Job terminates.

Programmer Response: Correct the invalid character and rerun the job.

Problem Determination: Table I, items 2, 13, 20, 29.

IBC407A PREVIOUS RECOVER PROGRAM WAS ABORTED. RERUN RECOVER

Explanation: The RECOVER routine did not go to completion.

System Action: Job terminates.

Operator Response: Rerun the recover job. If the problem recurs, run the IBCDASDI utility program and reinitialize the volume.

IBC408A RECORD NUMBER SUPPLIED DOES NOT EQUAL CORRESPONDING BAD RECORD NUMBER

Explanation: Replacement records are not in proper order.

System Action: Job terminates.

Programmer Response: Probable user error. Reorder replacement records, reload the program, and execute the REPLACE routine.

Problem Determination: Table I, items 2, 13, 20, 29.

IBC409A NEW COUNT DOES NOT EQUAL GOOD ORIGINAL COUNT

Explanation: The count field for this record does not match the count field supplied on the INSERT statement.

System Action: Job terminates.

Programmer Response: Probable user error. Correct the count field of the INSERT statement to correspond to the original count field.

Problem Determination: Table I, items 2, 15, 20, 29.

IBC411A {TRACK|VOLID} NUMBER SUPPLIED DOES NOT MATCH NUMBER ON TAPE

Explanation: The track number or volume serial number on the REPLACE statement does not match the corresponding number on the recover tape.

System Action: Job terminates.

Programmer Response: Probable user error. Either (1) supply the correct track number or volume serial number on the REPLACE statement; or (2) supply the correct replace tape, reload the program, and execute the REPLACE routine.

Problem Determination: Table I, items 2, 13, 20, 29.

IBC412A RECOVER TAPE WAS NOT MADE BY THIS LEVEL OF RECOVER/REPLACE. RERUN RECOVER

Explanation: The REPLACE routine attempted to use output of an earlier version of the RECOVER routine.

System Action: Job terminates.

Programmer Response: Probable user error. Use an up-to-date version of the RECOVER routine to produce a correct recover tape.

Problem Determination: Table I, items 2, 15, 20, 28, 29.

IBC413A TAPE ON cuu NOT A RECOVER TAPE

Explanation: A recover tape is not mounted on the specified channel and unit, as stated in the REPLACE statement.

System Action: Job terminates.

Operator Response: Probable user error. Mount the correct tape and rerun the job.

Problem Determination: Table I, items 2, 15, 20, 28, 29.

IBC

Supervisor Messages (IEA)



Component Name	IEA
Program Producing Message	ABEND, IEAPRINT program, input/output supervisor, nucleus initialization program (NIP), rollout/rollin, and supervisor.
Audience and Where Produced	For operator: console. For programmer: SYSPRINT data set.
Message Format	xx IEAnns text xx Message reply identification (absent, if operator reply not required or if issued by IEANIP at IPL time.) nnn Message serial number. s Type code: A Action; operator must perform a specific action. E Eventual action; operator must perform action when he has time. I Information; no operator action is required. W Wait; processing stopped until action is determined and performed. text Message text.
Comments	None.
Problem Determination	Refer to the fold-out in part VI of this publication for problem determination instructions.

Input/Output Supervisor Messages 1

IEA000A adr,INT REQ,cm,stat,sensbbbbbb,,ser,jjj
IEA000A adr,INT REQ,CC=3/NO PATHS AVAILABLE,,,jjj

Explanation: For the first format of the message, the input/output supervisor detected a device that requires intervention; for the second format of the message, the input/output supervisor received a not operational indication on the last available path to a device.

In the message text in hexadecimal, the fields are:

- adr Unit address of the device.
- cm Operation code of the channel command word (CCW) during whose execution the error occurred. If the channel command word cannot be found, this field appears as **.
- stat Status portion of the channel status word (CSW).
- sens First 2 sense bytes for the error condition.
- bbbbbb Next 3 sense bytes for the error

- condition. This field appears only for devices that give more than 2 bytes of sense information.
- ser Serial number of the volume on which intervention is required. This field appears only for magnetic tape or direct access devices.
- jjj Job name, in characters, during which intervention is required. (If the job name cannot be determined, this field will be left blank.)

- Operator Response:** For the first format of the message, take an appropriate action, such as:
- Make the unit ready. If the unit cannot be made ready, cancel the job.
 - Feed more cards to the reader or punch.
 - Clear a card jam.
 - Empty a stacker.
 - Empty the chip box.
 - Put paper into the printer or console typewriter.

For the second format of the message, either physically turn on a path to the device (for example, a control unit switch or a channel switch) or VARY a path online that has been previously varied offline. Then, if necessary, make the device ready.

Problem Determination: Table I, items 11, 29, 30.

```
IEA000I adr,errmsg,cm,stat,sens,dcbctfd,ser
IEA000I lna,err,cm,stat,ibss,opxxterm,,jjj
IEA000I adr,errdscrptn,cm,stat,sensbbbbbb,
        {binxcylntcrck},ser,jjj
        {binxsbstcytr}
        {dcbctfd}
```

Explanation: The input/output supervisor, the basic telecommunication access method (BTAM), or the queued telecommunication access method (QTAM) routine found an uncorrectable input/output error. The first format of the message is used only for magnetic tapes; the second format only for telecommunication devices; and the third format for all devices other than telecommunication devices. For the 2305 and 3330, two lines are required to contain the message.

In the message texts, the fields are:

errmsg

Message describing the error:

- ERROR ON ERG to indicate that a data check occurred during an erase gap operation. The operation was initiated by the write recovery procedures. This message is an indication that some residual data remained on the tape; a later reread through the erased area may indicate a noise record. Depending on the length of the noise, a permanent error (read data check) may occur.
- NOISE-USER to indicate that a noise record (a record whose length is less than 12 bytes) was recognized as a cause of a data check. The noise record is ignored, and no repositioning for a reread is attempted.
- NOISE-ERP to indicate that error recovery procedures were in progress when a short record-data check condition was encountered. This situation should not occur, and is a good indication of either faulty hardware media, a crimp in the tape, or noise on the bus line. Repositioning of the tape cannot be guaranteed under these conditions.
- UNEX LOAD PT to indicate that an unexpected load point was encountered during error recovery for magnetic tape (probably the result of a recording density incompatibility). The message may appear twice if the tape is not a standard label tape.
- CTRL BLK ERR to indicate that the tape ERP is using an input/output block IOB in which the CSW command address is zero instead of an expected address.
- DSE FAILED to indicate that a data security erase failure occurred. An IOB intercept condition has been detected and the error is flagged as permanent.
- UNEX INTRPT to indicate that an

interrupt condition has been detected by the error recovery procedures and that only "device end" is on in the status byte.

errdscrptn

Description of the error based on status and sense information:

- CCC - channel control check.
- ICC - interface control check.
- CHC - chaining check.
- CDC - channel data check.
- EQC - equipment check.
- BOC - bus out check.
- CMD - command reject.
- DCK - data check
- SEN - a unit check occurred during a sense operation. (When this condition is present, the fields cm, stat, sensbbbbbb, and binxcylntcrck do not appear in the message text.)
- OVR - (for direct access and magnetic tape only).
- SKC - (for direct access only).
- NRF - no record found (for direct access only).
- MAM - missing address marker (for direct access only).
- DCC - data converter check (for magnetic tape only).
- UNC - unusual command (for 2540 card reader and punch only).
- TOT - (for telecommunications only).
- LDA - (for telecommunications only).
- IOE - input/output error (for errors other than those described above).
- WRI - indicates write inhibit switch should be checked.

adr

Unit address, in hexadecimal, of the device.

lna

Line address, in hexadecimal.

cm

Command code, in hexadecimal, of the channel command word (CCW) being executed when the error occurred. If the channel command word cannot be found, this field appears as **.

stat

Status portion, in hexadecimal, of the channel status word (CSW).

sens

First two sense bytes, in hexadecimal, for the error condition. This field appears only if a unit check condition is indicated in the stat field (which precedes this field in the message text).

bbbbbb

Next three sense bytes, in hexadecimal, for the error condition. This field appears only for devices that give more than two bytes of sense information. For the 3330 and 2305, this field contains the next six sense bytes for program errors and the next 22 bytes for equipment and data checks. These are contained on the second line of the message.

ib The sense byte describing a unit check type error condition for telecommunication devices.

ss Sense information resulting from the execution of a diagnostic Write/Read command which ended with a unit check status (2701 Data Adapter Unit only). This information may result from a Write/Break or Read/Skip command for QTAM.

dcbctfd Record count, in hexadecimal, not including label records. This field appears only for magnetic tape. (For the first format of this message, this field indicates the count of the record preceding the error record.)

op TP operation code, in hexadecimal, describing the type of channel command word (CCW) being executed when the error occurred.

xx Not used.

term Terminal identification characters, in hexadecimal. It may be either two bytes or one byte, depending upon the terminal type. If it is one byte, it is left justified. If a dial line is being used with QTAM, the last four digits of the dial number are provided.

binxcyltrck Address, in hexadecimal, of the bin (binx), the cylinder (cyl), and the track (trck) where the error occurred. When an error occurs while trying to obtain this data, the last seek address is substituted. This field appears only for disk and drum direct access devices. On a data or equipment check for a 2305 or 3330, this field does not appear. For other errors on these devices, the field is contained on the second line.

binxsbstcytr Address, in hexadecimal, of the bin (binx), the subcell (sb), the strip (st), the cylinder (cy), and the track (tr) where the error occurred. When an error occurs while trying to obtain this data, the last seek address is substituted. This field appears only for data cell direct access storage devices.

ser Serial number of the volume on which the error occurred. This field appears only for magnetic tape or direct access devices.

jjj Jobname

Note: Two consecutive commas or a blank field in the message text indicates that a field could not be determined or is contained on the next or previous line of the message.

Operator Response: Probable hardware error. For the first format of the

message, proceed with caution in accepting, unconditionally, the results of the operation. Consider canceling the job if there is a requirement to expect perfect results. Each message should be considered as a potential warning of a marginal condition.

Problem Determination: Table I, items 2, 30.

For the second and third formats of the message, note that some abnormal error condition occurred. Depending on the severity of the error (check the status and sense information) and depending on the installation requirements, take appropriate action.

For the 2305 and the 3330, the following responses are valid:

- CMD REJECT - command reject
This is a programmer error - correct and retry.
- OVERRUN
BUS OUT CK - bus out check
EQUIP CHECK - equipment check
INIF CTL CK - interface control check

These are permanent hardware faults. Customer Engineer action is required.

- DATA CHECK
Operator should request an alternate sparing utility program such as IEHATLAS to perform recovery - replace functions and to assign an alternate track spare if necessary.

If the above utility cannot complete, then the GET ALT function in the IBCDASDI or IHFDASDR utility should be invoked. This will assign the spare but will not perform recovery/replace.

If no alternate spares are available, Customer Engineer action is required.

- WR INHIBITED
If the write inhibit switch is set on to inhibit execution of write commands and the volume should be written on, set the switch off and rerun the job. If the write inhibit switch is set on to intentionally inhibit execution of write commands, follow the procedures established by your installation.

IEA001I UNIT adr, PATH pth INOPERATIVE [FOR CPU x]

Explanation: One path to a multipath device has become inoperative. The system will continue all operations on a limited basis, using the remaining paths.

In the message text, the fields are:

adr Unit address, in hexadecimal, of the device.

pth Channel and unit control path, in hexadecimal, by which the device

could not be accessed. If the path cannot be determined, this field appears as **.

x

Central processing unit, A or B, for which the path is inoperative. The field FOR CPU x appears only for multiprocessing systems.

Operator Response: Probable hardware error. The system will automatically begin reusing the path when it becomes operational.

Problem Determination: Table I, items 2, 30.

IEA022I jjj sss CORE IMAGE FAILED -x

Explanation: The attempt to write a core image dump for step sss of job jjj failed for one of the following reasons:

- If x is 1, the data set was full.
- If x is 2, the format of the data set was incorrect.
- If x is 3, an input/output error occurred; no dump is provided.
- If x is 4, an input/output error occurred; a partial dump is provided.
- If x is 5, an end-of-volume condition occurred for a tape; a partial dump is provided.

System Action: The system continues processing.

Operator Response: None.

Problem Determination: Table II, Format 1: trace option - TRACE=IO. If x=1, execute the IMDPRDMP service aid program and then execute the job step again. If the problem recurs, call IBM for programming support.

If x=2, execute the IEHDASDR program to produce a direct access dump of the SYS1.DUMP data set before calling IBM for programming support.

If x=3 or x=4, have the master console log available and call IBM for programming support.

If x=5, probable user error. If the message was issued on the first core image dump written to the tape volume, use a full 2400 foot reel of tape, or allocate the SYS1.DUMP data set on a direct access device specifying sufficient space to contain the entire dump. If the message is issued on other than the first dump written to the volume, note the number of dumps which can be contained on a single tape volume, manually unload the dump volume, and mount a new non-labeled scratch tape. This tape should be manually unloaded and replaced by a new tape when the number of core image dumps on that tape is such that a subsequent dump would generate the end of reel condition.

IEA023I jjj sss CORE IMAGE COMPLETE -x

Explanation: If x is 1, the attempt to write a core image dump for step sss of job jjj was successful.

System Action: The system continues processing.

Operator Response: For a direct access device, use the IMDPRDMP service aid program to print the dump data set.

Problem Determination: Table II, Format 1: trace option - TRACE=IO.

Supervisor Messages

IEA007I NO CORE AVAIL FOR NEW REGN

Explanation: Sufficient storage (52K contiguous bytes within dynamic storage) to bring in a terminator is not available.

System Action: A second attempt is made to obtain the 52K of storage, and if successful, processing continues. If main storage can not be obtained, the task is abnormally terminated and the system proceeds to the next task.

Operator Response: None.

Programmer Response: Ensure that 52K of main storage is available and resubmit the job.

ABEND Messages

IEA021I jjj sss CORE IMAGE BYPASSED -x

Explanation: No attempt was made to write a core image dump for step sss of job jjj for one of the following reasons:

- If x is 1, the damage assessment routine (DAR) was entered twice to perform the same function.
- If x is 2, the data set to contain the dump was not in the system.
- If x is 3, a dump was already in progress.

System Action: The system continues processing.

Operator Response: If x is 1 or 3, none. If x is 2, report this message to the programmer.

Programmer Response: Ensure that the SYS1.DUMP data set is included in the system and execute the job step again.

Problem Determination: Table I, item 30. Table II, Format 1: trace option - TRACE=SYS.

IEA024I ERROR IN GTF. xxx TRACE OPTION WAS DISABLED

Explanation: ABDUMP in its formatting of the GTF trace table found an error record for trace option xxx; where xxx is, EXT IO, SIO, PI, or SSM (SSM is applicable only in a multiprocessing system). This error record was produced when GTF encountered a program check while attempting to create a trace record for xxx. This message is followed by a hexadecimal dump of the error record. Refer to messages IHL118I and IHL1201.

System Action: The program check for the error record caused GTF to bypass recording further events for the trace option xxx. However, GTF continued to record all events for the other trace options requested.

Programmer Response: Probable user error. Ensure that problem programs are not altering the GTF region or partition. other trace options requested. If xxx is SVC, SVC tracing will continue.

Problem Determination: Table I, items 1, 2, 16, 29. Ensure that sufficient storage is available within the GTF region or partition for a SNAP dump (an additional 4K is needed for ABDUMP/SNAP execution). Ensure that the GTFSNP catalogued procedure is used to obtain an ABDUMP/SNAP dump.

IEA025I INVALID GTF RECORD FOLLOWS

Explanation: ABDUMP in its formatting of the GTF trace table found a GTF record with an invalid EID or FID field. ABDUMP prints this message and follows it with a hexadecimal dump of the error record.

System Action: Processing continues.

Programmer Response: Probable user error. Ensure that problems programs are not altering the trace table.

Problem Determination: Table I, items 1, 2, 11, 29.

IEA027I jjj sss ENQUEUED RESOURCES
IEA027I xxxx, yyyy

Explanation: Step sss of job jjj has been running in "must complete" status. However, the job has been scheduled for abnormal termination.

In the message text, xxxx is a major name and yyyy is a minor name of an enqueued resource for the job. This line will appear for each enqueued resource.

System Action: The system continues processing.

Operator Response: None. Message IEA028A follows.

IEA028A REPLY 'C' OR 'N'

Explanation: This message permits the operator to respond to preceding message IEA027I.

System Action: The system waits for a reply.

Operator Response: If the resources are critical and "must complete" status must be maintained, enter REPLY xx,'C'. If the resources are not critical, enter REPLY xx,'N' to release the resources and allow processing to continue.

Note: A REPLY xx,'C' will require that the system be reinitialized to release the resources.

IEA029I jjj sss TASK {REINSTATED
REINSTATEMENT FAILED}

Explanation: An attempt was made to reinstate a failing task for step sss of job jjj. Task reinstatement for problem program tasks means that the supervisor will abnormally terminate the task. System tasks will be reinitialized.

System Action: The system continues processing.

Operator Response: None. If the problem recurs, before calling IBM for programming support, execute the IMDPRDMP service aid program to print the dump data set, and have the output available.

Problem Determination: Table II, Format 1: trace option - TRACE=SYS.

IEA030I OPEN FAILED FOR DUMP DATA SET FOR {JS
ST}
(DUE TO hhh)

Explanation: An attempt to open a dump data set during ABEND processing was unsuccessful. In the message text, JS signifies a job step task and ST signifies a subtask (valid only in systems with the MFT - ATTACH option and with MVT). If the phrase "DUE TO hhh" appears, abnormal termination with a system completion code of hhh has occurred during the attempted open.

System Action: No dump is provided. The system continues processing.

Programmer Response: If the phrase "DUE TO hhh" appears, follow the response for that completion code. If the phrase does not appear, check that the SYSUDUMP DD statement is correctly specified, and resubmit the job.

Problem Determination: Table I, items 1, 15, 29.

IEA

The yyyy is either ALL if the hard copy log is to record all messages or a list of the appropriate routing codes (separated by commas and enclosed in parentheses) if only messages with these routing codes are to be recorded on the hard copy log. (If the console configuration contains an active graphic console or more than one active console, a hard copy log is required. In this case, the yyyy is not required if any of routing codes 1, 2, 3, 4, 7, 8, and 10 are desired, since all of these codes are automatically assigned by the system.)

The zzzz is either CMDS if all commands and responses are to be recorded on the hard copy log or NOCMDS if the commands and responses are not to be recorded on the hard copy log; if this parameter is not specified, CMDS is the system default. (If the console configuration contains an active graphic console or more than one active console, a hard copy log is required. In this case, the zzzz is not required and will be ignored if specified since CMDS is automatically assigned by the system.)

- MIN=nn to specify the minimum main storage space for job initiation. The nn is the number of 1K (1024-byte) blocks to be used. Caution should be taken to avoid reducing this value below actual scheduler design. This value overrides the value specified during system generation for minimum scheduler size (MINPART).
- MOD=nn to specify the computing system model being initialized. The nn is the model number (for example, 40, 50, or 65). This parameter is used to initialize the correct recovery management support (RMS) routines for the specified model. The default is the system-generated model identifier.
- RAM=aa to specify access method modules to be made resident. The aa is appended to IEAIGG to form the name of a SYS1.PARMLIB member; the member contains the list of modules to be loaded. If specified during system generation and not modified through this reply, the IEAIGG00 list is used.
- RERP=xx to specify error recovery procedure routines to be made resident. The xx is appended to IEAIGE to form the name of a SYS1.PARMLIB member; the member contains a list of modules to be loaded. If specified during system generation and not modified through this reply, the IEAIGE00 list is used.
- RSVC=xx to specify non-resident SVC routines, which are otherwise kept in direct access storage, to be made resident. The xx is appended to IEARSV to form the name of a SYS1.PARMLIB member; the member contains a list of SVC modules to be loaded. If specified during system generation and not

modified through this reply, the IEARSV00 list is used. (If the resident reenterable load module area option is included in the system, this parameter is as described for MVT.)

- SQS=n to specify the main storage space for the system queue area. The n is the total number of bytes needed for the system queue area. For more than two partitions in the system, 800 bytes of storage should be added to the minimum system queue area size (1600 for systems without MCS, 2600 for systems with MCS) for each partition in excess of two. The total size of the nucleus, including the system queue area and the optional BLDL, RAM, and RSVC modules, is rounded to the next higher 2K boundary, in systems with the storage protection feature, or to the next doubleword boundary.

For systems with MVT, the parameters are:

- ALTSYS=ddd as described for systems with MFT.
- BLDL=xx,[yy] as described for systems with MFT.
- HARDCPY=(xxxx[,yyyy][,zzzz]) as described for systems with MFT.
- HRAM=aa[,bb,cc,dd] to specify access method and other reenterable modules to be made resident in the secondary link pack area in Hierarchy 1 (only if IBM 2361 Core Storage and Main Storage Hierarchy Support is included in the system). The aa, bb, cc, and dd are appended to IEAIGG to form the names of SYS1.PARMLIB members. The number of members specified by the HRAM and RAM parameters combined cannot exceed four. If not specified at this time, no reenterable modules are loaded into Hierarchy 1.
- HSVC=aa[,bb,cc,dd] to specify non-resident SVC routines to be made resident in a secondary link pack area in Hierarchy 1 (only if IBM 2361 Core Storage and Main Storage Hierarchy Support are included in the system). The aa, bb, cc, and dd are appended to IEARSV to form the names of SYS1.PARMLIB members. The number of members specified by the HSVC and RSVC parameters combined cannot exceed four. If not specified at this time, no non-resident SVC modules are loaded into Hierarchy 1.
- MIN=nn to specify the minimum main storage space for job initiation. The nn is the number of 1K (1024-byte) blocks to be used. It must be 52 or greater. This value overrides the value specified during system generation.
- MOD=nn to specify the computing system model being initialized. The nn is the model number (for example, 40, 50, or 65). This parameter is used to



initialize the correct recovery management support (RMS) routines for the specified model. The default is the system-generated model identifier.

- MPS=nn to specify the main storage space for the master partition. The nn is the number of 2K (2048-byte) blocks to be reserved. This value overrides the value specified during system generation.
- QBF=nnn to specify the main storage space to be reserved for buffers for the job queue. The nnn is the number of 1K (1024-byte) blocks to be reserved. It can be any number up to and including 255. This value overrides the value specified during system generation.
- RAM=aa[,bb,cc,dd] to specify access method and other reenterable modules to be made resident. The aa, bb, cc, and dd are appended to IEAIGG to form the names of SYS1.PARMLIB members; the members contain lists of modules to be loaded in addition to the standard required modules. One to four members can be thus specified. If specified during system generation and not modified through this reply, the IEAIGG00 list is used.
- RRP=aa[,bb,cc,dd] to specify error recovery procedure routines to be made resident. The aa, bb, cc, and dd are appended to IEAIGE to form the names of SYS1.PARMLIB members; the members contain lists of error recovery procedure modules to be loaded. One to four members can be thus specified. If specified during system generation and not modified through this reply, the IEAIGE00 list is used.
- RSVC=aa[,bb,cc,dd] to specify non-resident SVC routines, which are otherwise kept in direct access storage, to be made resident. The aa, bb, cc, and dd are appended to IEARSV to form the names of SYS1.PARMLIB members; the members contain lists of SVC modules to be loaded. One to four members can be thus specified. If specified during system generation and not modified through this reply, the IEARSV00 list is used.
- SQS=n to specify the main storage space for the system queue. The n is the number of 2K (2048-byte) blocks of storage to be added to the size specified during system generation.
- TMSL=(nn,xxxx) [, (nn,xxxx)...] to specify time-slice groups. The nn is the priority of the time-slice group and is expressed as a one or two digit value from 0 through 13; the xxxx is the length, in milliseconds, of the time slice and is expressed as a one to four digit decimal value.

System Action: The system waits pending the operator's reply.

Operator Response: Reply as requested by the system programmer at the installation. The reply must take one of the following forms:

- REPLY 00,'U' to indicate that no parameters are to be changed.

Note: a simple EOB is equivalent to this reply.

- REPLY 00,'U,H' when using the system generation value for all parameters, and a list of the size of each of the storage hierarchies in systems with IBM 2361 core storage and main storage hierarchy support for IBM 2361 models 1 and 2 is wanted.
- REPLY 00,'U,L,H' when using the system generation value for all parameters, and all lists (including a list of the size of each of the storage hierarchies) are wanted.
- REPLY 00,'prm=' to indicate that the parameter as specified during system generation is to be canceled for this loading. The cancelation specification must always be followed by a comma.
- REPLY 00,'prm=val' or REPLY 00,'prm=val,val,...' to indicate that the parameter is to take the specified value(s) for this loading.
- To get a list of the HRAM, HSVC, RAM, and/or RSVC modules in systems with MVT or a list of the BLDL, RAM, or RSVC modules or all three in systems with MFT, enter one of the following:
REPLY 00,'prm=val,L'
REPLY 00,'prm=val,val,...,L'
REPLY 00,'prm=00,L'
REPLY 00,'U,L'

Enter the first or second reply when specifying the value(s) for the parameter, the third reply when using the system generation value for the parameter, and the fourth reply when using the system generation value for all parameters, if all lists are wanted.

- Omission of a parameter from the reply to indicate that the system generation value is to be used.

More than one parameter can be specified. For example:

REPLY 00,'prm=val,val prm=, prm=00,L'

The rules for specifying several parameters are:

- The list of parameters must be enclosed in apostrophes. A comma or blank must separate successive parameters in the list. The last parameter in the list need not be followed by a comma or blank unless the cancelation specification is the last item. The cancelation

specification must always be followed by a comma. IEA104A M ser

Example:

You may specify:
r 00,'prm=val,prm=val,prm=,'
or
r 00,'prm=val,prm=,prm=val'

You may not specify:
r 00,'prm=val,prm=val,prm='

- U must not be specified.
- If all the parameters do not fit on one line, follow the last parameter on the line with a blank and CONT. For example:

REPLY 00,'RAM=12,RSVC=00,I CONT'

The system will issue message IEA116A to request the rest of the reply. The reply can be continued as many times as needed.

IEA102A INVALID PARAMETER/FORMAT - RESPECIFY

Explanation: During nucleus initialization, the last reply entered through the console contained an invalid parameter or was not in the correct format.

System Action: If the reply contained an invalid parameter, the system accepts all parameters specified before the specification of the parameter in error.

Operator Response: Probable user error. Enter the reply again correctly. In the case of an invalid parameter, it is permissible to enter a reply specifying only the corrected parameter and the parameters that were not accepted (that is, those parameters following the invalid parameter in the last reply).

If desired, any parameter may be respecified in this response. However, if any parameter was accepted, any reply which contains the parameter U is invalid.

Problem Determination: Table I, items 2, 29.

IEA103I DATASET dsn NOT FOUND BY LOCATE

Explanation: Data set dsn could not be found; the data set is either not cataloged or the volume containing the data set is not mounted.

System Action: Nucleus initialization will continue. The system will run with decreased function.

Operator Response: Probable user error. If the data set and its associated function are required, catalog the data set or mount the volume containing the data set. Restart the system.

Problem Determination: Table I, items 2, 11, 25d, 29.

Explanation: The nucleus initialization program (NIP) requires that the direct access volume whose serial number is ser be mounted.

This message will be repeated if a non direct access device, a direct access device with a serial number other than ser, or a direct access device of the wrong device type was mounted.

System Action: The system waits for a reply.

Operator Response: Probable user error. Mount the specified volume on any available direct access device of the correct type.

Problem Determination: Table I, items 2, 11, 29.

IEA105A dsn RESIDES ON A UNIT (utn) FOR WHICH THERE IS NO UCB

Explanation: The nucleus initialization program (NIP) could not find the unit control block (UCB) for the unit on which the volume containing the specified data set resides. The unit was probably not defined during system generation.

In the message text, dsn is the data set name and (utn) is the unit name.

System Action: If dsn is either SYS1.NUCLEUS or SYS1.LINKLIB, the system enters the wait state. If dsn is any optional data set name, the system continues processing.

Operator Response: If the SYS1.NUCLEUS or SYS1.LINKLIB data set resides on a unit having no unit control block, remove the system residence volume from its present unit and mount it on a unit defined at system generation. Then start the system again.

If an optional data set (SYS1.ASRLIB or SYS1.ROLLOUT) resides on a unit having no unit control block, the associated option will be made inoperative and nucleus initialization will continue. If it is desired to include the option in the system, remove the volume from its present unit and mount it on a unit defined at system generation. Then start the system again.

Report this message to the system programmer at the installation, so that he can have the system generated again with all units defined.

Programmer Response: Probable user error. Perform an input/output system generation, specifying in the IODEVICE macro instruction the addresses of all device accessible to the system.

Problem Determination: Table I, items 2, 11, 29.

IEA106I mem NOT FOUND IN lib

Explanation: The nucleus initialization program (NIP) could not find the member named mem in the library named lib.

System Action: The nucleus initialization program continues processing.

Operator Response: Report this message to the programmer.

Programmer Response: Probable user error. Ensure that the member is included in the library.

Problem Determination: Table I, items 2, 11, 29.

IEA107I prm IGNORED

Explanation: A reply to message IEA101A named a parameter, prm, that was not selected during system generation for optional changing when the system is loaded.

System Action: The nucleus initialization program (NIP) continues processing.

Operator Response: Report this message to the programmer.

Programmer Response: Probable user error. If the parameter is required ensure that the option associated with parameter prm is selected at system generation.

Problem Determination: Table I, items 2, 11, 29.

IEA108I PERMANENT I/O ERROR DURING BLDL [-SYS1.SVCLIB]

Explanation: The nucleus initialization program (NIP) is unable to bring the linkage library (SYS1.LINKLIB) or the SVC library (SYS1.SVCLIB) directory into main storage because of an uncorrectable input/output error. If the system can determine that the failure occurred while attempting to bring in the SYS1.SVCLIB directory, this information is also included.

System Action: The nucleus initialization program continues processing without a resident directory.

Operator Response: Probable hardware error. Report this message to the programmer.

Problem Determination: If the error recurs, before calling IBM for hardware support, record the address of the device on which the input/output error occurred and have it available.

IEA109I BLDL FAILED FOR FOLLOWING MODULES

Explanation: During nucleus initialization, parts of the resident directories have not been completed. The module names not found in SYS1.SVCLIB or

SYS1.LINKLIB and therefore not appearing in the resident directory are printed on the console immediately following this message.

System Action: The nucleus initialization program (NIP) continues processing with an incomplete resident directory.

Operator Response: Probable user error. Report this message and give the master console log to the programmer.

Programmer Response: Probable user error. Ensure that the modules listed are included in the SYS1.LINKLIB or SYS1.SVCLIB data set.

Problem Determination: Table I, items 2, 13, 25c, 29.

IEA110I LOAD FAILED FOR lmd

Explanation: During nucleus initialization, the access method module named lmd was not loaded into main storage.

System Action: The nucleus initialization program (NIP) continues processing.

Operator Response: Report this message to the programmer.

Programmer Response: Probable user error. Ensure that modules listed are included in the SYS1.LINKLIB data set.

Problem Determination: Table I, items 2, 13, 25c, 29.

IEA111W SPACE EXCEEDED - RESPECIFY prm

Explanation: While providing the optional parameter named prm, the nucleus initialization program (NIP) exceeded the available main storage.

System Action: The system enters a wait state (Wait State code 003).

Operator Response: Report this message to the programmer, asking him for a different response to message IEA101A so that less main storage will be required. Then restart the system.

Programmer Response: Probable user error. Ensure that sufficient main storage is available for the system generated.

Problem Determination: Table I, items 11, 29.

IEA112I LIST lis FOR prm - INVALID FORMAT

Explanation: During nucleus initialization, the format of the list named lis for the optional parameter named prm was invalid.

System Action: The nucleus initialization program (NIP) continues processing without the named parameter.

Operator Response: Report this message to the programmer.

Programmer Response: Probable user error. Ensure that the list (lis) in SYS1.PARMLIB referenced by parameter prn is of the correct format.

Problem Determination: Table I, items 13, 26c, 29.

IEA113I prn MODULE LIST

Explanation: In the reply to message IEA101A, a list of modules for the optional parameter named prn was requested. The list immediately follows this message.

System Action: The system continues processing.

Operator Response: Give the list to the programmer.

IEA114I SVC xxx NOT SUPPORTED

Explanation: During nucleus initialization, SVC routine module xxx, which is not supported by the system being initialized, was specified.

System Action: The module was not loaded; however, the nucleus initialization program (NIP) continues processing.

Operator Response: Report this message to the programmer.

Programmer Response: Probable user error. Ensure that SVC routine module xxx is included at system generation.

Problem Determination: Table I, items 11, 29.

IEA115I SVC xxx NOT DEFINED

Explanation: During nucleus initialization, SVC routine module xxx, which is not defined and does not exist, was specified.

System Action: The module was not loaded; however, the nucleus initialization program (NIP) continues processing.

Operator Response: Report this message to the programmer.

Programmer Response: Probable user error. Ensure that SVC routine module xxx is included at system generation.

Problem Determination: Table I, items 11, 29.

IEA116A CONTINUE SYSTEM PARAMETERS

Explanation: During nucleus initialization, the reply to message IEA101A specified CONT as its final entry. The CONT indicated that the reply was incomplete and that additional parameters were to be specified.

System Action: The system waits for a reply to message IEA101A.

Operator Response: Probable user error. Continue the reply to message IEA101A, beginning this continuation with REPLY 00.

IEA117I NUMBER OF TIME-SLICING GROUPS EXCEEDS SYSGEN LIMIT

Explanation: During nucleus initialization, the operator specified more time-slicing groups than were defined at system generation.

Message IEA102A follows, permitting the operator to respecify his reply.

System Action: The system waits for a reply to message IEA102A.

Operator Response: Probable user error. Respecify the reply in response to message IEA102A.

IEA118I TIME SLICE VALUE INCREASED TO 20 MILLISECONDS

Explanation: The time-slice value specified by the operator is smaller than the minimum value permitted. The nucleus initialization program (NIP) corrected the error by increasing the size of the time-slice value to 20, the minimum permissible size.

System Action: The system continues processing.

Operator Response: None.

IEA119I SQS SIZE INCREASED TO nnnn BYTES

Explanation: During system initialization, the nucleus initialization program found that the size specified for the system queue area was less than nnnn bytes.

System Action: The size of the system queue area was increased to the minimum of nnnn bytes.

System Action: The system continues processing.

Operator Response: None.

IEA120A DEVICE ddd SHARED. REPLY 'CONTINUE' OR 'WAIT'

Explanation: Device ddd is a shared device and is presently reserved by a central processing unit (CPU) other than the central processing unit from which an IPL is being performed.

System Action: The system action depends on the operator's response.

Operator Response: To wait until the device is released by the central processing unit that is presently using it, enter REPLY xx,'WAIT'. Normal

IEA

processing will continue after the device is available.

Otherwise, enter REPLY xx, 'CONTINUE'. This reply will result in the device being marked unavailable to the central processing unit from which the IPL is being performed. Processing will continue. (If this reply is entered, do not execute any job that might require allocation of device ddd. If such a job is executed, a mount message will be issued and subsequent operator action might make the device unavailable to the central processing unit that originally reserved it.)

Note: If the message appears frequently or if the wait time is excessive, notify the system programmer at the installation.

IEA125I EMULATOR COMPATIBILITY FEATURE ASSUMED
LOADED INTO WCS

Explanation: If emulation is to be performed, the nucleus initialization program (NIP) has assumed that the emulator compatibility feature has been loaded into Writable Control Storage (WCS).

System Action: The nucleus initialization program continues processing.

Operator Response: If emulation is to be performed and the compatibility feature has not been loaded into WCS, load the compatibility feature and restart the system. Otherwise, none.

IEA130I LINK LIBRARY DATA SETS NOT FOUND

Explanation: The nucleus initialization program (NIP) could not find one or more of the data sets that were to be concatenated with the SYS1.LINKLIB data set to form the system link library:

- The data sets were not found in the system catalog.
- The data sets were not found on the device indicated by the catalog. (In this case, this message will be preceded by message IEA211I.)
- The data sets were resident on a device that the operator (in response to message IEA131A) indicated was not to be mounted.

System Action: The nucleus initialization program continues processing.

Operator Response: Report this message to the programmer.

Programmer Response: Probable user error. Ensure that the data sets are included in one of the volumes specified in the SYS1.PARMLIB member LNKLST0.

Problem Determination: Table I, items 11, 13, 26c, 29.

IEA131A MOUNT LINKLIB VOL(S): ser

Explanation: The nucleus initialization program (NIP) could not find one or more of the volumes containing the data sets to be concatenated with the SYS1.LINKLIB data set to form the system link library. The volume serial numbers, ser, of the volumes that could not be found are listed one at a time following this message.

System Action: The nucleus initialization program waits for an operator response after each volume serial number is listed, and continues processing after each response.

Operator Response: After each volume serial number is listed, either mount the indicated volume or reply with an EOB signal from the console. (The EOB signal indicates that the data sets resident on the indicated volume are not to be included in the system link library.)

IEA135A SPECIFY SYS1.DUMP TAPE UNIT ADDRESS OR NO

Explanation: The nucleus initialization program (NIP) has been unable to locate the SYS1.DUMP data set and is asking whether a tape volume is to be provided for the data set.

System Action: The system waits for a reply.

Operator Response: If the SYS1.DUMP data set is to be used, enter REPLY xx, 'ddd' where ddd is the 2400/3400 series tape device to contain the tape volume.

Note: For a Model 65 Multiprocessing System, make sure that tape device ddd is accessible to the central processing unit being tested.

If the SYS1.DUMP data set is not to be used, enter REPLY xx, 'NO'. (The dump, which is normally directed to the SYS1.DUMP data set, will be bypassed if a critical system error occurs.)

IEA136I DEVICE AT ddd UNACCEPTABLE FOR SYS1.DUMP -
xxxx

Explanation: An unacceptable device ddd was specified in response to message IEA135A for reason xxxx as follows:

- NO UCB - The unit control block (UCB) for device ddd cannot be found.
- NOT 2400 - Device ddd is not a 2400/3400 series tape device.
- UNAVAILABLE - Device ddd is either not available or not operational.
- NONEXISTENT - Device ddd is physically nonexistent.
- I/O ERROR - An uncorrectable I/O error occurred on device ddd.

System Action: The system reissues message IEA135A.

Operator Response: In all cases except where xxxx is an I/O error it is a probable user error. Verify that the

device is operational and is specified correctly. Then enter REPLY xx,'ddd' again in response to message IEA135A. If the second attempt also fails, either specify another device in response to message IEA135A or enter REPLY xx,'NO' in response to message IEA135A and call IBM for programming support. If xxxx is I/O ERROR, it is a probable hardware error. Either specify another device in response to message IEA135A or enter REPLY xx,'NO', and call IBM for hardware support.

IEA137A M ddd,NL

Explanation: In response to message IEA135A, the operator indicated that the SYS1.DUMP data set was to reside on a tape volume on device ddd.

This message appears (following message IEA138A) if the operator erroneously mounts a labeled tape volume in response to this message.

This message also appears if, before the tape is mounted, input/output activity occurs on any device other than device ddd.

System Action: The system waits for the operator response.

Operator Response: Mount an unlabeled tape volume on device ddd.

IEA138A D ddd

Explanation: In response to message IEA137A, a labeled tape volume was mounted on device ddd.

System Action: The system waits for the operator response.

Operator Response: Probable user error. Demount the volume from device ddd.

Problem Determination: Table I, items 11, 29.

IEA150A SPECIFY HARDCPY

Explanation: A hard copy log is required for one of the following reasons:

- The console configuration contains an active graphic console.
- The console configuration contains more than one active console.

System Action: The system waits until the operator has responded to this message.

Operator Response: Enter REPLY xx, 'HARDCPY=(xxxx[,yyyy][,zzzz])' to specify that the hard copy log is desired:

- The xxxx is required and is either SYSLOG if the system log is to be used as the hard copy log or an appropriate unit address if a console is to be used as the hard copy log.

Note: The console specified must be one that was operating during previous NIP processing.

- The yyyy is not required if any of routing codes 1, 2, 3, 4, 7, 8, and 10 are desired, since all of these codes are automatically assigned by the system. Otherwise, the yyyy is either ALL if the hard copy log is to record all messages or a list of the additional routing codes (separated by commas and enclosed in parentheses) if messages with these routing codes are also to be recorded on the hard copy log.
- The zzzz is normally part of the standard reply but should not be specified during nucleus initialization processing since all commands and responses will automatically be recorded on the hard copy log.

IEA152I HARDCPY SPECIFICATION INVALID

Explanation: In response to message IEA101A or IEA150A, the operator specified an invalid device for a hard copy log:

- The device was not a valid console.
- The system log is not supported as the hard copy log.

System Action: In response to an invalid device in the reply to message IEA101A, the system ignores the HARDCPY specification and continues operation.

In response to an invalid device in the reply to message IEA150A, the system reissues message IEA150A.

Operator Response: Probable user error. If the invalid reply was issued in response to message IEA150A, wait until message IEA150A is reissued and then respond with a valid device (or SYSLOG if the system log is supported and SYSLOG was not previously specified).

If a hard copy log is not mandatory but is desired for NIP and IPL messages, start the system again.

If a recording of NIP and IPL messages and operator commands is not required but a hard copy log is desired, wait until a READY message is issued and then enter a VARY HARDCPY command.

Problem Determination: Table I, items 11, 29.

IEA153I HARDCPY CONSOLE UNAVAILABLE

Explanation: In response to message IEA101A, HARDCPY specified a valid console, but the console was unavailable at IPL time.

System Action: System initialization continues, but the HARDCPY specification is not accepted. If a hard copy log is required, the system issues message IEA150A.

Operator Response: If message IEA150A has been issued, respond as indicated by the message.

If a hard copy log is not mandatory but is desired for NIP and IPL messages, start the system again.

If a recording of NIP and IPL messages and operator commands is not required but a hard copy log is desired, wait until a READY message is issued and then enter a VARY HARDCPY command.

IEA154I HARD COPY OF INITIALIZATION MESSAGES DISCONTINUED

Explanation: The logging of nucleus initialization program (NIP) messages must be discontinued because the message buffer is full. The message or operator reply preceding this message was the last message recorded.

System Action: System initialization continues.

Operator Response: None.

IEA205I UNABLE TO SCRATCH dsn ON ser

Explanation: An attempt to scratch and reallocate space for data set dsn on the volume whose serial number is ser failed because of an error during the scratch operation.

System Action: The system continues processing.

Operator Response: Report this message to the programmer.

Programmer Response: Probable user error. Ensure that the central processing unit indicated at system generation is the same system that is the subject of NIP.

Problem Determination: Table I, items 11, 29.

IEA206I UNABLE TO ALLOCATE dsn ON ser

Explanation: An attempt to allocate space for data set dsn on the volume whose serial number is ser failed.

System Action: The system continues processing.

Operator Response: Report this message to the programmer.

Programmer Response: Probable user error. Ensure that the central processing unit indicated at system generation is the same system that is the subject of IPL.

Problem Determination: Table I, items 11, 29.

IEA207I FORMATTING OF dsn DATA SET UNSUCCESSFUL

Explanation: A permanent input/output error occurred while the nucleus initialization program (NIP) was attempting to set up the format of the data set dsn.

System Action: The system continues processing.

Operator Response: Report this message to the programmer.

Programmer Response: Probable hardware error. If the problem recurs, call IBM for hardware support.

IEA208I fff FUNCTION INOPERATIVE

Explanation: The nucleus initialization program (NIP) has detected unrecoverable error conditions during initialization of function fff. As a result, the function has been made inoperative.

This message is issued in conjunction with a diagnostic message identifying the specific type of error.

System Action: The nucleus initialization program continues processing.

Operator Response: Report this message to the programmer.

Programmer Response: Probable user error. Respond to the diagnostic message issued in conjunction with this message.

IEA209I dsn SCRATCHED FROM ser

Explanation: The space allocation for data set dsn was found to be too small and has been scratched from the volume whose serial number is ser.

System Action: The system attempts to allocate more space for the data set and will inform the operator of the action taken by issuing either message IEA206I or IEA210I.

Operator Response: None.

IEA210I dsn ALLOCATED ON ser

Explanation: Space for data set dsn was successfully allocated on the volume whose serial number is ser.

System Action: The system continues processing.

Operator Response: None.

IEA211I OBTAIN FAILED FOR dsn DATA SET

Explanation: The nucleus initialization program (NIP) was unable to find the data set control block (DSCB) for data set dsn for one of the following reasons:

- The volume containing the data set was not mounted.
- The data set control block was not in the volume table of contents (VTOC).
- A permanent input/output error occurred.

System Action: The nucleus initialization program continues processing.

Operator Response: If the volume that contains the data set is not mounted,

mount it and restart the system. If the volume is mounted, record the device number and notify the programmer.

Programmer Response: Probable user error. List the VTOC of the volume that is supposed to contain the data set. If the data set is not on the volume, create it and have the system restarted.

Problem Determination: Table I, items 2, 13, 25bd, 29.

Additional Technical Information: The data set may be relocated.

IEA212A D, xxx OR yyy

Explanation: During nucleus initialization, direct access devices xxx and yyy were found to have duplicate volume labels. If one of the devices is a data cell, the message text will appear as adr/b, where adr is the device address and b is the bin number of the sub-cell containing the duplicate volume label.

System Action: Nucleus initialization is suspended until one of the identified volumes is demounted.

Operator Response: Demount the volume that is not needed. If the volume to be demounted is a permanently resident device, such as a drum, start the system again. If a sub-cell is to be demounted, demount the entire data cell.

IEA213I INITIALIZATION OF SYS1.ASRLIB INCOMPLETE

Explanation: The SYS1.ASRLIB data set was only partially initialized for one of the following reasons:

- The nucleus address of one or more refreshable modules was not resolved successfully.
- The SYS1.ASRLIB data set was not large enough to contain all the modules and tables required for the machine check handler (MCH).
- An attempt was made to write a module or table onto the SYS1.ASRLIB data set, but the size of the module or table exceeded the track capacity of the unit on which the data set resides.

System Action: The system continues processing.

Operator Response: Report this message to the programmer.

Programmer Response: Probable user error. Ensure that the SYS1.ASRLIB is large enough to contain all the modules.

Problem Determination: Table I, items 11, 29.

IEA214I I/O ERROR DURING SYS1.ASRLIB INITIALIZATION

Explanation: The nucleus initialization program (NIP) has encountered a permanent input/output error while writing the SYS1.ASRLIB data set.

Operator Response: Report this message to the programmer.

Programmer Response: Probable hardware error. If the problem recurs, call IBM for hardware support.

IEA216I GETMAIN FAILED DURING INITIALIZATION

Explanation: The nucleus initialization program (NIP) issued a GETMAIN macro instruction; however, more main storage was requested than was available.

System Action: The system bypasses the function requiring the storage and issues message IEA208I, describing the inoperative function. Processing continues.

Operator Response: Report this message to the programmer.

Programmer Response: Probable user error. Ensure that sufficient main storage is available for NIP processing.

Problem Determination: Table I, items 11, 29.

IEA217I SEREP INTERFACE ESTABLISHED

Explanation: The nucleus initialization program (NIP) has retained the system environment recording, editing, and printing (SEREP) interface for one of the following reasons:

- SEREP support was selected for the model.
- Neither SER nor MCH was selected during system generation.
- No level of SER support was selected for the model. (In this case, message IEA219I precedes this message.)
- A required SER module could not be found in the SYS1.LINKLIB data set. (In this case, message IEA106I, which identifies the SER module not found, precedes this message.)

System Action: The nucleus initialization program continues processing.

Operator Response: None.

IEA218I MODEL=nnn/sys, ALTSYS=ddd, ASSUMED

Explanation: The nucleus initialization program (NIP) has assumed primary model nnn, system type (360 or 370) - sys, and alternate system residence device ddd:

- Model nnn will be used for initialization of model dependent system functions unless the MOD parameter is specified in response to message IEA101A, which follows this message.
- Device ddd will be used as the 'to' device for a system-initiated system residence swap unless the ALTSYS parameter is specified in response to message IEA101A, which follows this message.

System Action: The nucleus initialization program continues processing.

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Operator Response: If model nnn and device ddd are correct for the system being initialized, none.

If nnn is not correct, specify the correct model number in the MOD parameter in response to message IEA101A; if ddd is not to be used, specify a device of the same type as the system residence device in the ALTSYS parameter in response to message IEA101A.

IEA219I MODEL NOT SUPPORTED

Explanation: The nucleus initialization program (NIP) has determined that system environment recording (SER) support was not selected for either the assumed model or the model specified in the MOD parameter in response to message IEA101A.

System Action: The nucleus initialization program continues processing.

Operator Response: Report this message to the programmer.

Programmer Response: Probable user error. Ensure that the central processing unit indicated at system generation is the same system that is the subject of NIP.

Problem Determination: Table I, items 11, 29.

IEA220I H0=nn BYTES H1=nn BYTES

Explanation: During nucleus initialization, a listing was requested of the size of each of the storage hierarchies.

In the message text, H0 represents hierarchy 0 (processor storage), H1 represents hierarchy 1, and nn represents the number of bytes, in decimal.

Operator Response: None.

IEA250E TIMER ON CPU y INOPERATIVE, VARY COMMANDS MAY BE AFFECTED

Explanation: The interval timer on central processing unit (CPU) y is not enabled. Therefore, VARY CPU, VARY channel, and QUIESCE commands may give unpredictable results.

System Action: The system continues processing.

Operator Response: Probable user error. To avoid unpredictable results, enable the timer and restart the system.

Problem Determination: Table I, items 11, 29.

IEA251E CONTROL UNIT ccX HAS PARTITION SWITCHES SET ASYMMETRICALLY

Explanation: The control unit ccx has at least one tape unit or direct access device that is accessible to one CPU only.

System Action: System initialization will continue normally but system performance may be degraded.

Operator Response: Probable user error. If the control unit is intended to be asymmetric, ignore the message. Otherwise, set the I/O control unit allocation switch to "enable" and restart the system.

Problem Determination: Table I, item 30.

IEA252I STORAGE LOCATIONS xxxxxx TO yyyyyy OFFLINE

Explanation: During nucleus initialization, storage has been placed offline. Storage is either nonexistent, disabled, powered down, or malfunctioning. In the message text, xxxxxx is the starting address and yyyyyy is the ending address of the storage.

System Action: The system continues processing.

Operator Response: If this message appears unexpectedly, call IBM for hardware support. Otherwise, no response is necessary.

Additional Technical Information: If the main storage box is enabled, and the message appears, there has been a machine check in that main storage.

IEA253I CHANNELS OFFLINE y:x

Explanation: During nucleus initialization, channels x of central processing unit y have been placed offline. In the message text, x will appear for each channel involved.

System Action: The system continues processing.

Operator Response: If this message appears unexpectedly, call IBM for hardware support.

IEA254W STORAGE BOX ENABLE/DISABLE SWITCHES SET ASYMMETRICALLY

Explanation: Located on the configuration control panel is a pair of storage allocation switches for each storage unit in the system (one switch for each central processing unit). Both central processing units are operating in multisystem mode, but cannot share storage because the storage allocation switches for each storage unit have been set in the same position (ENABLE or DISABLE).

System Action: The system entered wait state (wait state code 015).

Operator Response: Probable user error. Set the storage enable/disable switches so that each box in a multiprocessor configuration either can or cannot be used by both central processing units. If the problem recurs, call IBM for hardware support.

IEA255W BOTH PREFIX SWITCHES ARE SET THE SAME

Explanation: The prefix switches, located on the configuration control panel, for both central processing units have been set in the same position (ENABLE or DISABLE). This causes both central processing units to use the same prefixed storage area.

System Action: The system entered wait state (wait state code 012).

Operator Response: Probable user error. Set one of the prefix switches in the opposite direction and restart the system. If the problem recurs, call IBM for hardware support.

IEA256I PARTITIONED SYSTEM INITIATED

Explanation: A system with only one central processing unit has been initiated.

System Action: The system continues processing.

Operator Response: If an attempt to initiate a system with two central processing units was made, call IBM for programming support. Otherwise, no action is required.

IEA257I ONE CPU MULTIPROCESSOR INITIATED

Explanation: The system has been started in multisystem mode, and the central processing unit (CPU) that was not started was placed offline.

System Action: The system continues processing.

Operator Response: None.

Problem Determination: If the message appeared unexpectedly, Table I, items 11, 29. If the message was expected, no action is necessary.

IEA258I MULTIPROCESSOR INITIATED

Explanation: The system has been started in multisystem mode, and both central processing units have been initiated.

System Action: The system continues processing.

Operator Response: None.

IEA260I STATUS OF DEVICE

	dev	dev	dev	dev	dev
cc	x	x	x	x	x
cc	x	x	x	x	x
cc	x	x	x	x	x
cc	x	x	x	x	x
cc	x	x	x	x	x

Explanation: This message indicates the status of all devices in the system at nucleus initialization:

- Each cc indicates a unique channel/control unit address in the system.
- Each dev indicates a possible device address.
- Each x indicates the status of the particular dev for the particular cc:
 - # Offline to both central processing units.
 - A Online to central processing unit A only.
 - B Online to central processing unit B only.
 - S Online to both central processing units (shared).
 - . No unit control block (not generated into system).

System Action: The system continues processing.

Operator Response: None.

Rollout/Rollin Messages

IEA400I jjj, sss R/I I/O ERR

Explanation: A permanent input/output error occurred on a direct access device while attempting to rollin step sss of job jjj.

System Action: The job is abnormally terminated.

Operator Response: Probable hardware error. Resubmit the job. If the problem recurs, reallocate the Rollout/Rollin data set.

Problem Determination: Table II, Format 1: trace option - TRACE=IO.

IEA401I jjj, sss R/O I/O ERR

Explanation: A permanent input/output error occurred on a direct access device while attempting to rollout step sss of job jjj.

System Action: The system designates that the job could not be rolled out, and an attempt is made to find another region that will satisfy the rollout request.

Operator Response: Probable hardware error. If the problem recurs, reallocate the Rollout/Rollin data set.

Problem Determination: Table II, Format 1: trace option - TRACE=IO.

IEA402A ROLLOUT/IN MSGS REQUIRED. REPLY Y OR N.

Explanation: The rollout/rollin code has been entered for the first time after the system was started. This message gives



the operator the option of allowing the system to display informational messages IEA403-IEA406.

System Action: The system waits pending the operator's reply.

Operator Response: If the informational messages are to be displayed, enter REPLY xx,'Y'. If the informational messages are to be suppressed, enter REPLY xx,'N'.

IEA403I jjj, sss, LOG R/O siz, adr

Explanation: Step sss of job jjj has caused a logical rollout of dynamic main storage.

In the message text, siz is the size of the region and adr is the beginning address of the region, in hexadecimal.

System Action: The system continues processing.

Operator Response: None.

IEA404I REGN adr LOG ROLLIN

Explanation: The region whose beginning address is adr, in hexadecimal, has been rolled in.

System Action: The system continues processing.

Operator Response: None.

IEA405I jjj, sss, R/O OF jjj, sss

Explanation: Step sss of job jjj specified at the beginning of the message text has caused a physical rollout of step sss of job jjj specified at the end of the message text.

System Action: The system continues processing.

Operator Response: None.

IEA406I jjj, sss, ROLLIN

Explanation: Step sss of job jjj has been physically rolled in.

System Action: The system continues processing.

Operator Response: None.

Input/Output Supervisor Messages 2

IEA604A D adr,ser

Explanation: The operator replaced a required direct access volume without having received a mount request.

In the message text, D indicates that the volume whose serial number is ser is to be demounted from the device whose unit address is adr, in hexadecimal.

Operator Response: Demount the volume. Then respond as indicated for message IEA605A, which follows this message.

IEA605A M adr,ser,,[jjj]

Explanation: M indicates that the volume whose serial number is ser is to be mounted on the device whose unit address in hexadecimal is adr.

Message IEA604A or IEA606I precedes this message, indicating the reason for the mount request. In the message text, jjj is the name of the job in control during which intervention is required. If the job name cannot be determined, this field is left blank.

Operator Response: If the volume requested is not available, cancel the job. Otherwise, mount the indicated volume. (If message IEA606I precedes this message, the volume indicated in that message must first be demounted from the device.)

IEA606I adr,BAD VOLUME LABEL,cm,stat,senbbbb,,ser,[jjj]

Explanation: A permanent input/output error occurred while trying to read the volume serial number of the indicated volume.

In the message text, in hexadecimal, the fields are:

adr

Unit address of the device.

cm

Operation code of the channel command word (CCW) during whose execution the error occurred. If the channel command word cannot be found, this field appears as **.

stat

Status portion of the channel status word (CSW).

sens

First 2 sense bytes for the error condition.

bbbbbb

Next 3 sense bytes for the error condition. This field appears only for devices that give more than 2 bytes of sense information.

ser

Serial number of the volume on which intervention is required.

jjj

The name of the job in control when intervention is required. If the jobname cannot be determined, this field is left blank.

Operator Response: Respond as indicated for message IEA605A, which follows this message. 2

IEA620I ddd TR=nnn,TW=nnn,SIO=nnnnn ERROR
THRESHOLD REACHED

Explanation: The number of errors specified by either the read error threshold or the write error threshold has been exceeded.

In the message text, the fields are:

ddd Unit address of the device.
TR=nnn Number of temporary read errors.
TW=nnn Number of temporary write errors.
SIO=nnnnn Number of Start I/O operations.

Operator Response: Check the local operating procedures to see if the number of errors specified in the message text indicates that the volume should be reconditioned.

IEA700I ccc[-rl] {jjj} sss ff[ddddddd]
{aaa}

Explanation: The control program detected an error during the execution of a GETMAIN macro instruction. The job step was abnormally terminated with a system completion code of ccc. This message provides additional information on the error.

In the message text, the fields are:

ccc system completion code
r reason code. Included only when there are multiple reasons for issuing the message.
jjj job name
sss step name
ff flag byte. A X'00' indicates that the GETMAIN macro instruction was issued via an SVC 4 instruction. A X'80' indicates that GETMAIN was entered via a branch and that job name jjj has been replaced by branch address aaa.
aaa return address of the calling routine from register 14 if the entry to GETMAIN was not via an SVC instruction.
ddddddd variable data in hexadecimal. Data is 1 to 3 complete words in length.

The length and meaning of hexadecimal data dddddddd is dependent on system completion code ccc and reason code (r) given in the message.

The meaning of the applicable reason codes is:

ccc r	Meaning
604-1	Parameter list for the GETMAIN macro instruction contained an invalid address, or the address of the parameter list was invalid
604-2	A free queue element (FQE) contained invalid information
804-1	Requested amount of main storage was not available
804-2	In an MVT system, a negative length was specified; in an MFT system, a zero length was specified.

The meaning of the variable data is:

ccc r	word 1	word 2	word 3
504	x1		
604 1	x1		
604 2	x2	x3	x3
804 1	x2	x4	
804 2	x2		
B04	x2		
C04	x2		

where:

- x1 - Address of the GETMAIN parameter list. The first word of the parameter list is the address of the length list specified in the LA operand; the second word is the address of the address list specified in the A operand.
- x2 - The first byte is the number of the subpool for which the request was made; the last three bytes are the number of bytes requested.
- x3 - Contents of the free queue element (FQE). The first word is a pointer to the next FQE; the second word is the number of bytes in the free area defined by this FQE.
- x4 - Number of bytes in the largest available block of main storage in your region or partition.

Programmer Response: Refer to the explanation of completion code ccc in the section on "Completion Codes" for the complete response to this message.

IEA701I ccc[-rl]{jjj} sss ff[ddddddd]
{aaa}

Explanation: The control program detected an error during the execution of a FREEMAIN macro instruction. The job step was abnormally terminated with a system completion code of ccc. This message provides additional information on the error.

In the message text, the fields are:

ccc system completion code
 r reason code. Included only when there are multiple reasons for issuing the message.
 jjj job name
 sss step name
 ff flag byte. A X'00' indicates that the FREEMAIN macro instruction was issued via an SVC 5 instruction. A X'80' indicates that FREEMAIN was entered via a branch and that job name jjj has been replaced by branch address aaa.
 aaa return address of the calling routine from register 14 if the entry to FREEMAIN was not via an SVC instruction.
 dddddddd variable data in hexadecimal. Data is 1 to 4 complete words in length.

The length and meaning of hexadecimal data dddddddd is dependent on system completion code ccc and reason code (r) given in the message.

The meaning of the applicable reason codes is:

ccc	r	Meaning
305-1		Specified main storage area was not in named subpool
305-2		Specified subpool could not be found
605-1		Parameter list for the FREEMAIN macro instruction contained an invalid address, or the address of the parameter list is invalid
605-2		A free queue element (FQE) contained invalid information

The meaning of the variable length data is:

ccc	r	word 1	word 2	word 3	word 4
305	1	x1	x2	x3	
305	2	x1	x2	x3	
505		x4			
605	1	x4			
605	2	x1	x2	x5	x5
905		x1	x2	x3	
A05		x1	x2	[x6]	
B05		x1	x2		
D05		x1	x2		

where:

x1 - The first byte is the number of the subpool for which the request was made; the last three bytes are the number of bytes requested.

- x2 - Beginning address of the main storage area to be freed.
- x3 - Address of the task control block (TCB) for the abending task.
- x4 - Address of the FREEMAIN parameter list. The first word of the parameter list is the address of the length list specified in the IA operand; the second word is the address of the address list specified in the A operand.
- x5 - Contents of the free queue element (FQE). The first word is a pointer to the next FQE; the second word is the number of bytes in the free area defined by this FQE.
- x6 - Number of bytes of overlap into free area. (Provided only in an MVT system.)

Programmer Response: Refer to the explanation of completion code ccc in the section on "Completion Codes" for the complete response to this message.

IEA702I ccc[-r] { jjj } sss ff[ddddddd]

Explanation: The control program detected an error during the execution of either a GETMAIN or FREEMAIN macro instruction. The job step was abnormally terminated with a system completion code of ccc. This message provides additional information on the error.

In the message text, the fields are:

ccc system completion code
 r reason code. Included only when there are multiple reasons for issuing the message.
 jjj job name
 sss step name
 ff flag byte. A X'00' indicates that the GETMAIN/FREEMAIN macro instruction was issued via an SVC 10 instruction. A X'80' indicates that GETMAIN/FREEMAIN was entered via a branch and that job name jjj has been replaced by branch address aaa.
 aaa return address of the calling routine from register 14 if the entry to GETMAIN/FREEMAIN was not via an SVC instruction.
 dddddddd variable data in hexadecimal. Data is 1 to 3 complete words in length.

The length and meaning of hexadecimal data dddddddd is dependent on system completion code ccc and reason code (r) given in the message.

The meaning of the applicable reason codes is:

<u>ccc</u>	<u>r</u>	<u>Meaning</u>
30A	1	Specified main storage area was not in named subpool
30A	2	Specified subpool could not be found
30A	3	Main storage area to be freed was not within caller's region (subpool FREEMAIN only)
30A	4	Zero length was not specified for subpool FREEMAIN
60A	2	A free queue element (FQE) for either a GETMAIN or FREEMAIN macro instruction was invalid
80A-1		Requested amount of main storage not available
80A-2		Zero length specified

The meaning of the variable length data is:

<u>ccc</u>	<u>r</u>	<u>word 1</u>	<u>word 2</u>	<u>word 3</u>
20A		x1	x2	
30A	1	x3	x4	x1
30A	2	x3	x4	x1
30A	3	x3	x4	x1
30A	4	x3	x4	x1
40A		x3	x4	
60A	2	x3	x5	x5
80A	1	x3	x6	
80A	2	x3		
90A		x3	x4	
A0A		x3	x4	[x7]
B0A		x3		
D0A		x3	x4	

where:

- x1 - Address of the task control block (TCB) for the abending task.
- x2 - Number of the subpool that was not freed.
- x3 - The first byte is the number of the subpool for which the request was made; the last three bytes are the number of bytes requested.
- x4 - Beginning address of the main storage area to be freed.
- x5 - Contents of the free queue element (FQE). The first word is a pointer to the next FQE; the second word is the number of bytes in the free area defined by this FQE.

x6 - Number of bytes in the largest available block of main storage in your region or partition.

x7 - Number of bytes of overlap into free area. (Provided only in an MVT system.)

Programmer Response: Refer to the explanation of completion code ccc in the section on "Completion Codes" for the complete response to this message.

IEA703I ccc[-r] jjj sss MODULE ACCESSED xxxxxxxx

Explanation: During execution of a LINK, LOAD, ATTACH, or XCTL macro instruction, the control program encountered an error while loading module xxxxxxxx. The job step was abnormally terminated with a system completion code of ccc. This message provides additional information on the error.

IEA

In the message text, the fields are:

ccc system completion code

r reason code. Included only when there are multiple reasons for issuing the message.

jjj job name

sss step name

xxxxxxx the name of the module being accessed at the time of the error.

This message is issued for the following completion codes:

<u>ccc</u>	<u>r</u>	<u>Explanation of reason Code</u>
106	C	Invalid scatter data in load module
106	D	Invalid record type in load module
106	E	Invalid address in load module
106	F	Uncorrectable input/output error
207		
308		
406		
706		
806	4	Specified entry point not found
806	8	Uncorrectable input/output error
906		
A06		

Programmer Response: Refer to the explanation of completion code ccc in the section on "Completion Codes" for the complete response to this message.

Data Set Utility Messages (IEB)

Component Name	IEB
Program Producing Message	Data set utility programs: IEBCOMPR, IEBCOPY, IEBDG, IEBEDIT, IEBGENER, IEBISAM, IEBTPCH, IEBTCRIN, IEBUPDAT, IEBUPDTE.
Audience and Where Produced	For programmer: SYSPRINT data set.
Message Format	IEBnnnnI text nnn Message serial number, which is coded to indicate the utility program: 0nn IEBEDIT 1nn IEBCOPY 2nn IEBCOMPR 3nn IEBGENER 4nn IEBTPCH 5nn IEBUPDAT 6nn IEBISAM 7nn IEBDG 8nn IEBUPDTE 9nn IEBTCRIN text Message text.
Comments	Messages indicating job termination can be interpreted three ways: <ul style="list-style-type: none"> • If the utility program was invoked, a return code is passed to the calling program with the option to terminate. • If the utility program represents one step of a multi-step job, the job is terminated. • Otherwise, the job is terminated.
Associated Publications	<u>IBM System/360 Operating System:</u> <u>Utilities, GC28-6586</u>
Problem Determination	Refer to the fold-out in part VI of this publication for problem determination instructions.

IEB

IEBEDIT Program Messages

IEB008I INVALID NAME FIELD

IEB001I {SYSUT1} NOT OPENED
 {SYSUT2}
 {SYSIN}

Explanation: The SYSUT1, SYSUT2, or SYSIN data set, as indicated in the message text, could not be opened. Either the DD statement defining the data set was not included in the input stream or a DCB parameter for the data set was invalid.

System Action: The job step is terminated. (The return code is 8.)

Programmer Response: Probable user error. Ensure that a DD statement for SYSUT1, SYSUT2, and SYSIN is included in the input stream, and that the parameters on the DD statement(s) are correct (particularly that the block size specification is a multiple of 80). Resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 5a, 13, 29

Explanation: In the EDIT statement preceding this message, the name field is invalid. Possibly, the name field consists of more than 8 characters or contains an invalid character.

System Action: Processing continues with the next EDIT statement, if any. (The return code is 4.)

Programmer Response: Probable user error. Correct the name field on the preceding statement and resubmit the job to process either the entire input stream or the unedited portion of the input stream, as necessary.

Problem Determination: Table I, items 1, 2, 3, 5a, 7c, 13, 29.

IEB009I INVALID STATEMENT SYNTAX

Explanation: The EDIT statement preceding this message is coded incorrectly.

System Action: Processing continues with the next EDIT statement, if any. (The return code is 4.)

Programmer Response: Probable user error. Correct the construction of the preceding statement and resubmit the job to process either the entire input stream or the unedited portion of the input stream, as necessary.

Problem Determination: Table I, items 1, 2, 3, 5a, 7c, 13, 29.

IEB010I INVALID OPERATION CODE

Explanation: The preceding statement is not an EDIT utility control statement. Possibly, EDIT is misspelled.

System Action: Processing continues with the next EDIT statement, if any. (The return code is 4.)

Programmer Response: Probable user error. Correct the operator on the preceding control statement to EDIT and resubmit the job to process either the entire input stream or the unedited portion of the input stream, as necessary.

Problem Determination: Table I, items 1, 2, 3, 5a, 7c, 13, 29.

IEB011I INVALID OPERAND

Explanation: In the EDIT statement preceding this message, the operand is invalid. Possibly, a parameter is misspelled or incompatible parameters are specified.

System Action: Processing continues with the next EDIT statement, if any. (The return code is 4.)

Programmer Response: Probable user error. Correct the operand(s) on the preceding control statement and resubmit the job to process either the entire input stream or the unedited portion of the input stream, as necessary.

Problem Determination: Table I, items 1, 2, 3, 5a, 7c, 13, 29.

IEB014I INVALID DELIMITER

Explanation: In the EDIT statement preceding this message, a delimiter is invalid.

System Action: Processing continues with the next EDIT statement, if any. (The return code is 4.)

Programmer Response: Correct the delimiter(s) on the preceding control statement and resubmit the job to process either the entire input stream or the unedited portion of the input stream, as necessary.

Problem Determination: Table I, items 1, 2, 3, 5a, 7c, 13, 29.

IEB019I REQUIRED OPERAND OMITTED

Explanation: This message is reserved for future use.

Programmer Response: None.

IEB020I INVALID CONTINUATION CARD

Explanation: In the statement preceding this message, the continuation does not begin in column 16.

System Action: Processing continues with the next EDIT statement, if any. (The return code is 4.)

Programmer Response: Probable user error. Begin the continued statement in column 16 or correct the statement that indicated a continuation, if no continuation is desired. Resubmit the job to process either the entire input stream or the unedited portion of the input stream, as necessary.

Problem Determination: Table I, items 1, 2, 3, 5a, 7c, 13, 29.

IEB021I INVALID CHARACTER

Explanation: In the EDIT statement preceding this message, a character is invalid.

System Action: Processing continues with the next EDIT statement, if any. (The return code is 4.)

Programmer Response: Probable user error. Correct the error in the control statement and resubmit the job to process either the entire input stream or the unedited portion of the input stream, as necessary.

Problem Determination: Table I, items 1, 2, 3, 5a, 7c, 13, 29.

IEB022I JOB NAME NOT FOUND BEFORE END OF FILE

Explanation: Either no JOB statement was found in the input data set or the specified job could not be found.

System Action: The job step is terminated. (The return code is 4.)

Programmer Response: Probable user error. Insert the missing JOB statement into the input stream or correct the control information on the associated EDIT statement and resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 5a, 7c, 13, 29.

IEB023I sss STEP COULD NOT BE FOUND

Explanation: Step sss could not be found in the input data set. Possibly the step name was misspelled.

System Action: Processing continues with the next EDIT statement, if any. (The return code is 4.)

Programmer Response: Probable user error. Insert the missing step into the input stream or correct the control information on the associated EDIT statement. Resubmit the job to process either the entire input stream or the unedited portion of the input stream, as necessary.

Problem Determination: Table I, items 1, 2, 3, 5a, 7c, 13, 29.

IEB024I d WAS HIGHEST SEVERITY CODE

Explanation: Return code d was the highest return code generated during execution of the IEBEDIT program.

Programmer Response: For other than successful job completion, severity code = 0, resubmit the job to process either the entire input stream or the unedited portion of the input stream, as necessary.

Problem Determination: Table I, items 1, 2, 3, 5a, 7c, 13, 29.

IEB027I I/O ERROR dsn, jjj, sss, ddd, devtyp, ddn, op, err, xxxx, acc

Explanation: A permanent input/output error occurred while processing on device ddd.

In the message text, the error analysis information was provided by the SYNADAF data management macro instruction issued by the SYNAD routine:

dsn Data set name.
jjj Job name.
jjj Step name.
ddd Unit address of the device.
devtyp Device type.
ddn Data definition name.
op Operation attempted.
err Error description.
xxxx Last seek address of block count.
acc Access method.

System Action: The program is terminated. (The return code is 8.)

Programmer Response: Correct the error condition indicated in the message text according to the error analysis information provided by the SYNADAF data management macro instruction. Resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 5a, 7c, 13, 29. Table II, Format 1: trace option - TRACE=SYS.

IEB030I {SYSUT1} BLKSIZE INVALID
 {SYSIN }

Explanation: The block size of the SYSUT1 or SYSIN data set, as indicated in the message text, is not a multiple of 80 bytes.

System Action: The program is terminated. (The return code is 8.)

Programmer Response: Probable user error. Correct the block size of the indicated data set and resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 5a, 7c, 13, 29.

IEB032I SYSUT2 BLKSIZE INVALID - SYSUT1 ASSUMED

Explanation: The block size of the SYSUT2 data set is not a multiple of 80 bytes.

System Action: The SYSUT1 block size attributes are assumed for the SYSUT2 data set. Processing continues. (The return code is 4.)

Programmer Response: Probable user error. If the block size for SYSUT1 is undesirable for SYSUT2, correct the block size for SYSUT2 and resubmit the job; otherwise, disregard this message.

Problem Determination: Table I, items 1, 2, 3, 5a, 7c, 13, 29.

IEB033I STATEMENT NOT PROCESSED EOF ON SYSUT1

Explanation: An end-of-file condition was encountered on the SYSUT1 data set, and the preceding EDIT statement was not processed.

System Action: The job step is terminated. (The return code is 4.)

Programmer Response: Probable user error. Restructure the EDIT statements if the edited output is not as desired and resubmit the job; otherwise, disregard the unprocessed EDIT statements.

Problem Determination: Table I, items 1, 2, 3, 5a, 7c, 13, 29.

IEB034I STEPNAME REQUIRED WITH TYPE={INCLUDE}
 {EXCLUDE}

Explanation: No step name was specified with a TYPE=INCLUDE or TYPE=EXCLUDE operation, as indicated in the message text.

System Action: Processing continues with the next EDIT statement, if any. (The return code is 4.)

Programmer Response: Probable user error. Correct the condition indicated in the message text and resubmit the job to process either the entire input stream or the unedited portion of the input stream, as necessary.

Problem Determination: Table I, items 1, 2, 3, 5a, 7c, 13, 29.

IEBCOPY Program Messages

IEB100I I/O ERROR READING MEMBER membername

Explanation: An I/O error was encountered reading the specified member. Message IEB139I gives detailed information regarding the location of the error record (always issued previous to this message.)

System Action: The next COPY control statement is sought, unless a data check in the key or data portion only occurred. In this case the error is ignored and data is copied as it came into main storage. (The return code is 4.)

Programmer Response: Depending on the type of error, re-run the COPY operation with the data set in error allocated (1) at a different physical location on the volume, (2) on a different device, (3) on a different channel. If the error is on an input data set, it may be necessary to re-create the data set.

Problem Determination: Table I, items 1, 3, 13, 25b, 29. Table II, Format 1: trace option - TRACE=SIO,IO,PCI.

IEB101I I/O ERROR WRITING MEMBER DATA AT TTR=ttr [-DURING READ BACK CHECK]

Explanation: An I/O error occurred while copying member data to the output data set. The TTR of the record in error relative to the beginning of the data set is given. [] part of message is only given if the error occurred during read back check.

System Action: If the error was encountered during read back check and involved a data check in key or data only, the error is ignored. Otherwise the next COPY control statement is sought. (The return code is 4.)

Programmer Response: Depending on the type of error, re-run the COPY operation with the data set in error allocated (1) at a different physical location on the volume, (2) on a different device, (3) on a different channel.

Problem Determination: Table I, items 1, 3, 13, 25b, 29. Table II, Format 1: trace option - TRACE=SIO,IO,PCI.

IEB102I MEMBER membername NOT COPIED DUE TO I/O ERROR

Explanation: An I/O error on the SYSUT3 work file has made processing of the specified member impossible. If ***** replaces the membername in the above message, the error was found reading from SYSUT3 and the output directory will have to be investigated to determine which

member was not copied (possibly via use of IEHLIST.)

System Action: Processing continues with the next member to be copied. (The return code is 4.)

Programmer Response: Depending on the type of error, re-run the COPY operation with the data set in error allocated (1) at a different physical location on the volume, (2) on a different device, (3) on a different channel.

Problem Determination: Table I, items 1, 3, 13, 25b, 29. Table II, Format 1: trace option - TRACE=SIO,IO,PCI.

IEB103I MEMBERS membername THROUGH END OF DATA SET ARE NOT ACCESSIBLE DUE TO I/O ERROR

Explanation: Due to an I/O error while updating the output data set's directory, members starting from the named member through the end of the data set (in alphanumeric order) have become inaccessible.

System Action: The next COPY operation is sought. (The return code is 4.)

Programmer Response: Depending on the type of error, re-run the COPY operation with the data set in error allocated (1) at a different physical location on the volume, (2) on a different device, (3) on a different channel.

Problem Determination: Table I, items 1, 3, 13, 25b, 29. Table II, Format 1: trace option - TRACE=SIO,IO,PCI.

IEB104I INVALID COMMAND OR KEYWORD

Explanation: A command or keyword on the control statement just listed is misspelled or invalid for the IEBCOPY program.

System Action: The COPY operation is terminated. The next COPY control statement is sought. (Return code - 4.)

User Response: Correct the error and resubmit the job.

IEB105I PARAMETER INVALID

Explanation: A parameter on the control statement just listed is too long or contains an invalid character.

System Action: The COPY operation is terminated. The next COPY control statement is sought. (Return code - 4.)

User Response: Correct the error and resubmit the job.

IEB106I UNEQUAL PARENTHESIS

Explanation: The statement just printed has an unbalanced number of parenthesis.

System Action: The COPY operation is terminated. The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Probable user error. Correct the error and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB107I INVALID CONTINUATION

Explanation: The control statement just listed is invalid. Parameters may have ended with a comma (which infers continuation) but the continuation column (72) was blank. An attempt may have been made to continue a statement from within a RENAME/REPLACE specification within nested parentheses and this is invalid.

System Action: The COPY operation is terminated. The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Probable user error. Correct the error and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB108I MEMBER WITHOUT SELECT OR EXCLUDE

Explanation: A statement contained MEMBER= but was not associated with a SELECT or EXCLUDE command.

System Action: The COPY operation is terminated. The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Probable user error. Correct the error and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB109I NO MIXING OF SELECT AND EXCLUDE MODES IN SAME COPY STEP

Explanation: A SELECT statement immediately follows an EXCLUDE statement without an INDD= statement between, or the converse - an EXCLUDE statement immediately follows a SELECT statement.

System Action: The COPY operation is terminated. The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Probable user error. Correct the error and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB110I INVALID REPLACE SPECIFIED

Explanation: Parameters were not embedded within parenthesis correctly or parentheses were missing from valid RENAME/REPLACE specifications.

System Action: The COPY operation is terminated. The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Probable user error. Correct the error and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB111I NULL PARAMETERS

Explanation: A control statement was completely blank or blanks followed the equal sign immediately after a keyword.

System Action: The COPY operation is terminated. The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Probable user error. Correct the error and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB112I CANNOT RENAME/REPLACE ON EXCLUDE

Explanation: The control statement just listed has a parameter embedded within parenthesis to show RENAME/REPLACE of this member. This is invalid with an exclusive copy.

System Action: The COPY operation is terminated. The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Probable user error. Correct the error and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB113I OUTDD OR INDD NOT SPECIFIED

Explanation: The commands are incomplete. An INDD=keyword must be associated with a COPY statement that has defined the output data set (OUTDD=). A SELECT or EXCLUDE statement may have been read without an INDD= preceding it.

System Action: The COPY operation is terminated. The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Probable user error. Correct the error and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB114I OUTDD/LIST NOT ON COPY CARD

Explanation: The OUTDD= or LIST= keywords were scanned but were not physically or logically associated with the COPY statement.

System Action: The COPY operation is terminated. The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Probable user error.
Correct the error and rerun the job.

Problem Determination: Table I, items 1,
3, 13, 29.

IEB115I END OF FILE ON SYSIN

Explanation: On the first read or during
a "flush" end of file was given by the
SYSIN device.

System Action: Control is returned to the
caller; this is the end of the last COPY
operation.

Programmer Response: None.

IEB116I MIXING CONTROL STATEMENTS FROM OLD AND NEW
VERSION OF IEBCOPY

Explanation: Both types of statements
were contained within the same copy step
or multiple COPY operations are attempted
using old version IEBCOPY control
statements.

System Action: If a complete set of valid
statements occurred together, one COPY
operation will have been done. If the
statements are intermixed, no COPY will be
done. The job will be terminated. (The
return code is 4.)

Programmer Response: Probable user error.
Correct the error and rerun the job.

Problem Determination: Table I, items 1,
3, 13, 29.

IEB117I TABLES EXCEED ALLOCATED CORE

Explanation: The amount of main storage
available for creation of the INDD table
and SELECT/EXCLUDE Table has been
exceeded.

System Action: The COPY operation is
terminated. The next COPY control
statement is sought. (Return code - 4.)

Programmer Response: Probable user error.
Multiple COPY, OUTDD= and INDD= statements
can be used so the INDD table which is
built for each copy step will not be so
large. The number of member names in
SELECT/EXCLUDE statements per copy step
can also be decreased, and the number of
copy steps increased. Review the core
storage estimate considerations for
IEBCOPY.

Problem Determination: Table I, items 1,
3, 15, 29. Have core storage estimate
calculations available.

IEB118I CONTROL STATEMENT ERROR

Explanation: The statement just listed
has an invalid command, keyword or
parameter. There may be multiple INDD=
keywords on the same statement or old and
new versions of IEBCOPY keywords are
mixed.

System Action: The job step is terminated
if old IEBCOPY type of statements.
Otherwise, the COPY operation is
terminated and the next COPY control
statement is sought. (Return code - 4.)

Explanation: Probable user error.
Correct the error and rerun the job.

Problem Determination: Table I, items 1,
3, 15, 29.

IEB119I STATEMENT SEQUENCE ERROR

Explanation: There is an error in the old
version IEBCOPY control statement sequence
or multiple COPY statements immediately
following each other where the first COPY
statement was incomplete or out of place.

System Action: If in old version IEBCOPY
mode, the job step is terminated;
otherwise, the next COPY control statement
is sought. (The return code is 4.)

Programmer Response: Probable user error.
Correct the error and rerun the job.

Problem Determination: Table I, items 1,
3, 15, 29.

IEB120I ddname VALIDATION ERROR

Explanation: The name of the DD statement
on which the error occurred is identified
in the area designated by ddname. This
message is always given by the validation
routine when there is an error during
validation or opening of any data set.
The message immediately following this
message will explain the nature of the
error.

System Action: None.

Programmer Response: None.

IEB121I OPEN ERROR

Explanation: The data set defined in the
preceding message could not be opened.

System Action: The next COPY control
statement is sought. (Return code - 4.)

Programmer Response: Probable user error.
Check for invalid DD statement parameters.

Problem Determination: Table I, items 1,
25b, 29.

IEB122I DSCB COULD NOT BE OBTAINED

Explanation: There was an error return
given from the OBTAIN macro used to read
the DSCB for the data set defined in the
preceding message.

System Action: The next copy control
statement is sought. (Return code - 4.)

Programmer Response: Probable user error.
Check to see that a DSCB for data set in
question is available.

Problem Determination: Table I, items 1, 3, 13, 25b, 29.

IEB123I DATA SET NOT PARTITIONED

Explanation: The data set identified in the preceding message does not have partitioned organization. If the data set that is not partitioned is an input or an output data set, it cannot be processed by the IEBCOPY program.

System Action: The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Rerun the job step.

Problem Determination: Table I, items 1, 3, 13, 25b, 29.

IEB124I INVALID LRECL

Explanation: The logical record length of the data set defined is not valid. It may be zero or input data set LRECL may not be equal to output data set LRECL.

System Action: The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Rerun the job step.

Problem Determination: Table I, items 1, 3, 13, 25b, 29.

IEB125I INVALID BLOCKSIZE

Explanation: The blocksize of the data set defined is not valid. The blocksize may be zero or larger than track size going to a non-track overflow data set.

System Action: The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Rerun the job step.

Problem Determination: Table I, items 1, 3, 13, 25b, 29.

IEB126I ddname REFERENCES AN UNMOVABLE DATA SET

Explanation: The input data set (ddname) is flagged as unmovable so it will not be compressed in place because it may contain location dependent data.

System Action: The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Probable user error. Verify that the data set in question is flagged as unmovable (FORMAT1 DSCB).

Problem Determination: Table I, items 1, 3, 13, 25b, 29.

IEB127I RECFM INCOMPATIBLE

Explanation: The record format of the input data set defined is incompatible with that of the output data set (i.e., cannot copy from fixed record format to variable record format or vice versa).

System Action: The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Probable user error. Respecify the record format of either the input or output data set and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 25b, 29.

IEB128I CANNOT REBLOCK TRACK OVERFLOW DATA SETS

Explanation: The input and/or the output data set have track overflow records so reblock/deblock will not be done.

System Action: The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Probable user error. Respecify the block size of the output data set so that it is equal to the block size of the input data set, and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 25b, 29.

IEB129I CANNOT REBLOCK KEYED DATA SETS

Explanation: The input and/or the output data set has keyed records so reblock/deblock will not be done.

System Action: The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Probable user error. Respecify the block size of the output data set so that it is equal to the block size of the input data set, and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 25b, 29.

IEB130I KEY LENGTHS UNEQUAL

Explanation: The key length of the input and output data sets are not equal.

System Action: The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Probable user error. Respecify the key length of the output data set so that it is equal to the key length of the input data set, and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 25b, 29.

IEB131I CANNOT COMPRESS KEYED DATA SET

Explanation: A compress in place COPY operation was requested but the data set contains keyed records. IEBCOPY will not compress keyed data sets.

System Action: The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Probable user error. Verify that the data set in question is keyed (FORMAT1 DSCB).

Problem Determination: Table I, items 1, 3, 13, 25b, 29.

IEB132I INVALID RE/DE-BLOCKING

Explanation: The data set previously defined is incompatible with the output data set. For example, a variable format record may contain an LRECL that is greater than the output blocksize.

System Action: The COPY operation is terminated. The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Probable user error. Respecify the output block size to allow this member to be properly copied, and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 25b, 29.

IEB133I MINIMUM REQUESTED CORE NOT AVAILABLE

Explanation: A variable conditional GETMAIN was issued, and the return code indicates that the minimum amount of core requested was not obtainable.

System Action: The job is terminated. (The return code is 8.)

Programmer Response: Probable user error. Allocate a larger partition or region to the IEBCOPY program. This error may also occur if blocked SYSIN/SYSPRINT is specified and the required access method modules use core such that the minimum requested by GETMAIN cannot be made available. In this case, de-block the blocked SYSIN/SYSPRINT data set(s). Review the core storage estimate considerations for IEBCOPY.

Problem Determination: Table I, items 1, 3, 15, 29. Have core storage estimate calculations available.

IEB134I CANNOT COMPRESS WITH SELECT OR EXCLUDE

Explanation: An input data set's DDNAME was specified which was identical to the current output data set's DDNAME, but a SELECT or EXCLUDE control statement was also specified. This is an "implied" COMPRESS, and a mixed-mode copy step is not allowed.

System Action: The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Probable user error. If the COMPRESS is desired, do not follow the INDD statement or group which contains the duplicate DDNAME with a SELECT or EXCLUDE control statement. If the COMPRESS is not desired, remove the duplicate DDNAME from the appropriate INDD statement.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB135I MINIMUM I/O BUFFER NOT ALLOCATABLE

Explanation: There is not enough unallocated core available to contain two minimum size I/O buffers without overlaying required tables.

System Action: The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Probable user error. Make more core available to the Utility Program. If a relatively large number of membernames are specified on the current SELECT or EXCLUDE control statement(s), it may be necessary to fragment this into smaller groups of membernames and more copy steps. Allocate a larger partition or region to the IEBCOPY program. Review the core storage estimate considerations for IEBCOPY.

Problem Determination: Table I, items 1, 3, 15, 29.

Have core storage estimate calculations available.

IEB136I CANNOT ALLOCATE TWO TRACKS OF I/O BUFFERS FOR COMPRESS

Explanation: There is not enough unallocated core available to contain twice the device-dependent block size as specified by the results of a DEVTYPE macro. COMPRESS operations must have this much I/O buffer space for full track I/O and synchronization.

System Action: The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Probable user error. Make more core available to the Utility Program. If several input data set DDNAME's are specified on the current INDD control statement or group, remove the DDNAME causing the COMPRESS and put it into a separate copy operation. Also it may be necessary to take actions similar to those described in message IEB133I. Review the core storage estimate considerations for IEBCOPY.

Problem Determination: Table I, items 1, 3, 15, 29. Have core storage estimate calculations available.

IEB137I CANNOT SPECIFY DUPLICATE MEMBERNAMES FOR SELECT/EXCLUDE/RENAME - NAME=membername

Explanation: The user has specified duplicate membernames in either his EXCLUDE statement(s) or his SELECT statement(s). If in the latter, the user may have specified duplicate renamed or un-renamed "oldnames", duplicate "newnames", or a combination of these. The membername specified is the one which was duplicated.

System Action: The next COPY control statement is sought (Return code - 4.)

Programmer Response: Probable user error. If duplicate name must be specified, put each duplicate in a separate copy step. It is advisable not to specify duplicate member names at all.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB138I CANNOT PROCESS ALL OLD/NEW-NAMES SPECIFIED

Explanation: The core required for processing the number of oldnames/newname pairs specified is not available.

System Action: The next COPY control statement is sought. 5Return code - 4.)

Programmer Response: Probable user error. Decrease the number of renamed members specified within any one SELECT control statement, and spread the SELECT control statements over more copy steps. Review the core storage estimate considerations for IEBCOPY.

Problem Determination: Table I, items 1, 3, 15, 29. Have core storage estimate calculations available.

IEB139I SYNADAF message text -
DURING READ
DURING WRITE
DURING READBACK CHECK

Explanation: An I/O error has occurred, the SYNADAF macro issued, and this message text is generated by the SYNADAF macro.

System Action: The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Depending on the type of error, re-run the COPY operation with the data set in error allocated (1) at a different physical location on the volume, (2) on a different device, (3) on a different channel. If the error is on an input data set, it may be necessary to re-create the data set.

Problem Determination: Table I, items 1, 3, 13, 25b, 29. Table II, Format 1: trace option - TRACE=SIO,IO,PCI.

IEB140I ddname REFERENCES A NULL INPUT DATA SET

Explanation: The ddname printed is used to reference an "empty" input data set; there are no membernames contained in the directory of this data set.

System Action: The next input data set of control statement is sought.

Programmer Response: None.

IEB141I CANNOT RE/DE-BLOCK WITH NOTE-LIST/USER TTRN IN MEMBER membername

Explanation: The directory entry for the named member indicates the presence of a Note List and/or User TTRN's. However, the user's data set specifications indicate the requirement to re/de-block

members as they are copied. These two facts are incompatible in this Utility.

System Action: The next COPY control statement is sought is sought. (Return code - 4.)

Programmer Response: Probable user error. If this member is to be copied, it cannot be re/deblocked. Either respecify those factors which cause re/deblocking (i.e., BLKSIZE, RECFM, LRECL parameters of the appropriate DCB's referenced in JCL), or rebuild the directory entry and alter the member data as needed to eliminate the Note-List/User TTRN indicators.

Problem Determination: Table I, items 1, 3, 13, 25b, 29.

IEB142I CANNOT CONTINUE TO BUILD CTLTAB

Explanation: The Utility program requires more core to build required control table to process the current input data set.

System Action: The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Probable user error. More core is required to contain the control table; allocate a larger partition to the Utility program. If a larger partition is not available, it will be necessary to use SELECT control statements for the members to be copied, and to assure that there are at least two of these control statements, each having approximately the same number of membernames specified, and each in a separate copy step. Review the core storage estimate considerations for IEBCOPY.

Problem Determination: Table I, items 1, 3, 15, 29. Have core storage estimate calculations available.

IEB143I ALL SELECTED MEMBERS COPIED - DID NOT USE ALL SPECIFIED INDD'S

Explanation: All specified (selected) members have been successfully copied, and the directory entries referencing these members are properly set up. It was not necessary to use all specified input data sets in order to "find" and process all selected members.

System Action: The next control statement is sought.

Programmer Response: None.

IEB144I THERE ARE xxx UNUSED TRACKS IN OUTPUT DATA SET REFERENCED BY ddname

Explanation: This message is issued upon completion of copying all required members to the output data set whose ddname is printed. The message is given following the completion of the COPY operation. If an error has occurred, the number of tracks given in this message may be incorrect.

System Action: The next control statement is sought.

Programmer Response: None.

IEB145I CANNOT COMPRESS TRACK OVERFLOW DATA SET

Explanation: The Utility program will not allow a compress-in-place operation to be done if the Track Overflow bit has been set in the DCB which references the "output" data set.

System Action: The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Probable user error. Verify that the data set in question is not flagged (FORMAT 1 DSCB) as a track overflow data set.

Problem Determination: Table I, items 1, 3, 13, 25b, 29.

IEB146I CANNOT COMPRESS WITH RE/DE-BLOCKING

Explanation: The Utility program will not allow a compress-in-place operation to be done if the user has not specified the same data set characteristics in both the input and output DD statements which reference the data set to be compressed.

System Action: The next COPY control statement is sought (Return code - 4.)

Programmer Response: Probable user error. Specify the same data set characteristics (i.e., BLKSIZE, RECFM, LRECL) for both the input and output DD statements to be used while compressing. This is best done by referencing the same ddname in the relevant INDD and OUTDD control statements.

Problem Determination: Table I, items 1, 3, 13, 25b, 29.

IEB147I END OF JOB - $\begin{pmatrix} 0 \\ 4 \\ 8 \end{pmatrix}$ WAS HIGHEST SEVERITY CODE

Explanation: This message, which is issued at the completion of the IEBCOPY job step, indicates the highest return code generated during the execution of the program.

System Action: None.

Programmer Response: None.

IEB148I NO SPACE IN OUTPUT DIRECTORY FOR DIRECTORY ENTRIES FROM INPUT DATA SET ddname

Explanation: While building an updated output directory (to reflect members copied from the input data set referenced by "ddname" in the above message), the utility program has determined that the amount of directory space allocated to the output data set is insufficient.

System Action: If message number IEB168I does not immediately follow this message, the output data set directory (a) reflects those members copied as of the immediately preceding input data set, if any, or (b) is left as it originally was if this input data set is the first one from which members were to have been copied. If the message IEB168I does follow, the output directory is truncated. The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Probable user error. Execute the IEHLIST program to determine just which members are usable and referenced by the truncated output directory.

Problem Determination: Table I, items 1, 3, 13, 25b, 29. Execute the IEHLIST utility program to list the directory (LISTPDS) of all input data sets in the associated COPY operation; have the directory listing available. Execute the IEHDASDR utility program to dump the directory of the associated output data set, and save the output.

IEB149I THERE ARE xxx UNUSED DIRECTORY BLOCKS IN OUTPUT DIRECTORY

Explanation: This message is issued upon completion of copying all required members to the output data set, at the end of the current COPY operation. If an error has occurred, the number of blocks given in this message may be incorrect.

System Action: The next control statement is sought.

Programmer Response: None.

IEB150I ++WARNING++ THE OUTPUT DS REF. BY xxxxxxxx CONTAINS TOO MANY DIRECTORY BLOCKS PER TRACK

Explanation: While writing the output directory, the utility program found the number of directory blocks per track allocated to the output data set to be greater than the track capacity.

System Action: Processing of the job step is continued and the directory blocks are updated without the number of directory blocks per track being changed.

Programmer Response: Make sure that your disk pack has the legitimate number of blocks per track (for instance, 17 (X'11') on a 2316 disk pack). The number of directory blocks per track can be checked in the format-4 DSCB of the volume in question at offset 75 (X'4B') on a 2316 disk pack. If your disk pack would have 18 blocks per track instead of 17, in the case of a 2316 disk pack, I/O errors might occur when using the last directory block on each track. Therefore, copy all partitioned data sets from this disk pack to a pack that shows the correct number of directory blocks per track (see the format-4 DSCB).

IEB151I JOB HAS TERMINATED WITH ERRORS

Explanation: This message is issued as the result of a previous error (as indicated by one or more preceding error messages) which may cause further processing to be terminated.

System Action: Depending on the error(s), either the next COPY operation is processed or the job step is terminated.

Programmer Response: Correct the error(s) indicated by preceding error message(s) and re-submit that portion of the job which is not successfully completed.

Problem Determination: Table I, items 1, 3, 13, 29. Table II, Format 1: trace option - TRACE=SIO,IO,PCI.

IEB152I membername COMPRESSED-WAS ALREADY IN PLACE AND NOT MOVED

Explanation: The member named in this message did not need to be physically moved during the compress-in-place operation.

System Action: None.

Programmer Response: None.

IEB153I ALL MEMBERS COMPRESSED-ALL WERE ORIGINALLY COMPRESSED

Explanation: The data set which was to have been compressed in place was not in need of being compressed, since there were no embedded "gaps" between any of the members of the data set. No members from this data set were physically moved.

System Action: None.

Programmer Response: None.

IEB154I membername HAS BEEN SUCCESSFULLY COPIED

Explanation: The member named in this message has been successfully copied from the input data set to the output data set. In the case of a compress-in-place operation, this message may be issued for a specific member even though the member was not actually moved, and message IEB152I was issued. If the job step completes successfully, this copied member can be accessed and used.

System Action: None.

Programmer Response: None.

IEB155I membername HAS BEEN SUCCESSFULLY COPIED AND IS A 'NEWNAME'

Explanation: The member named in this message is a renamed member which has been successfully copied from the input data set to the output data set. The "oldname" of this member can be determined by checking the Utility control statement(s) printed at the beginning of the copy step

in which this message occurred. If the job step completes successfully, this copied member can be accessed (using the new membername specified), and used.

System Action: None.

Programmer Response: None.

IEB156I NOT A DIRECT ACCESS DATA SET

Explanation: The data set defined in the previous message is not on a direct access device. IEBCOPY will not copy non-direct access data sets.

System Action: The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Probable user error. Correct the error and re-submit the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB157I DD STATEMENT NOT FOUND

Explanation: The DD statement for the data set defined in the previous message could not be found.

System Action: The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Probable user error. Insert a DD statement for the data set and

Problem Determination: Table I, items 1, 3, 13, 29.

IEB158I PARM EQUAL COMPRESS NOT VALID.

Explanation: PARM=COMPRESS was specified on the EXEC statement but the user has specified new version IEBCOPY statements which do not use PARM=COMPRESS to designate compress mode.

System Action: Processing continues, but the compress in place will not be done unless ddnames referenced in subsequent COPY operations cause it.

Programmer Response: None.

IEB159I NO MEMBERS COPIED FROM INPUT DATA SET REFERENCED BY ddname

Explanation: The input data set whose ddname appears in this message was not used for one of the following reasons:

- A selective copy was specified but none of the members to be copied were on this data set.
- All of the members which were to have been copied from this input data set had names which were duplicates of membernames on the output data set, and the Replace option was not specified.
- An I/O error (the message for which would have been printed prior to this time) has precluded use of members from this input data set.

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System Action: Normally, the next input data set will be processed. If an I/O error has occurred, the action indicated by the previous I/O error message(s) will be taken.

Programmer Response: None if this condition was desired; otherwise, take appropriate action, depending upon the condition indicated in the above explanation.

Problem Determination: Table I, items 1, 3, 13, 25c, 29.

IEB160I CONCATENATED DATA SETS

Explanation: The DD name given in the previous message is the first in a group of concatenated data sets. IEBCOPY will not process concatenated data sets.

System Action: The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Probable user error. If more than one input data set is to be used in the copy step, a separate DD card is required for each. The ddnames must then also be specified within the INDD= keyword on a COPY or INDD utility control card.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB161I COMPRESS TO BE DONE USING INDD NAMED ddname

Explanation: A request for compress in place operation has been detected. The input and output data sets are the same data set.

System Action: A compress in place operation is attempted.

Programmer Response: None.

IEB162I INPUT DATA SET FROM INDD NAMED ddname NOT SAME AS OUTDD-CANNOT COMPRESS

Explanation: PARM=COMPRESS is specified but the input and output data sets are not the same data set.

System Action: PARM=COMPRESS is ignored.

Programmer Response: Probable user error. If a COMPRESS is wanted, correct DD cards or IEBCOPY control cards and rerun.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB163I NO MEMBER NAMES FOR PARTIAL COPY, WILL NOT COPY

Explanation: The old version of IEBCOPY statement specified TYPCOPY=I but was not followed by any MEMBER=statements.

System Action: The job step is terminated. (The return code is 4.)

Programmer Response: Probable user error. Correct the error and rerun the job.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB164I TOTAL COPY ASSUMED

Explanation: The old version of IEBCOPY statement specified TYPCOPY=E but was not followed by any MEMBER=statements.

System Action: A full copy is done. (The return code is 4.)

Programmer Response: Probable user error. Correct the error and rerun the job.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB165I membername 'FOUND' BUT NOT COPIED, DUE TO I/O ERROR READING INPUT DIRECTORY

Explanation: A Selective copy operation was being attempted, and the member named in this message had been encountered on the current input data set prior to the occurrence of the described I/O error.

System Action: None.

Programmer Response: None.

Problem Determination: Table II, Format 1: trace option - TRACE=SIO,IO,PCI.

IEB166I NO MEMBERS COPIED TO DATA SET REFERENCED BY ddname

Explanation: Due to a validation error described in a previous message, no copying was done to the output data set referenced by the specified ddname.

System Action: The next COPY control statement is sought. (Return code - 4.)

Programmer Response: None.

IEB167I FOLLOWING MEMBER(S) COPIED FROM INPUT DATA SET REFERENCED BY ddname -

Explanation: The ddname given in this message references the input data set from which member(s) whose names will be listed were copied. This message is to assist the user in tracing which data sets were used and how they were used.

System Action: None.

Programmer Response: None.

IEB168I **WARNING** DUE TO ERROR, POSSIBLE LOSS OF ACCESS TO MEMBER DATA AND/OR INCOMPLETE DIRECTORY

Explanation: If preceded by message IEB148I, the output directory has been truncated. Otherwise the output directory may be incomplete.

System Action: The next COPY control statement is sought. (Return code 4.)

Programmer Response: Depending on the type of error, rerun the COPY operation with the data set in error allocated (1) at a different physical location on the volume, (2) on a different device, (3) on a different channel. If the error is on an input data set, it may be necessary to re-create the data set. Another utility (such as IEHLIST) should be used to determine the final status of the output directory.

Problem Determination: Table I, items 1, 3, 13, 25c, 29.

IEB169I **WARNING** DUE TO I/O ERROR ON SYSUT4, OUTPUT DIRECTORY MAY BE INCOMPLETE

Explanation: Due to an I/O error on SYSUT4, the output directory may not be complete.

System Action: The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Depending on the type of error, rerun the COPY operation with the data set in error allocated (1) at a different physical location on the volume, (2) on a different device, (3) on a different channel. The output data sets directory should be investigated to see if all information is valid (possibly via use of IEHLIST.)

Problem Determination: Table I, items 1, 3, 13, 25c, 29. Table II, Format 1: trace option - TRACE=SIO,IO,PCI.

IEB170I **WARNING** DUE TO SYSUT3 I/O ERROR, COMPRESS-IN-PLACE NOT DONE AND COPY OPERATION TERMINATED

Explanation: An I/O error has occurred while using the "spill" data set. None of the members will have been physically moved, so the data set remains as it was prior to processing.

System Action: The next COPY control statement is sought. (Return code - 4.)

Programmer Response: Depending on the type of error, rerun the COPY operation with the data set in error allocated (1) at a different physical location on the volume, (2) on a different device, (3) on a different channel.

Problem Determination: Table I, items 1, 3, 13, 29. Table II, Format 1: trace option - TRACE=SIO,IO,PCI.

IEB171I ** WARNING ** DIRECTORY MAY NOT REFLECT VALID LOCATION OF MEMBER DATA

Explanation: An I/O error during a compress-in-place operation may have affected the validity of the data sets directory.

System Action: The next COPY control statement is sought. (Return code - 4.)

Programmer Response: The data set in question should be re-created or dumped and checked for valid information. (Possibly via IEHLIST and/or IEHDASDR.)

Problem Determination: Table I, items 1, 3, 13, 25c, 29. Table II, Format 1: trace option - TRACE=SIO,IO,PCI.

IEB172I ddname COULD NOT BE OPENED

Explanation: The specified data set could not be opened. This is normally the SYSPRINT data set. The SYSPRINT DD statement may not have been included in the JOB stream.

System Action: This data set will not be used. I/O error messages and an end-of-job message will be issued to the console typewriter via alternate methods. The error is ignored. (Return code - 4.)

Programmer Response: Probable user error. It will be necessary to use another utility (such as IEHLIST) to verify the ending status of all COPY operations performed.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB173I ddname - INVALID BLOCKSIZE

Explanation: An invalid blocksize associated with the specified data set was detected. This is normally the SYSPRINT data set. Invalid DCB information such as block size may have been specified in the SYSPRINT DD statement.

System Action: This data set will not be used. I/O error messages and an end-of-job message will be issued to the console typewriter via alternate methods. The error is ignored. (Return code - 4.)

Programmer Response: Probable user error. It will be necessary to use another utility (such as IEHLIST) to verify the ending status of all COPY operations performed.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB174I ** WARNING ** INPUT RECORD IS A SHORT LENGTH RECORD - DDNAME = inddname - OUTPUT TTRN = tt tt rr nn

Explanation: An unexpected short length record (shorter than BLKSIZE) has been found on the input data set described by inddname. It was copied to the output data set (at tt tt rr nn) exactly as it was read from the input data set.

System Action: The error is ignored.

Programmer Response: Probable user error. If the error cannot be ignored by the user, the input data set will have to be re-created.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB175I ** WARNING ** INPUT RECORD IS GREATER THAN OUTPUT BLKSIZE-DDNAME = inddname - OUTPUT TTRN = tt tt rr nn

Explanation: An input record whose length is greater than the output block size has been processed. The record was copied to the output data set (at tt tt rr nn) exactly as it was on input (no truncation).

System Action: The error is ignored.

Programmer Response: Probable user error. If necessary, re-execute the COPY operation again, specifying a larger block size on the output data set via JCL.

Problem Determination: Table I, items 1, 3, 13, 25b, 29.

IEB176I MEMBER membername IN DATASET REFERENCED BY ddname HAS MORE THAN ONE NOTELIST POINTER

Explanation: The directory entry for the referenced member has more than one note list (user TTRN with N having a value greater than zero). This is an invalid directory entry and the member cannot be correctly processed.

System Action: The next COPY operation is sought. (The return code is 4.)

Programmer Response: Probable user error. Re-create the member in error.

Problem Determination: Table I, items 1, 3, 13, 25c, 29.

IEB177I membername WAS SELECTED BUT NOT FOUND IN ANY INPUT DATA SET

Explanation: The member named in this message was specified on a select statement for the previous copy step/operation but did not exist on any of the specified input data sets.

System Action: None.

Programmer Response: None.

IEB188I MEMBER membername IN DATA SET 'REFERENCED' BY ddname HAS RECORDS GREATER THAN BLKSIZE

Explanation: The input data set's records were found to be greater than the block size.

System Action: The next COPY operation is sought. (The return code is 4.)

Programmer Response: Probable user error. Recreate the member in error.

Problem Determination: Table I, items 1, 3, 13, 29.

IEBCOMPR Program Messages

IEB201I INVALID CONTROL STATEMENT

Explanation: The syntax of the control statement preceding this message is invalid.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: Probable user error. Correct the syntax of the preceding statement and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB202I INVALID DIRECTORY BLOCK SIZE

Explanation: The length of the partitioned data set directory entry is less than 14 or greater than 256 bytes.

System Action: The job step is terminated. (The return code is 12.)

Programmer Response: None.

Problem Determination: Table I, items 1, 3, 13, 26a, 29.

IEB205I USER DATA FIELDS UNEQUAL

Explanation: The user data fields of the SYSUT1 and SYSUT2 data sets are not the same.

System Action: The fields are listed and processing continues. (Return code - 12.)

Programmer Response: None.

IEB210I TRUE NAMES MISSING FROM BOTH SETS

Explanation: All the names in one directory do not have counterpart names in the other directory.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: Make sure that at least one partitioned data set has true names associated with every member in the partitioned data set, and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 26a, 29.

IEB211I KEY LENGTHS ARE NOT EQUAL.

Explanation: The key lengths of the SYSUT1 and SYSUT2 data sets are not the same.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Make sure that both input data sets contain keys with the same length, and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29. Have the input data sets available.

IEB212I INVALID DCB PARAMETER

Explanation: The record formats are not standard or the BLKSIZE/LRECL is omitted from the input or output DD statement.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: Make sure that a valid RECFM was specified in the DCB, and that the BLKSIZE/LRECL parameter was included in the input or output DD statement. If the data set resides on an unlabeled tape, make sure that a valid RECFM was included in the DCB parameter in the DD statement. After making corrections, execute the job step again.

Problem Determination: Table I, items 1, 3, 13, 25a, 29.

IEB213I REPETITIOUS CARD INVALID

Explanation: A second COMPARE or LABELS statement has been encountered.

System Action: The job is terminated at the end of the control statement scan. (The return code is 12.)

Programmer Response: Probable user error. Remove the extra command statement and rerun the job step.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB214I FIXED RECORD LENGTHS UNEQUAL

Explanation: The record lengths of the SYSUT1 and SYSUT2 data sets are not the same.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: Probable user error. Make sure that the logical records in both data sets are of the same length, and that the LRECL parameter in both DCBs are correctly specified; rerun the job.

Problem Determination: Table I, items 1, 3, 13, 25a, 29.

IEB215I RECORD FORMATS DIFFERENT

Explanation: The record characteristics of the SYSUT1 and SYSUT2 data sets are not the same.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: Probable user error. Make sure that the record characteristics of the two data sets are compatible.

Problem Determination: Table I, items 1, 3, 13, 25a, 29.

IEB216I ILLEGAL CONTROL CARD SEQUENCE

Explanation: The COMPARE statement was not the first utility control statement, or two COMPARE statements were encountered.

System Action: The program is terminated at the end of the control card scan. (The return code is 12.)

Programmer Response: Probable user error. Make sure that there is only one COMPARE statement in the input stream, and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB217I INVALID LRECL FOR V/VS RECORD

Explanation: The 11 field of a V/VS record is less than 5 or greater than 32,756.

System Action: The job step is terminated. (The return code is 12.)

Programmer Response: Make sure that the input data sets are valid and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29. Have the input data sets available.

IEB218I PERMANENT INPUT ERROR - FIND MACRO

Explanation: A permanent input error was found by the FIND macro instruction during partitioned data set directory search.

System Action: The job step is terminated. (The return code is 12.)

Programmer Response: None.

Problem Determination: Table I, items 1, 3, 13, 25c, 29. Table II, Format 1: trace option - TRACE=SI0,IO.

IEB219I INVALID BLKSIZE FOR V/VS RECORD

Explanation: The LL field of a V/VS is less than 9 or greater than 32,760.

System Action: The job step is terminated. (The return code is 12.)

Programmer Response: Make sure that the input data sets are valid, and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29. Have the input data sets available.

IEB221I RECORDS ARE NOT EQUAL

Explanation: Two corresponding records do not contain the same data, or the second part of the record descriptor word is not equal (00).

IEB

System Action: The records are listed, and processing continues. (The return code is 8.)

Programmer Response: None.

IEB222I KEYS ARE NOT EQUAL

Explanation: Two corresponding keys do not contain the same data.

System Action: The records are listed, and processing continues. (The return code is 8.)

Programmer Response: None.

IEB223I EXTRA RECORD ON SYSUT2

Explanation: The SYSUT2 data set contains more records than the SYSUT1 data set.

System Action: The records are printed, and processing continues. (The return code is 8.)

Programmer Response: None.

IEB224I EXTRA RECORD ON SYSUT1

Explanation: The SYSUT1 data set contains more records than the SYSUT2 data set.

System Action: The records are printed, and processing continues. (The return code is 8.)

Programmer Response: None.

IEB225I JOB TERMINATED AFTER EXIT

Explanation: The return code returned from an exit routine indicated that the job should be terminated.

System Action: The job is terminated. (The return code is 12 or 16, as determined by exit routine.)

Programmer Response: None.

Problem Determination: Table II, Format 1: trace option - TRACE=SIO,IO.

IEB226I WARNING - INVALID NAME

Explanation: The statement label either is longer than eight characters, or contains an invalid character.

System Action: Processing continues normally.

Programmer Response: Probable user error. Correct the statement label, and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB227I TEN CONSECUTIVE ERRORS

Explanation: Ten successive unequal comparison have occurred, and an error routine was not specified.

System Action: If the input data sets are sequential the program is terminated. (Return code - 12.)

If the input data sets are partitioned, processing continues with the next member. If the current member is the last member, the program is terminated. (Return code - 8.)

Programmer Response: None.

IEB229I DDNAME ddn CANNOT BE OPENED

Explanation: The named DD statement ddn does not exist.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: Either correct the ddname if it is misspelled in the DD statement or the ddlist, or insert a new DD statement with the correct name.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB230I SYSIN BLOCKSIZE ERROR

Explanation: The SYSIN DD statement specifies a block size that is not a multiple of the specified logical record length.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: Make sure that the block size is a multiple of the specified logical record length, and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB231I EXTRA USER INPUT HEADER LABELS ON SYSUT1

Explanation: The SYSUT1 data set contains more user input header labels than the SYSUT2 data set.

System Action: The extra labels are printed, and processing continues. (The return code is 8.)

Programmer Response: None.

IEB232I EXTRA USER INPUT HEADER LABELS ON SYSUT2

Explanation: The SYSUT2 data set contains more user input header labels than the SYSUT1 data set.

System Action: The extra labels are printed, and processing continues. (The return code is 8.)

Programmer Response: None.

IEB233I EXTRA USER INPUT TRAILER LABELS ON SYSUT1

Explanation: The SYSUT1 data set contains more user input trailer labels than the SYSUT2 data set.

System Action: The extra labels are printed, and processing continues. (The return code is 8.)

Programmer Response: None.

IEB234I EXTRA USER INPUT TRAILER LABELS ON SYSUT2

Explanation: The SYSUT2 data set contains more user input trailer labels than the SYSUT1 data set.

System Action: The extra labels are printed, and processing continues. (The return code is 8.)

Programmer Response: None.

IEB235I SYSUT1 CONTAINS NO USER INPUT HEADER LABELS

Explanation: The programmer requested the INHDR exit and/or label comparison, but there was no input header label on the SYSUT1 data set.

System Action: Message IEB232I will be issued.

Programmer Response: None.

IEB236I SYSUT2 CONTAINS NO USER INPUT HEADER LABELS

Explanation: The programmer requested the INHDR exit and/or label comparison, but there was no input header label on the SYSUT2 data set.

System Action: Message IEB231I will be issued.

Programmer Response: None.

IEB237I BOTH INPUT DATA SETS CONTAIN NO USER HEADER LABELS

Explanation: The programmer requested the INHDR exit and/or label comparison, but there were no input header labels on the SYSUT1 and SYSUT2 data sets.

System Action: Processing continues. (The return code is 8.)

Programmer Response: None.

IEB238I SYSUT1 CONTAINS NO USER INPUT TRAILER LABELS

Explanation: The programmer requested the INTLR exit and/or label comparison, but there was no input trailer label on the SYSUT1 data set.

System Action: Message IEB234I will be issued.

Programmer Response: None.

IEB239I SYSUT2 CONTAINS NO USER INPUT TRAILER LABELS

Explanation: The programmer requested the INTLR exit and/or label comparison, but

there was no input trailer label on the SYSUT2 data set.

System Action: Message IEB233I is also issued.

Programmer Response: None.

IEB240I BOTH INPUT DATA SETS CONTAIN NO USER TRAILER LABELS

Explanation: The programmer requested the INTLR exit and/or label comparison, but there were no input trailer labels on the SYSUT1 and SYSUT2 data sets.

System Action: Processing continues. (The return code is 8.)

Programmer Response: None.

IEB241I INPUT HEADER LABELS ARE NOT EQUAL

Explanation: Corresponding input header labels are not the same.

System Action: The SYSUT1 label is listed first, followed by the SYSUT2 label. Processing continues. (Return code - 8.)

Programmer Response: None.

IEB242I INPUT TRAILER LABELS ARE NOT EQUAL

Explanation: Corresponding input trailer labels are not the same.

System Action: The SYSUT1 label is listed first, followed by the SYSUT2 label. Processing continues. (Return code - 8.)

Programmer Response: None.

IEB243I ERROR WHILE READING USER INPUT HEADER LABEL ON SYSUT1

Explanation: An uncorrectable input/output error occurred while reading user input header labels on the SYSUT1 data set.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: None.

Problem Determination: Table I, items 1, 3, 13, 29. Table II, Format 1: trace option - TRACE=SIO,IO. Have the associated data set available.

IEB244I I/O ERROR WHILE READING USER INPUT HEADER LABEL ON SYSUT2

Explanation: An uncorrectable input/output error occurred while reading user input header label on the SYSUT2 data set.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: None.

IEB

Problem Determination: Table I, items 1, 3, 13, 29. Table II, Format 1: trace option - TRACE=SIO,IO. Have the associated data set available.

IEB245I I/O ERROR WHILE READING USER INPUT TRAILER LABEL ON SYSUT1

Explanation: An uncorrectable input/output error occurred while reading user input trailer label on the SYSUT1 data set.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: None.

Problem Determination: Table I, items 1, 3, 13, 29. Table II, Format 1: trace option - TRACE=SIO,IO. Have the associated data set available.

IEB246I I/O ERROR WHILE READING USER INPUT TRAILER LABEL ON SYSUT2

Explanation: An uncorrectable input/output error occurred while reading user input trailer label on the SYSUT2 data set.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: None.

Problem Determination: Table I, items 1, 3, 13, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEB247I x INPUT {HEADER} LABELS FROM BOTH DATA
 {TRAILER}
SETS ARE COMPARED

Explanation: At the programmer's request, x number of user input header or trailer labels, were compared.

System Action: If the return code from the user exit routine is 16, message IEB225I is also issued. Otherwise, processing continues normally.

Programmer Response: None.

IEB248I x EXITS TO rtne IS MADE FOR {SYSUT1}
 {SYSUT2}
RETURN CODE FROM USER ROUTINE IS d

Explanation: User label processing routine rtne has been entered x times for the SYSUT1 or SYSUT2 data set, as indicated in the message text. The routine returned a return code of d, indicating that no more labels will be processed.

System Action: If the return code from the user routine is 16, message IEB225I is also issued. Otherwise, processing continues normally.

Programmer Response: None.

IEB249I NO RECORDS ARE COMPARED, DATA=ONLY

Explanation: The programmer specified DATA=ONLY; hence only user header labels are processed.

System Action: The program is terminated. (The return code is 0.)

Programmer Response: None.

IEB250I USER LABEL IS NOT SUPPORTED BY PARTITIONED DATA SET

Explanation: The programmer requested the INHDR or INTLR exit, but user labels are invalid for partitioned data sets.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: Specify the keyword parameter TYPORG=PS in the COMPARE statement if the data sets are indeed physical sequential, and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 25a, 29. Have the associated data sets available.

IEB251I INCOMPATIBLE MAXIMUM LOGICAL RECORD LENGTH

Explanation: One of the input data sets contains logical records greater than 32K bytes; the other one does not.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: Make sure that both data sets contain records of compatible logical record length, and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 25a, 29. Have the associated data sets available.

IEB252I KEYED DATA SETS. ONE CONTAINS SPANNED RECORD, THE OTHER ONE DOES NOT

Explanation: Both input data sets contain keyed records. But one data set has variable spanned record; the other one does not.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: Make sure that the input data sets are of compatible characteristics; rerun the job.

Problem Determination: Table I, items 1, 3, 13, 25c, 29. Have the associated data sets available.

IEB253I RECORDS ARE COMPARED AT PHYSICAL BLOCK LEVEL

Explanation: Since both data sets contain keyed spanned records or logical record greater than 32K bytes, the comparison is made at the block level.

System Action: Processing continues normally.

Programmer Response: None.

IEB254I CORRESPONDING BLOCK LENGTHS ARE NOT EQUAL

Explanation: Corresponding block lengths are not the same.

System Action: The blocks are printed, and processing continues. (Return code - 8.)

Programmer Response: None.

IEB255I CORRESPONDING RECORD LENGTHS ARE NOT EQUAL

Explanation: Corresponding lengths of variable or variable spanned records are not the same.

System Action: The records are printed, and processing continues. (Return code - 8.)

Programmer Response: None.

IEB256I IEBCOMPR DOES NOT COMPARE PARTITIONED DATA SETS WITH VS RECFM

Explanation: The programmer requested that partitioned data sets containing variable spanned (VS) records be compared, but the IEBCOMPR program does not support this function.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Specify TYPORG=PS in the COMPARE statement if the input data sets are indeed physical sequential; rerun the job.

Problem Determination: Table I, items 1, 3, 13, 25c, 29. Have the associated data sets available.

IEB257I JOB TERMINATED AFTER EXIT FOR USER VOLUME SWITCH LABEL PROCESS

Explanation: The programmer requested that processing be terminated after the volume switch input header/trailer labels were examined in the labels exit routine.

System Action: The program is terminated. (Return code - 16.)

Programmer Response: None.

IEB258I USER LABELS NOT COMPARED, UNABLE TO TAKE EXIT FOR ONE DATA SET

Explanation: The programmer wishes to process the input header/trailer labels as data, but the utility program is unable to take the input header/trailer label exit for one of the data sets. Probably, the SUL subparameter is missing from the SYSUT1 or SYSUT2 DD statement.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Make sure that both the SYSUT1 and SYSUT2 DD statements specify SUL in the LABEL parameter; rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB259I INVALID KEYWORD IN OR BEFORE COLUMN dd

Explanation: In the statement preceding this message, a keyword beginning in or before column dd is either incorrect or not applicable to the command for which it is specified.

System Action: Job is terminated after the control card scan. (Return code - 12.)

Programmer Response: Probable user error. Correct the invalid keyword on the preceding statement, and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB260I MISSING COMMAND IN OR BEFORE COLUMN dd

Explanation: In the statement preceding this message, a command that should appear in or before column dd is omitted. Possibly, the previous statement indicated a continuation, but the continuation indicator was not recognized and the scan routine looked for a command on the preceding statement.

System Action: The program is terminated at the end of the control statement scan. (Return code - 12.)

Programmer Response: Probable user error. Include the required command on the preceding statement, or correct the previous statement that caused the error.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB261I INVALID PARAMETER IN OR BEFORE COLUMN dd

Explanation: In the statement preceding this message, a keyword beginning in or before column dd is incorrect:

- The parameter is longer than eight characters.
- The parameter is invalid for the preceding keyword.
- The parameter is not immediately preceded by an equal sign.
- The parameter is misspelled.

System Action: The program is terminated at the end of the control statement scan. (Return code - 12.)

Programmer Response: Probable user error. Correct the invalid parameter on the preceding statement.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB

IEB262I MISSING KEYWORD IN OR BEFORE COLUMN dd

Explanation: In the statement preceding this message, a required keyword that should appear in or before column dd is omitted, or a blank immediately preceded an equal sign.

System Action: The program is terminated at the end of the control statement scan. (Return code - 12.)

Programmer Response: Probable user error. Correct or include the required keyword on the preceding statement.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB263I MISSING PARAMETER IN OR BEFORE COLUMN dd

Explanation: In the statement preceding this message, a required parameter that should appear in or before column dd is omitted.

System Action: The program is terminated at the end of the control statement scan. (Return code - 12.)

Programmer Response: Probable user error. Include the required parameter on the preceding statement.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB264I FIRST CONTROL CARD IS NOT COMPARE

Explanation: The COMPARE statement was not the first utility control statement.

System Action: The program is terminated at the end of the control card scan. (The return code is 12.)

Programmer Response: Probable user error. Make sure that the first statement of the SYSIN data set is the COMPARE statement, and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB265I INVALID COMMAND IN OR BEFORE COLUMN dd

Explanation: In the statement preceding this message, the command beginning in or before column dd is either misspelled or not immediately preceded or followed by a blank.

System Action: The program is terminated at the end of the control statement scan. (Return code - 12.)

Programmer Response: Probable user error. Correct the invalid command on the preceding statement.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB266I CONTINUATION CARD BEGINS IN WRONG COLUMN

Explanation: The continuation statement preceding this message does not begin in columns 4-16.

System Action: The program is terminated at the end of the control card scan. (The return code is 12.)

Programmer Response: Probable user error. Correct the error indicated in the message text, and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB267I I/O ERROR, jjj, sss, ddd, devtyp, ddn, op, err, xxxx, acc

Explanation: A permanent input/output error occurred while processing on device ddd.

In the message text, the error analysis information was provided by the SYNADAF data management macro instruction issued in the SYNAD routine:

- jjj Job name.
- sss Step name.
- ddd Unit address of the device.
- devtyp Device type.
- ddn Data definition name.
- op Operation attempted.
- err Error description.
- xxxx Last seek address or block count.
- acc Access method.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Ensure that the DCB information was valid, and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29. Table II, Format 1: trace option - TRACE=SIO,IO. Have the associated data set available.

IEBGENER Program Messages

IEB302I INVALID PARAMETER LIST

Explanation: The parameter list supplied by the programmer is invalid; that is, the halfword pointed to by the first word of the three-word parameter list contains a negative number.

System Action: The program step is terminated. (The return code is 12.)

Programmer Response: Probable user error. Make sure that the length of the parameter list specified at invocation is not a negative number.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB303I INVALID CONTROL STATEMENT

Explanation: The syntax of the control statement preceding this message is invalid.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: Probable user error. Correct the preceding utility control statement and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB304I CONTROL STATEMENT INPUT ERROR

Explanation: A permanent input/output error was detected while reading the SYSIN data set.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: None.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB305I JOB TERMINATED AFTER LABEL EXIT

Explanation: A return code of 16 was returned by a LABEL exit routine, indicating that processing be terminated.

System Action: The job is terminated. (The return code is 16.)

Programmer Response: None.

IEB306I JOB TERMINATED AFTER KEY EXIT

Explanation: The return code from a KEY exit routine indicates termination.

System Action: The program is terminated. (The return code is 12 or 16, as determined by the exit routine.)

Programmer Response: None.

IEB307I JOB TERMINATED AFTER DATA EXIT

Explanation: The return code from a DATA exit routine indicates termination.

System Action: The job is terminated. (The return code is 12 or 16, as determined by the exit routine.)

Programmer Response: None.

IEB308I PERMANENT INPUT ERROR

Explanation: A permanent input/output error was detected while reading the SYSUT1 data set.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: Make sure that the DCB values are correct for the data set being processed.

Problem Determination: Table I, items 1, 3, 13, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEB309I PERMANENT OUTPUT ERROR

Explanation: A permanent input/output error was detected while writing the SYSUT2 data set.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: Make sure that the output DCB values are compatible with input DCB values, considering any record editing that was requested.

Problem Determination: Table I, items 1, 3, 13, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEB310I STOW ERROR IN OUTPUT DATA SET

Explanation: A permanent error occurred while writing the directory of the SYSUT2 data set. Possibly:

- The SYSUT2 data set is not partitioned.
- A member name was specified more than once in MEMBER statements.
- Insufficient space was allocated for the directory.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: Make sure that the SYSUT2 data set is partitioned, a member name is not specified more than once, and sufficient space is allocated for the directory, as necessary.

Problem Determination: Table I, items 1, 3, 13, 25c, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEB311I CONFLICTING DCB PARAMETERS

Explanation: The DCB parameters in the SYSUT2 DD statement are not compatible with those specified in the SYSUT1 DD statement (e.g., the block size specified in the SYSUT2 DD statement is not a multiple of the block size specified in the SYSUT1 DD statement, and no editing is specified).

System Action: The job step is terminated. (The return code is 12.)

Programmer Response: Probable user error. Make sure that the DCB parameters of the output DD statement are compatible with the DCB parameters of the input DD statement, considering any editing that was requested.

IEB

Problem Determination: Table I, items 1, 3, 13, 29.

IEB312I JOB TERMINATED AFTER ERROR EXIT

Explanation: A return code of 16 was returned by an ERROR exit routine, indicating that processing be terminated.

System Action: The program is terminated. (Return code - 16.)

Programmer Response: None.

IEB315I SPACE NOT AVAILABLE

Explanation: Insufficient main storage space is available for the work area, buffers, and save areas.

System Action: The job is terminated. (The return code is 12.)

Programmer Response: None.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB316I DDNAME ddn CANNOT BE OPENED

Explanation: DD statement ddn does not exist.

System Action: The job is terminated. (The return code is 12.)

Programmer Response: Probable user error. Correct the ddname if it is misspelled in the DD statement or the ddlist, or insert a DD statement specifying the name.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB317I JOB TERMINATED, NO INPUT BLKSIZE/LRECL

Explanation: The BLKSIZE/LRECL parameter was omitted from the input DD statement.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: Probable user error. Include a BLKSIZE/LRECL parameter in the SYSUT1 DD statement.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB318I JOB TERMINATED, NO OUTPUT BLKSIZE/LRECL

Explanation: The BLKSIZE/LRECL parameter is omitted from the output DD statement.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: Probable user error. Include a BLKSIZE parameter in the SYSUT2 DD statement.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB319I INVALID SYSIN BLOCKSIZE

Explanation: The SYSIN DD statement specifies a block size that is not a multiple of the specified logical record length.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: Probable user error. Correct the SYSIN BLKSIZE to be a multiple of the logical record length.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB320I OUTPUT DATA SET WITH KEYS IN VS/VBS PROCESSING

Explanation: During a process other than 'straight copy', the programmer specified keys for a VS (variable-length, spanned) or VBS (variable-length, blocked, spanned) output data set.

System Action: Job terminated (the return code is 12).

Programmer Response: Probable user error. Correct the data set characteristics (RECFM, BLKSIZE, LRECL) to be equal for the input and output data sets, and do no editing if keys are desired on VS or VBS records. If a change is required in the data set characteristics or if editing is to be done, a key cannot be specified.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB321I INPUT DATA SET WITH KEYS IN VS/VBS PROCESSING

Explanation: The input data set contained keys in one of the following situations:

- The input data set contained VS (variable-length, spanned) or VBS (variable-length, blocked, spanned) records, and the output data set had different attributes from the input data set.
- The input data set did not contain VS or VBS records, but the output data set did contain VS or VBS records.

System Action: The job is terminated. (The return code is 12.)

Programmer Response: Probable user error. Correct the data set characteristics (RECFM, BLKSIZE, LRECL) to be equal for the input and output data sets, and do no editing if keys are desired on VS or VBS records. If a change is required in the data set characteristics or if editing is to be done, a key cannot be specified.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB322I JOB TERMINATED AFTER OPENING OUTPUT DATA SET UPON USER REQUEST

Explanation: The input header user label routine requires termination of the job after the output data set is opened.

System Action: Job terminated (return code is 16).

Programmer Response: None.

IEB323I JOB TERMINATED AFTER HEADER LABEL PROCESSING

Explanation: The programmer specified a LABELS DATA=ONLY statement. Therefore, after the user header labels are processed, the program will be terminated.

System Action: Only user header labels are processed. The program is terminated. (Return code - 8.)

Programmer Response: None.

IEB324I x TIMES TO rtne EXITROUTINE

Explanation: User label exit routine rtne has received control x times.

System Action: Processing continued (return code is 0).

Programmer Response: None.

IEB325I LAST RETURN CODE WAS XX

Explanation: Return code xx was the last return code issued by the user routine specified in preceding message IEB324I.

System Action: Processing continued (return code is 0).

Programmer Response: None.

IEB326I {SYSUT1} {HEADER} LABEL GAVE I/O ERROR
{SYSUT2} {TRAILER}

Explanation: A permanent input/output error occurred while reading or writing a SYSUT1 or SYSUT2, header or trailer label, as indicated in the message text. If the error occurred while reading or writing a header label, the data set was not opened.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: None.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB327I SPECIFIED KEY EXITS ARE NOT TAKEN

Explanation: The programmer specified key exits on a job requiring processing of a VS (variable-length, spanned) or VBS (variable-length, blocked, spanned) data set with reformatting.

System Action: Key exits are not taken. Processing continues. (Return code - 4.)

Programmer Response: Do not specify key exits.

IEB328I LRECL EXCEEDS 32K; STRAIGHT COPY NOT SPECIFIED

Explanation: A process other than 'straight copy' was specified. However:
• The RECFM specified for the input or output DCB was VS or VBS.
• The LRECL specified for the input or output DCB, or both, was greater than 32,756.

System Action: Job terminated (the return code is 12).

Programmer Response: Probable user error. Make data set characteristics (RECFM, LRECL, BLKSIZE) equal for input and output data sets and do not specify editing. Rerun the job.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB329I PDS NOT ALLOWED WHEN INPUT/OUTPUT DATA SET HAS RECFM=VS/VB

Explanation: The programmer specified that the output data set should be partitioned and should contain VS (variable-length, spanned) or VBS (variable-length, blocked, spanned) records. However, VS or VBS records cannot be specified for partitioned data sets.

System Action: Job terminated (return code is 12).

Programmer Response: Probable user error. Remove the utility control statements which specify the output data set as being a PDS, and rerun the job.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB330I TOTALING EXIT REQUESTS TERMINATION

Explanation: A return code of 16 was returned by the programmer's totaling routine, indicating that processing be terminated.

System Action: The program is terminated. (Return code - 15.)

Programmer Response: None.

IEB331I PROCESSING ENDS UPON REQUEST OF TOTALING EXIT

Explanation: A return code of eight was returned by the programmer's totaling routine, indicating that processing be terminated but normal end of data processing be complete for the output data set.

System Action: Processing is terminated, but normal end of data processing is completed for the output data set. (Return code - 8.)

Programmer Response: None.

IEB

IEB332I TOTALING EXIT DEACTIVATED UPON ITS OWN REQUEST

Explanation: A return code of zero was returned by the programmer's totaling routine, indicating that processing be continued but no further totaling exits be taken.

System Action: Processing continues, but no further totaling exits are taken (Return code - 0.)

Programmer Response: None.

IEB333I RECORD LABELS=n STATEMENTS ARE REQUIRED

Explanation: The programmer has specified a LABELS DATA=INPUT statement. Therefore, RECORD LABELS=n statements are also required.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: Probable user error. If user labels are desired, insert a RECORD LABELS=n statement and the associated labels statements in the input stream; if labels are not desired, remove the LABELS DATA=INPUT statement. Rerun the job.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB334I NO EDITING OR CONVERSION WILL BE DONE

Explanation: Both data sets contain VS (variable-length, spanned) or VBS (variable-length, blocked, spanned) records, have the same block size, and have the same logical record length. Therefore, no editing or conversion will be done.

System Action: Processing continues. (The return code is 0.)

Programmer Response: None.

IEB336I INVALID COMMAND IN COLUMN dd

Explanation: In the statement preceding this message, the operation beginning in column dd is correct:

- A GENERATE statement is not the first control statement.
- The GENERATE statement appears twice.
- An operation is misspelled.
- An operation other than GENERATE, EXITS, MEMBER, RECORD, or LABELS was specified.
- The LABELS statement appears twice.
- There are more input labels than are specified by the RECORD LABELS=n statement.

System Action: The job is terminated. (The return code is 12.)

Programmer Response: Probable user error. Correct the command on the preceding utility control statement and rerun the job.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB337I INVALID KEYWORD IN COLUMN dd

Explanation: In the statement preceding this message, a keyword beginning in column dd is either misspelled, incorrect, or not applicable to the command for which it is specified.

System Action: The job is terminated. (The return code is 12.)

Programmer Response: Probable user error. Correct the invalid keyword and rerun the job.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB338I INVALID PARAMETER IS COLUMN dd

Explanation: In the statement preceding this message, a parameter beginning in column dd is incorrect:

- A member name contains more than eight characters.
- In the RECORD statement, the IDENT keyword is followed by the more than three parameters.
- In the RECORD statement, the FIELD keyword is followed by more than four parameters.
- In the RECORD statement, the conversion parameters in the FIELD keyword are not HE, PZ, or ZD.
- In the LABELS statement, the parameters in the DATA keyword are not ALL, ONLY, YES, NO, or INPUT.
- In the RECORD statement, the LABELS keyword is not followed by a number from one to eight.

System Action: The job is terminated. (The return code is 12.)

Programmer Response: Probable user error. Correct the invalid parameter and rerun the job.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB339I COMMAND MISSING PRECEDING COLUMN dd

Explanation: In the statement preceding this message, no operation is specified before column dd. Possibly, the preceding statement is a continuation statement, but the previous statement indicating the continuation contained an error and, therefore, the continuation was not recognized.

Explanation: A command is absent from a card; or a card which has a continuation indicator contains an error. The continuation indicator is not recognized, and the scan routine looks for a command on the following card.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: Probable user error. Insert the missing command or correct the error on the statement with the continuation indicator, and rerun the job.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB340I KEYWORD MISSING PRECEDING COLUMN dd

Explanation: In the statement preceding this message, a required keyword that should appear before column dd is omitted; that is, the NAME keyword is not specified in the MEMBER statement, or the DATA keyword is not specified in the LABELS statement.

System Action: The job is terminated. (The return code is 12.)

Programmer Response: Probable user error. Insert the missing keyword and rerun the job.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB341I PARAMETER MISSING PRECEDING COLUMN dd

Explanation: In the statement preceding this message, a parameter that should appear before column dd is omitted; that is, a keyword is not followed by a parameter, or the IDENT keyword in the RECORD statement is not followed by all three parameters.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: Probable user error. Insert the missing parameter and rerun the job.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB342I INVALID SPACE ALLOCATION

Explanation: Required keywords in the GENERATE statement are omitted or their parameter values are too small. This message is also issued if a RECORD LABELS=n statement is not preceded by a LABELS DATA=INPUT statement.

System Action: The job is terminated. (The return code is 12.)

Programmer Response: Probable user error. Correct keywords in the GENERATE statement or insert a LABELS DATA=INPUT statement, as necessary.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB343I ALLOWED NO. OF CARDS EXCEEDED

Explanation: Three or more LABELS cards were encountered.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: Probable user error. Reduce the number of LABELS statements to one or two and rerun the job.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB344I WARNING: INVALID STATEMENT LABEL

Explanation: In the statement preceding this message, the name field is greater than eight characters or contains an invalid character.

System Action: Processing continues.

Programmer Response: Correct the name field of the preceding statement.

IEB345I CONTINUATION NOT BEFORE COLUMN 17

Explanation: The statement preceding this message does not contain any characters in columns 1-16, indicating that the statement is not a continuation. However, the previous statement indicated that a continuation statement was to follow.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: Probable user error. Correct the preceding statement so that the statement is a continuation or correct the previous statement so that a continuation statement is not expected.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB346I MISSING PARENTHESES

Explanation: In the statement preceding this message, a closing parenthesis is omitted or an error was encountered in a parameter list before the closing parenthesis.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: Probable user error. Insert the missing parenthesis or correct the error within the parenthesis, and rerun the job.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB347I DUPLICATE KEYWORD

Explanation: In the EXITS statement preceding this message, a keyboard is specified twice.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: Probable user error. Remove the duplicate keyword and rerun the job.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB348I PRECEDING MEMBER REQUIRES 'IDENT'

Explanation: Two MEMBER statements were encountered; however, there was no RECORD IDENT statement associated with the first MEMBER statement.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: Probable user error. Insert a RECORD IDENT=(ident parameters) with the associated MEMBER statement, and rerun the job.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB349I INCONSISTENT PARAMETERS IN FIELD OR IDENT

Explanation: The first two parameters on an IDENT or FIELD keyword are not consistent with each other.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: Probable user error. Make sure that the length indicator is accurate for the parameter it is describing, and rerun the job.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB350I LITERAL LENGTH EXCEEDS 40

Explanation: In the RECORD statement preceding this message, the literal specified in the FIELD keyword is greater than 40 bytes.

System Action: The job is terminated. (The return code is 12.)

Programmer Response: Probable user error. Correct the literal on the preceding statement so it does not exceed forty bytes, and rerun the job.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB351I I/O ERROR jjj, sss, ddd, devtyp, ddn, op, err, xxxx, acc

Explanation: A permanent input/output error occurred while processing on device ddd.

In the message text, the error analysis information was provided by the SYNADAF data management macro instruction issued in the SYNAD routine:

jjj Job name.
sss Step name.
ddd Unit address of the device.
devtyp Device type.
ddn Data definition name.

op Operation attempted.
err Error description.
xxxx Last seek address or block count.
acc Access method.

System Action: The job step is terminated. (The return code is 12.)

Programmer Response: Make sure that the data set characteristics accurately describe the data set which is being accessed. If they do not, correct them and rerun the job.

Problem Determination: Table I, items 1, 3, 15, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEBPTCH Program Messages

IEB401I PRINT/PUNCH STATEMENT NOT FIRST.

Explanation: A PRINT or PUNCH statement is not the first utility control statement.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Correct the sequence of control cards or insert a PRINT or PUNCH statement.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB402I INVALID OPERATION

Explanation: In the utility statement preceding this message, the operation is invalid.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Correct the invalid operation on the preceding statement.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB403I MORE THAN TWO TITLE STATEMENTS.

Explanation: More than two TITLE statements are included.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Remove all but two TITLE statements.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB404I KEYWORD INVALID OR OMITTED

Explanation: In the statement preceding this message, a required keyword is either incorrect or missing.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Correct or include the required keyword on the preceding statement.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB405I PARAMETER INVALID OR OMITTED

Explanation: In the statement preceding this message, a required parameter is either incorrect, inconsistent, or missing.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Correct or include the required parameter on the preceding statement. If multiple RECORD statements are included, make sure that each statement contains an IDENT parameter.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB406I JOB TERMINATED AFTER USER EXIT

Explanation: The job was terminated after control was returned from an exit routine.

System Action: The program is terminated. (Return code - 12 or 16, as determined by the exit routine.)

Programmer Response: None.

IEB407I JOB TERMINATED DUE TO I/O ERROR

Explanation: A permanent input/output error was encountered.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Check the DCB parameters of the SYSUT1 data set. Make sure that the maximum LRECL size is specified for variable length records. Make sure that TYPORG=PO was not specified for a physical sequential data set. If SYSUT1 record format is V or VS make sure there are not records less than the minimum five bytes long.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB408I MEMBER mem CANNOT BE FOUND

Explanation: Member mem is not contained in the SYSUT1 data set.

System Action: The member is not printed or punched. If there is another MEMBER statement, the next member is read; otherwise, the program is terminated. (Return code - 8.)

Programmer Response: Make sure that the member to be printed or punched is contained in the SYSUT1 data set.

Problem Determination: Table I, items 1, 3, 13, 25c, 29.

IEB409I INVALID CONTROL STATEMENT

Explanation: The construction of the control statement preceding this message is invalid.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Make sure that the construction of the preceding statement is correct. If this is a TITLE card, make sure there are valid parenthesis with the ITEM keyword.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB410I INCORRECT RECORD STATEMENT

Explanation: The RECORD statement preceding this message is incorrect.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. If an IDENT keyword is in the preceding RECORD statement, make sure that the sum of the input-location parameter - minus one and the length parameter does not exceed the SYSUT1 logical record length. If one or more FIELD keywords are in the preceding RECORD statement, make sure that the sum of the input-location parameter and the length parameter does not exceed the SYSUT1 logical record length. Also make sure that the sum of all length parameters for fields defined in the preceding RECORD statement, does not exceed the specified output length - minus one per printed line or per punched card.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB411I DDNAME ddn CANNOT BE OPENED

Explanation: DD statement ddn does not exist.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Make sure that the ddname is not misspelled in the DD statement or ddlist.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB

IEB412I INVALID INP/OUTP DCB PARAMETER

Explanation: One or more parameters in the BLKSIZE and LRECL keywords were omitted from the SYSUT1 DD statement. The omitted parameters were replaced by the value 1.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Make sure that the data control block contains all necessary parameters.

Problem Determination: Table I, items 1, 3, 13, 29.

System Action: The print or punch operation is terminated. (Return code - 12.)

Programmer Response: Ensure that the proper data set is mounted.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB418I VS/VBS NOT ALLOWED IN PDS

Explanation: The data set organization conflicts with the record format -- that is, if RECFM=VS or VBS, then TYPORG must be PS.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. If SYSUT1 record format is VS or VBS, make sure that TYPORG=PO was not specified.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB414I xxxxx PARAMETER IS TOO SMALL

Explanation: The number of FIELD keywords, IDENT keywords, literals, or name keywords in MEMBER or RECORD statements is greater than the number specified in parameter xxxxx - MAXFLDS, MAXGPS, MAXLITS, MAXLINE, or MAXNAME, respectively.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Specify a greater value for parameter xxxxx.

Problem Determination: Table I, items 1, 3, 13, 29.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. If SYSUT1 record format is VS or VBS, make sure that TYPORG=PO was not specified.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB419I USER RETURN CODE dd INVALID

Explanation: Return code dd was returned by the user. However, the return code is invalid if it is other than 0, 4, or 16.

System Action: The return code is ignored. Processing continues according to prior conditions.

Programmer Response: None.

IEB415I VS/VBS DATA PROCESSED IN BLOCKS

Explanation: The LRECL specified for the VS or VBS input data area exceeds 32,756 bytes.

System Action: Processing continues a physical basis -- that is, blocks rather than logical records are printed or punched.

Programmer Response: None.

System Action: The return code is ignored. Processing continues according to prior conditions.

System Action: The return code is ignored. Processing continues according to prior conditions.

Programmer Response: None.

IEB420I SYSIN IS EMPTY

Explanation: The SYSIN data set does not contain any IEBPTPCH control statements.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Make sure that the SYSIN data set contains either a PRINT or PUNCH statement.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB416I PREFORM, VS LRECL LARGER THAN 32K

Explanation: The LRECL specified for the VS or VBS input data set exceeds 32,756 bytes and PREFORM was specified in the PRINT or PUNCH utility control statement.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Reformat the data set or delete the PREFORM parameter from the PRINT or PUNCH control statement.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB421I I/O ERROR jjj, sss, ddd, devtyp, ddn, op, err, xxxx, acc

Explanation: A permanent input/output error occurred while processing on device ddd.

In the message text, the error analysis information was provided by the SYNADAF data management macro instruction issued in the SYNAD routine:

jjj Job name.
sss Step name.
ddd Unit address of the device.
devtyp Device type.
ddn Data definition name.

IEB417I DATA SET EMPTY

Explanation: The data set to be printed or punched contains no data.

op Operation attempted.
err Error description.
xxxx Last seek address or block count.
acc Access method.

System Action: The program is terminated.
(Return code - 12.)

Programmer Response: Correct the error condition indicated in the message text.

Problem Determination: Table I, items 1, 3, 13, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEB431I INVALID KEYWORD IN COLUMN dd

Explanation: In the statement preceding this message, a keyword beginning in column dd is either incorrect or not applicable to the command for which it is specified.

System Action: The program is terminated at the end of the control statement scan.
(Return code - 12.)

Programmer Response: Probable user error. Correct the invalid keyword in the preceding statement. If this is a LABELS command, make sure that the keyword specified for the DATA= operand is either ALL, ONLY, YES or NO. If this is a PRINT command, make sure that the parameter specified for the CNTRL keyword is not greater than that specified for the MAXLINE keyword. If this is a PUNCH command make sure that neither the INITPG or MAXLINE keyword has been specified.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB432I INVALID PARAMETER IN COLUMN dd

Explanation: In the statement preceding this message, a parameter beginning in column dd is either incorrect or not applicable to the keyword for which it is specified.

System Action: The program is terminated at the end of the control statement scan.
(Return code - 12.)

Programmer Response: Probable user error. Correct the invalid parameter on the preceding statement. If the NAME, INREC, or OUTREC keywords are specified, make sure that the parameter does not exceed 8 characters.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB433I MISSING KEYWORD BEFORE COLUMN dd

Explanation: In the statement preceding this message, a required keyword that should appear before column dd is either omitted or preceded or followed by an invalid delimiter.

System Action: The program is terminated at the end of the control statement scan.
(Return code - 12.)

Programmer Response: Probable user error. Correct or include the required keyword on the preceding statement.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB434I MISSING PARAMETER BEFORE COLUMN dd

Explanation: In the statement preceding this message, a required parameter that should appear before column dd is either omitted or preceded or followed by an invalid delimiter.

System Action: The program is terminated at the end of the control statement scan.
(Return code - 12.)

Programmer Response: Probable user error. Correct or include the required parameter on the preceding statement. If a TITLE statement precedes this message, make sure that the literal in the ITEM parameter does not exceed 40 characters.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB435I MISSING COMMAND PRECEDING COLUMN dd

Explanation: In the statement preceding this message, a required command that should appear before column dd is omitted. If the statement is a continuation, however, an error occurred on the preceding statement.

System Action: The program is terminated at the end of the control statement scan.
(Return code - 12.)

Programmer Response: Probable user error. Make sure the preceding statement contains a valid command. If this is a continuation statement, make sure a statement preceding the continuation contains a valid command.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB436I INVALID COMMAND

Explanation: In the statement preceding this message, a command is incorrect or invalid because of conditions set upon that command by keywords or parameters on previous statements.

System Action: The program is terminated at the end of the control statement scan.
(Return code - 12.)

Programmer Response: Probable user error. Correct the command on the preceding statement. Make sure that previous keywords and parameters, such as MAXGPS or MAXNAME, do not conflict with this command.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB437I INVALID LITERAL

Explanation: The literal field of the control statement preceding this message is invalid.

System Action: The program is terminated at the end of the control statement scan. (Return code - 12.)

Programmer Response: Probable user error. Make sure that the literal field on the preceding statement does not exceed the specified maximum length. If this is an ITEM parameter, make sure that the length of the literal is not greater than 40. Also make sure that the sum of the literal length and the output-location parameter does not exceed the maximum output per printed line or per punched card.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB438I INVALID NAME

Explanation: In the statement preceding this message, the statement name either is too long or contains an invalid character.

System Action: Processing continues normally. However, the control statement is ignored.

Programmer Response: Probable user error. Make sure that the preceding statement name does not exceed 8 characters, nor contain an invalid character.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB439I CONTINUATION NOT STARTED IN 4-16

Explanation: In the continuation statement preceding this message, data does not begin in columns 4 through 16.

System Action: The program is terminated at the end of the control statement scan. (Return code - 12.)

Programmer Response: Probable user error. Make sure that the continuation statement begins in columns 4 through 16. If the statement is not a continuation, however, correct the previous statement that

Problem Determination: Table I, items 1, 3, 13, 29.

IEB440I MISSING PARENTHESIS

Explanation: In the statement preceding this message, either a parenthesis is omitted or there is an error within the parentheses.

System Action: The program is terminated at the end of the control statement scan. (Return code - 12.)

Programmer Response: Probable user error. Include the missing parenthesis or correct the error within the parentheses.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB441I MEMBER INVALID: TYPORG NOT PO

Explanation: The MEMBER statement preceding this message is invalid since physical sequential (PS) organization was specified -- that is, TYPORG=PO must be specified on the PRINT or PUNCH utility control statement.

System Action: The program is terminated at the end of the control statement scan. (Return code - 12.)

Programmer Response: Probable user error. If SYSUT1 specifies a physical sequential data set, remove the MEMBER statement. If SYSUT1 specifies a partitioned data set, specify TYPORG=PO on the PRINT or PUNCH statement.

Problem Determination: Table I, items 1, 3, 13, 29.

IEBUPDAT Program Messages

IEB501I INVALID EXIT NAME. JOB TERMINATED.

Explanation: In the EXEC statement preceding this message, the exit routine name is incorrect. Possibly, the routine name is misspelled.

System Action: The program is terminated. (Return code = 12.)

Programmer Response: Probable user error. Correct the exit routine name on the EXEC statement, and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB502I EXIT RETURN CODE INDICATES TERMINATION.

Explanation: An exit routine returned a return code of 16, indicating termination.

System Action: The program is terminated.

Programmer Response: None.

IEB503I I/O ERROR ON SYSUT1. JOB TERMINATED.

Explanation: A permanent input/output error was encountered while the SYSUT1 data set was being read.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Make sure that the DCB parameters are specified correctly.

Problem Determination: Table I, items 1, Table II, Format 1: trace option - TRACE=SIO,IO. 3, 13, 29.

IEB504I L/O ERROR ON SYSIN. JOB TERMINATED.

Explanation: A permanent input/output error was encountered while the SYSIN data set was being read.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Make sure that the DCB parameters are specified correctly.

Problem Determination: Table I, items 1, 3, 13, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEB505I L/O ERROR ON SYSUT2. JOB TERMINATED.

Explanation: A permanent input/output error was encountered while the SYSUT2 data set was being written.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Make sure that the DCB parameters are specified correctly.

Problem Determination: Table I, items 1, 3, 13, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEB506I NM BLOCKSIZE IS ASSUMED 80

Explanation: Either no block size was specified for the SYSUT2 data set or the block size specified was not a multiple of 80 bytes.

System Action: A block size of 80 bytes is assumed, and processing continues. (Return code - 8.)

Programmer Response: Probable user error. Correct the block size on the SYSUT2 DD statement.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB509I CURRENT TRANSACTION REJECTED.

Explanation: The transaction represented by the preceding control statement and the logical record statements is rejected because the control statement is incorrect or is out of sequence with respect to other control statements.

System Action: Processing continues with the next member of the library. (Return code - 4.)

Programmer Response: Probable user error. Correct the preceding control statement.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB510I NO RECORDS WITHIN DELETE RANGE.

Explanation: No records were found within the range specified in the DELET statement.

System Action: Processing continues with the next member of the library. (Return code - 4.)

Programmer Response: Probable user error. Make sure that the range specified in the DELET statement is correct.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB511I NO RECORDS WITHIN NUMBER RANGE.

Explanation: No records were found within the range specified in the NUMBR statement.

System Action: Processing continues with the next member of the library. (Return code - 4.)

Programmer Response: Probable user error. Make sure that the range specified in the NUMBER statement is correct.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB512I DIRECTORY WRITE ERROR.

Explanation: A permanent error occurred while writing the directory of the SYSUT2 data set. Possibly, the SYSUT2 data set is not partitioned.

System Action: The program is terminated. (Return code - 16.)

Programmer Response: Make sure that the SYSUT2 data set is partitioned.

Problem Determination: Table I, items 1, 3, 13, 25a, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEB513I OUTPUT DIRECTORY FILLED.

Explanation: The directory of the SYSUT2 data set does not contain sufficient space for all the member entries.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Make sure that sufficient space is allocated for the directory.

Problem Determination: Table I, items 1, 3, 13, 25a, 29.

IEB514I MEMBER HAS NO RECORDS.

Explanation: The member specified in the preceding header statement contains no records.

IEB

System Action: Processing continues with the next member of the library. (Return code - 4.)

Programmer Response: Probable user error. Make sure that the member name is spelled correctly.

Problem Determination: Table I, items 1, 3, 13, 25a, 29.

IEB515I IMPROPER INVOCATION PARAMETER.

Explanation: Either the EXEC statement contains an incorrect parameter or an incorrect parameter was passed to the IEBUPDAT program.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Correct the invalid parameter.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB516I MEMBER NAME SEQUENCE ERROR.

Explanation: The member names specified on the preceding header statements are not in binary collating sequence. (For example, member name MEMB3 cannot be specified before member name MEMB2.)

System Action: Processing continues with the next member of the library. (Return code - 4.)

Programmer Response: Probable user error. Correct the sequence of header statements.

Problem Determination: Table I, items 1, 3, 13, 25a, 29.

IEB517I DDNAME ddn CANNOT BE OPENED

Explanation: DD statement ddn does not exist.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Correct the ddname if it is misspelled in the DD statement or the ddlist, or insert a new DD statement with the correct name.

Problem Determination: Table I, items 1, 3, 13, 29.

IEBISAM Program Messages

IEB600I UTILITY PROGRAM IEBISAM HAS SUCCESSFULLY COMPLETED THE REQUESTED OPERATION
COMPLETION CODE=00

Explanation: The program has successfully completed the requested operation.

System Action: Program operation has completed. (Return code - 0.)

Programmer Response: None.

IEB601I DCB FIELD VALUES INCONSISTENT COMPLETION
CODE=08

Explanation: One or more of the following DCB subparameters are invalid: RECFM, LRECL, BLKSIZE, RKP, and KEYLEN.

System Action: The program is terminated. The requested operation is not performed. (Return code - 8.)

Programmer Response: Probable user error. Correct the invalid DCB subparameters.

Problem Determination: Table I, items 1, 13, 29.

IEB602I jjj, sss, ddd, devtyp, ddn, op, err, xxxx,
acc COMPLETION CODE=08

Explanation: A permanent input/output error occurred while processing on device ddd.

In the message text, the error analysis information was provided by the SYNADAF data management macro instruction issued by the SYNAD routine:

jjj Job name.
sss Step name.
ddd Unit address of the device.
devtyp Device type.
ddn Data definition name.
op Operation attempted.
err Error description.
xxxx Last seek address or block count.
acc Access method.

System Action: The program is terminated. (Return code - 8.)

Programmer Response: Make sure the DCB information is consistent with the original indexed sequential data set.

Problem Determination: Table I, items 1, 13, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEB603I DUPLICATE RECORD COMPLETION CODE=08

Explanation: A record key is identical to a record key previously placed in the indexed sequential data set. Possibly the RKP or the KEYLEN parameter has been changed. (This message appears for a LOAD operation only.)

System Action: The program is terminated. Reconstruction of the indexed sequential data set is incomplete. (Return code - 8.)

Programmer Response: UNLOAD the original indexed sequential data set and respecify the LOAD operation. Also specify the original DCB parameters in the SYSUT1 and SYSUT2 DD cards.

Problem Determination: Table I, items 1, 13, 29.

IEB604I NUMBER OF CHARACTERS TO BE TRANSMITTED EXCEEDS LIMIT COMPLETION CODE=08

Explanation: The number of characters in a fixed-length record exceeds the value specified in LRECL or in LRECL + KEYLEN (for fixed-length, unblocked records with a relative key position of 0). (This message appears for a LOAD operation only.)

System Action: The program is terminated. The requested operation is not performed. (Return code - 8.)

Programmer Response: Probable user error. Correct the LRECL subparameter and unload the original indexed sequential data set, and then respecify that LOAD operation.

Problem Determination: Table I, items 1, 13, 25a, 29.

IEB605I CLOSE REQUESTED BY USER AFTER A USER EXIT COMPLETION CODE=04

Explanation: The return code returned by the user was either 4 or 12.

System Action: The program is terminated. (Return code - 4.)

Programmer Response: None.

IEB606I ILLEGAL RETURN CODE RECEIVED FROM A USER EXIT COMPLETION CODE=12

Explanation: The return code returned by the user was other than 0, 4, 8, or 12.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Correct the user exit routine to issue a valid return code.

Problem Determination: Table I, items 1, 13, 29. Have a listing of the exit routine available.

IEB607I SYSUT2 OR SYSUT1 DD CARD MISSING COMPLETION CODE=16

Explanation: No SYSUT1 or SYSUT2 DD statement was included in the job step.

System Action: The program is terminated. (Return code - 16.)

Programmer Response: Probable user error. Insert the missing SYSUT1 or SYSUT2 DD statement.

Problem Determination: Table I, items 1, 13, 29.

IEB608I INVALID OPTION IN THE PARM FIELD OF THE EXECUTE CARD COMPLETION CODE=16

Explanation: The PARM parameter of the EXEC statement is incorrect.

System Action: The program is terminated. (Return code - 16.)

Programmer Response: Probable user error. Correct the PARM parameter in the EXEC statement.

Problem Determination: Table I, items 1, 13, 29.

IEB609I INPUT SEQUENCE ERROR COMPLETION CODE=08

Explanation: Either a record was lost or a noise record was encountered when loading an indexed sequential data set. Possibly the RKP, KEYLEN, or OPTCD parameter has been changed.

System Action: The program is terminated. (Return code - 8.)

Programmer Response: If possible, use a backup copy of the unloaded data set. UNLOAD the original indexed sequential data set and respecify the LOAD operation. Also specify the original DCB parameters in the SYSUT1 DD card.

Problem Determination: Table I, items 1, 13, 29. Table II, Format 1: trace option - TRACE=SI0,IO.

IEBDG Program Messages

IEB700I DATA GENERATION HAS BEEN [SUCCESSFULLY] COMPLETED. COMPLETION CODE IS xxxx

Explanation: If xxxx is ZERO, data generation was successfully completed.

If xxxx is FOUR, the job step was terminated at the request of the user.

If xxxx is EIGHT, an error occurred while processing a utility control statement.

If xxxx is TWELVE, an error occurred while processing an input or output data set.

If xxxx is SIXTEEN, incorrect parameters were encountered in a data control block while opening a data set.

System Action: The program is terminated.

Programmer Response: If xxxx is ZERO or FOUR, no action is necessary.

If xxxx is EIGHT, correct the appropriate control statements and execute the job step again.

If xxxx is TWELVE, correct the error condition described in message IEB729I and execute the job step again.

If xxxx is SIXTEEN, correct the appropriate DD statements and execute the job step again.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB702I OPERATION WAS NOT DSD,FD,CREATE,REPEAT, OR END. CORRECT AND RERUN.

Explanation: The preceding utility control statement specified an invalid operation - that is, the operation was not DSD, FD, CREATE, REPEAT, or END.

System Action: Syntax checking of the remainder of the utility control statements in this set continues, but no additional data is generated. Processing continues normally with the next DSD statement encountered, if any. (Return code - 8.)

Programmer Response: Probable user error. Since the output data set may have been only partially completed, execute the IEHPRGM system utility program to scratch the data set, if necessary. Correct the operation specification on the preceding control statement.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB703I INVALID KEYWORD VALUE. DELIMITER, DESCRIPTOR OR TYPE IS IMPROPER OR DUPLICATED. IN FD NAME HAS OCCURRED PREVIOUSLY.

Explanation: The keyword value pinpointed by preceding message IEB727I is incorrect. Possibly:

- A double quote specified within a picture caused an invalid length.
- A starting character of * was used when AL or AN format was specified.
- A character other than 0-9 or A-F was used when a hexadecimal digit was to be specified.
- A nonnumeric character was used when a decimal number was to be specified.
- A keyword was misspelled.
- An FD statement contained a previously used name.

System Action: Syntax checking of the remainder of the utility control statements in this set continues, but no additional data is generated. Processing continues normally with the next DSD statement encountered, if any. (Return code - 8.)

Programmer Response: Probable user error. Since the output data set may have been only partially completed, execute the IEHPRGM system utility program to scratch the data set, if necessary. Correct the preceding statement so that a valid keyword value is specified.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB704I INPUT DDNAME ON CREATE OR FD CARD IS NOT SPECIFIED ON DSD CARD.

Explanation: The ddname specified on a CREATE or FD statement was not referred to on the DSD statement beginning this set of utility control statements. The IEBDG program was unable to open the data set.

System Action: Syntax checking of the remainder of the utility control statements in this set continues, but no additional data is generated. Processing continues normally with the next DSD statement encountered, if any. (Return code - 8.)

Programmer Response: Probable user error. Since the output data set may have been only partially completed, execute the IEHPRGM system utility program to scratch the data set, if necessary. Include the missing ddname in the DSD statement.

Problem Determination: Table I, items 1, 3, 13, 29

IEB705I INVALID KEYWORD, POSSIBLE IMBEDDED COMMA.

Explanation: The keyword pinpointed by preceding message IEB727I is invalid. Possibly, the keyword is misspelled or contains an embedded comma.

System Action: Syntax checking of the remainder of the utility control statements in this set continues, but no additional data is generated. Processing continues normally with the next DSD statement encountered, if any. (Return code - 8.)

Programmer Response: Probable user error. Since the output data set may have been only partially completed, execute the IEHPRGM system utility program to scratch the data set, if necessary. Correct the keyword on the preceding statement.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB706I NUMBER SPECIFIED IS LARGER THAN 32,767 OR EXCEEDS MACHINE CAPACITY (2,147,483,647).

Explanation: A length parameter on an FD statement was specified larger than 32,767 or the value of a field exceeded 2,147,483,647 during an INDEX operation.

System Action: No conversion is performed. Syntax checking of the remainder of the utility control statements in this set continues, but no additional data is generated. Processing continues normally with the next DSD statement encountered, if any. (Return code - 8.)

Programmer Response: Probable user error. Since the output data set may have been only partially completed, use the IEHPRGM system utility program to scratch the data set, if necessary. Correct the length specifications on the FD statement.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB707I FD NAME ON CREATE CARD IS NOT PREVIOUSLY DEFINED BY AN FD CARD OR IS NOT ASSOCIATED WITH CORRECT DCB

Explanation: The NAME parameter on a CREATE statement does not specify a value previously defined on an FD statement.

System Action: Syntax checking of the remainder of the utility control statements in this set continues, but no additional data is generated. Processing continues with the next DSD statement encountered, if any. (Return code - 8.)

Programmer Response: Probable user error. Since the output data set may have been only partially completed, execute the IEHPROGM system utility program to scratch the data set, if necessary. Make sure that the FD statement precedes the CREATE statement that refers to it.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB708I PICTURE LENGTH TOO LARGE FOR CONVERSION

Explanation: A decimal picture was to be converted to packed decimal or to a binary equivalent; however, the number of digits specified in the picture exceeds 16.

System Action: No conversion is performed. Syntax checking of the remainder of the utility control statements in this set continues, but no additional data is generated. Processing continues normally with the next DSD statement encountered, if any. (Return code - 8.)

Programmer Response: Probable user error. Since the output data set may have been only partially completed, execute the IEHPROGM system utility program to scratch the data set, if necessary. Make sure that the number of digits specified in the picture is less than 16.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB709I USER EXIT ROUTINE RETURNED AN INVALID RETURN CODE

Explanation: The return code returned from the user exit routine was other than 0, 4, 12, or 16.

System Action: Syntax checking of the remainder of the utility control statements in this set continues, but no additional data is generated. Processing continues normally with the next DSD statement encountered, if any. (Return code - 8.)

Programmer Response: Probable user error. Since the output data set may have been only partially completed, execute the IEHPROGM system utility program to scratch

the data set, if necessary. Correct the user exit routine so that a valid return code is returned.

Problem Determination: Table I, items 1, 3, 13, 23. Have program listing of the associated user exit routine available.

IEB710I UNABLE TO GET ENOUGH SPACE TO PROCESS REMAINING CONTROL CARDS

Explanation: A GETMAIN operation was unable to get sufficient space to process the remaining control statements.

System Action: Syntax checking of the remainder of the utility control statements in this set continues, but no additional data is processed. Processing continues normally with the next DSD statement encountered, if any. (Return code - 8.)

Programmer Response: Probable user error. Since the output data set may have been only partially completed, execute the IEHPROGM system utility program to scratch the data set, if necessary. If a REGION parameter was specified, ensure that the specified value is sufficient to complete the necessary processing.

Problem Determination: Table I, items 1, 3, 13, 19.

IEB711I KEYWORD VALUE NOT FOLLOWED BY A BLANK OR COMMA

Explanation: The keyword value pinpointed by preceding message IEB727I is not followed by a blank or comma.

System Action: Syntax checking of the remainder of the utility control statements in this set continues, but no additional data is generated. Processing continues normally with the next DSD statement encountered, if any. (Return code - 8.)

Programmer Response: Probable user error. Since the output data set may have been only partially completed, execute the IEHPROGM system utility program to scratch the data set, if necessary. Make sure that the keyword value is followed by a blank or comma.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB712I CONTROL CARD NAME OR KEYWORD VALUE EXCEEDS 8 CHARACTERS

Explanation: The length of a keyword value or control statement name is greater than 8 characters.

System Action: Syntax checking of the remainder of the utility control statements in this set continues, but no additional data is generated. Processing continues normally with the next DSD statement encountered, if any. (Return code - 8.)

Programmer Response: Probable user error. Since the output data set may have been only partially completed, execute the IEHPROGM system utility program to scratch the data set, if necessary. Correct the preceding statement so that the name or value does not exceed 8 characters.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB713I FLAGGED KEYWORD IS NOT COMPATIBLE WITH A PRECEDING KEYWORD

Explanation: The keyword pinpointed by preceding message IEB727I is not compatible with another keyword already specified on the same statement. (For example, the keywords PICTURE and FORMAT cannot be used together.)

System Action: Syntax checking of the remainder of the utility control statements on this set continues, but no additional data is generated. Processing continues normally with the next DSD statement encountered, if any. (Return code - 8.)

Programmer Response: Probable user error. Since the output data set may have been only partially completed, execute the IEHPROGM system utility program to scratch the data set, if necessary. Correct the preceding statement so that the incompatible keywords are not specified together.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB714I REPEAT CARD ERROR OR REQUIRED NUMBER OF CREATE CARDS NOT PRESENT

Explanation: One of the following error conditions occurred:

- Two or more REPEAT statements refer either to the same CREATE statement or to the same group of CREATE statements.
- A CREATE keyword in a REPEAT statement specifies a number greater than the number of following CREATE statements.

System Action: Syntax checking of the remainder of the utility control statements in this set continues, but no additional data is generated. Processing continues normally with the next DSD statement encountered, if any. (Return code - 8.)

Programmer Response: Probable user error. Since the output data set may have been only partially completed, execute the IEHPROGM system utility program to scratch the data set, if necessary. Correct the erroneous REPEAT or CREATE statement, as necessary.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB715I NAME AND/OR LENGTH OR QUANTITY SPECIFICATION(S) OMITTED FROM FD AND/OR REPEAT CARD

Explanation: One or more of the field name, length, and quantity specifications is missing from an FD and/or REPEAT statement.

System Action: Syntax checking of the remainder of the utility control statements in this set continues, but no additional data is generated. Processing continues normally with the next DSD statement encountered, if any. (Return code - 8.)

Programmer Response: Probable user error. Since the output data set may have been only partially completed, execute the IEHPROGM system utility program to scratch the data set, if necessary. Include the missing parameters on the FD and/or REPEAT statements, as necessary.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB716I PICTURE STRING OR FD FIELD OVERFLOWS OUTPUT RECORD OR INPUT FIELD SELECTED OVERRUNS INPUT WORKAREA

Explanation: During construction of an output record by a CREATE statement, a specified picture string or FD field extended past the end of the defined record.

System Action: Syntax checking of the remainder of the utility control statements in this set continues, but no additional data is generated. Processing continues normally with the next DSD statement encountered, if any. (Return code - 8.)

Programmer Response: Probable user error. Since the output data set may have been only partially completed, execute the IEHPROGM system utility program to scratch the data set, if necessary. Make sure that the DCB parameters are correct. Compare the LRECL parameter value with the length of the defined record, and make sure the value is specified correctly.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB717I INPUT RECORD SIZE EXCEEDS SPECIFIED OUTPUT RECORD SIZE

Explanation: The record length specified in a DD statement for an output data set is not sufficient to contain corresponding input records.

System Action: Syntax checking of the remainder of the utility control statements in this set continues, but no additional data is generated. Processing continues normally with the next DSD statement encountered, if any. (Return code - 8.)

Programmer Response: Probable user error. Since the output data set may have been only partially completed, execute the IEHPROGM system utility program to scratch the data set, if necessary. Increase the record length specified in the DD statement.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB718I DSD CONTROL CARD MUST BE FIRST CARD OF SET

Explanation: The DSD control statement is either out of order or missing.

System Action: Syntax checking of the remainder of the utility control statements in this set continues, but no additional data is generated. Processing continues normally with the next DSD statement encountered, if any. (Return code - 8.)

Programmer Response: Probable user error. Insert the missing DSD statement or correct the sequence of control statements, as necessary.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB720I BLANK DOES NOT FOLLOW OPERATION OR CONTROL CARD NAME

Explanation: The control statement name or operation is not followed by a blank.

System Action: Syntax checking of the remainder of the utility control statements in this set continues, but no additional data is generated. Processing continues normally with the next DSD statement encountered, if any. (Return code - 8.)

Programmer Response: Probable user error. Since the output data set may have been only partially completed, execute the IEHPROGM system utility program to scratch the data set, if necessary. Correct the preceding statement so that the control statement name or operation is followed by a blank.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB721I KEYWORD, KEYWORD VALUE OR DELIMITER IS MISSING OR EXTENDS INTO COLUMN 72

Explanation: A required keyword, keyword value, or delimiter is missing or is specified in column 72.

System Action: Syntax checking of the remainder of the utility control statements in this set continues, but no additional data is generated. Processing continues normally with the next DSD statement encountered, if any. (Return code - 8.)

Programmer Response: Probable user error. Since the output data set may have been only partially completed, execute the IEHPROGM system utility program to scratch the data set, if necessary. Correct the preceding statement so that the missing item is included or so the item does not extend into column 72.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB723I PICTURE PARAMETER IS NOT FOLLOWED BY A BLANK OR COMMA

Explanation: The picture length subparameter or the picture value field is not followed by a blank or comma.

System Action: Syntax checking of the remainder of the utility control statements in this set continues, but no additional data is generated. Processing continues normally with the next DSD statement encountered, if any. (Return code - 8.)

Programmer Response: Probable user error. Since the output data set may have been only partially completed, execute the IEHPROGM system utility program to scratch the data set, if necessary. Correct the preceding statement so that the picture parameter is followed by a blank or comma.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB724I UNABLE TO OPEN DATA SET. LOOK FOR CONFLICTING VALUES OR MISSING DD CARD

Explanation: An input or output data set referred to by a DSD statement could not be opened. Possibly, the DD statement is missing or the BLKSIZE, LRECL, or RECFM subparameters are incorrect.

System Action: No syntax checking or data generation is performed for this set of utility control statements. Processing continues normally with the next DSD statement encountered, if any. (Return code - 8.)

Programmer Response: Probable user error. Insert the missing DD statement or correct the invalid parameters, as necessary.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB725I A DUPLICATE DSD CARD HAS BEEN FOUND. CHECK FOR MISSING END CARD

Explanation: An END statement is either out of order or missing.

System Action: Syntax checking of the remainder of the utility control statements in this set continues, but no additional data is generated. Processing continues normally with the next DSD statement encountered, if any. (Return code - 8.)

Programmer Response: Probable user error. Insert the missing END statement or correct the sequence of control statements, as necessary.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB726I EXEC STATEMENT PARM PARAMETER IS CODED INCORRECTLY

Explanation: The PARM parameter of the EXEC statement contains an invalid character or does not contain a 4-digit decimal number.

System Action: The line count of the message data set is set to a default value of 58. (Return code - 0.)

Programmer Response: Probable user error. If the default value assumed is unacceptable, correct the LINECNT subparameter on the EXEC statement.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB727I ERROR

Explanation: This message pinpoints the location of syntax errors, incompatible keywords, and other control statement coding errors. In most cases, the "E" of ERROR falls directly below the point at which the error was detected in the preceding control statement.

System Action: The system action and return code are as indicated in the error message that follows this message.

Programmer Response: Respond as indicated in the error message that follows this message.

IEB728I INPUT STREAM FLUSHED FROM THIS POINT. LRECL, BLKSIZE, OR RECFM INCORRECT IN INPUT OR OUTPUT DCB

Explanation: An input or output data set could not be opened. Probably, the LRECL, BLKSIZE, or RECFM specification for the data set are incorrect or missing.

System Action: No syntax checking or data generation is performed for this set of utility control statements. Processing continues normally with the next DSD statement encountered, if any. (Return code - 8.)

Programmer Response: Probable user error. Include the missing LRECL, BLKSIZE, or RECFM parameters or correct the invalid parameters, as necessary.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB729I PERMANENT I/O ERROR, jjj, sss, ddd, devtyp, ddn, op, err, xxxx, acc

Explanation: A permanent input/output error occurred while processing on device ddd.

In the message text, the error analysis information was provided by the SYNADAF data management macro instruction issued in the SYNAD routine:

jjj Job name.
sss Step name.
ddd Unit address of the device.
devtyp Device type.
ddn Data definition name.
op Operation attempted.
err Error description.
xxxx Last seek address or block count.
acc Access method.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Correct the error condition as indicated in the message

Problem Determination: Table I, items 1, 3, 13, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEBUPDTE Program Messages

IEB801I {OM} BLOCKSIZE ASSUMED 80.
{NM}

Explanation: Necessary DCB parameters were omitted from the SYSUT1 (indicated by OM or old master) or SYSUT2 (indicated by NM or new master) DD statement. The program assumes that the SYSUT1 or SYSUT2 data set, as applicable, contains 80-byte (fixed-length) unblocked records.

System Action: Processing continues. However, if the data set does not contain 80-byte (fixed-length) unblocked records, additional messages will be generated during execution and the job step will be terminated. (Return code - 0.)

Programmer Response: If the record format specifications assumed are correct, none. Otherwise, correct the applicable

Problem Determination: Table I, items 1, 3, 13, 29. Use the IEHLIST utility program to list the VTOC of the volumes on which the old master and new master data sets reside.

IEB802I I/O ERROR jjj, sss, ddd, devtyp, ddn, op, err, xxxx, acc

Explanation: A permanent input/output error occurred while processing on device ddd.

In the message text, the error analysis information was provided by the SYNADAF data management macro instruction issued in the SYNAD routine:

jjj Job name.
sss Step name.
ddd Unit address of the device.
devtyp Device type.
ddn Data definition name.
op Operation attempted.
err Error description.
xxxx Track address or relative block number.
acc Access method.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Correct the error condition indicated in the message text.

Problem Determination: Table I, items 1, 3, 13, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEB803I PERMANENT INPUT ERROR - FIND MACRO

Explanation: A permanent input error was detected by the FIND macro instruction while attempting to search a partitioned data set directory.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: Check the DD statement describing the SYSUT1 data set for missing or incorrect parameters.

Problem Determination: Table I, items 1, 3, 13, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEB804I PERMANENT INPUT ERROR - BLDL MACRO

Explanation: A permanent input/output error was detected by the BLDL macro when attempting to search a partitioned data set directory.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: Check the DD statement describing the SYSUT1 data set for missing or incorrect parameters.

Problem Determination: Table I, items 1, 3, 13, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEB805I CONTROL STATEMENT ERROR

Explanation: In the utility control statement preceding this message, a name, keyword, or parameter is incorrect.

System Action: If both the old master data set and the updated master data set are partitioned, the program continues processing with the next function statement, if any. Otherwise, the program is terminated. (Return code - 4.)

Programmer Response: Probable user error. Correct the incorrect name, keyword, or parameter on the preceding statement.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB806I STATEMENT SEQUENCE ERROR

Explanation: Either the utility control statements are out of sequence, or an unnecessary statement has been encountered.

System Action: If both the old master data set and the updated master data set are partitioned, the program continues processing with the next function statement, if any. Otherwise, the program is terminated. (Return code - 4.)

Programmer Response: Probable user error. Correct the sequence of control statements.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB807I INVALID OPERATION

Explanation: The statement preceding this message is inconsistent with previously specified parameters. Possibly:

- A DELETE statement is encountered during an UPDATE=INPLACE operation.
- A CHANGE statement is encountered, but PARM=NEW was specified on the EXEC statement.
- Data statements are out of sequence.
- A NUMBER statement with a SEQ1 parameter is encountered following an ADD statement.

System Action: If both the old master data set and the updated master data set are partitioned, the program continues processing with the next function statement, if any. Otherwise, the program is terminated. (Return code - 4.)

Programmer Response: Probable user error. Correct the control statement or sequence of data statements, as necessary.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB

IEB808I TERMINATED THIS MEMBER. IEBUPDTE WILL TRY NEXT MEMBER

Explanation: A control statement error, a statement sequence error, or an invalid operation has terminated an update operation.

System Action: Processing continues with the next function statement, if any. (Return code - 0.)

Programmer Response: Correct the control statement error.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB810I DELETE RANGE INVALID

Explanation: In the DELETE statement preceding this message, the SEQ1 or SEQ2 value specified does not match a sequence number in an existing logical record.

System Action: Processing continues with the next function statement, if any. (Return code - 4.)

Programmer Response: Probable user error. Correct the SEQ1 or SEQ2 value, as necessary, on the preceding statement.

Problem Determination: Table I, items 1, 3, 13, 26bc, 29.

IEB811I NUMBER RANGE INVALID

Explanation: In the NUMBER statement preceding this message, the SEQ1 value does not match a sequence number in an existing logical record.

System Action: Processing continues with the next function statement, if any. (Return code - 4.)

Programmer Response: Probable user error. Correct the SEQ1 value on the preceding statement.

Problem Determination: Table I, items 1, 3, 13, 26bc, 29.

IEB812I DIRECTORY WRITE ERROR

Explanation: A permanent input/output error occurred while writing the directory of the SYSUT2 data set.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Ensure that sufficient space is allocated for the directory on the SYSUT2 DD statement.

Problem Determination: Table I, items 1, 3, 15, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEB813I OUTPUT DIRECTORY FULL

Explanation: Insufficient space was allocated for directory entries in the

SYSUT2 data set. Therefore, the member was not placed in the data set.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Recreate the SYSUT2 data set, allocating sufficient space for the additional directory entries. Then rerun the IEBUPDTE program to include the members that were omitted.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB814I DDNAME ddn CANNOT BE OPENED

Explanation: The data set specified on DD statement ddn cannot be opened. Possibly, the LRECL or BLKSIZE for the SYSIN volume are not equal to or a multiple of 80.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Correct the parameters that define the data set on DD statement ddn.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB815I CANNOT PROCESS MORE THAN ONE PS DATA SET PER PASS

Explanation: A control statement specified the processing of two input sequential data sets in the same job step.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Ensure there is no disagreement between the JCL and the user control statements. Rerun the job.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB816I MEMBER NAME mem FOUND

IEB816I MEMBER NAME mem FOUND IN NM DIRECTORY. TTR IS NOW ALTERED

Explanation: For the first format of the message, member name mem specified on an ADD statement already exists.

For the second format of the message, member name mem exists in the new master (NM) directory.

System Action: For the first format of the message, the program is terminated. (Return code - 12.)

For the second format of the message, an entry (TTR) is altered and processing continues. (Return code - 0.)

Programmer Response: For the second format of the message, no action is necessary. For the first format of the message, change the member name to be added.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB817I MEMBER NAME mem NOT FOUND IN NM DIRECTORY. STOWED WITH TTR

Explanation: Member name mem does not exist in the directory of the new master (NM) data set.

System Action: An entry (TTR) is made for the member in the directory. Processing continues. (Return code - 0.)

Programmer Response: None.

IEB818I HIGHEST CONDITION CODE WAS xx

Explanation: Condition code xx was the highest code generated in the job step.

System Action: The program is terminated normally.

Programmer Response: None.

IEB819I END OF JOB IEBUPDTE

Explanation: The IEBUPDTE program has completed processing.

System Action: The program is terminated normally.

Programmer Response: None.

IEB820I CANNOT PROCESS MORE THAN ONE UPDATE INPLACE PER PASS

Explanation: Two or more UPDATE=INPLACE operations were specified in the same job step.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Specify each UPDATE=INPLACE operation in a separate job step.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB821I INVALID EXIT NAME. JOB ENDED

Explanation: The name of a user exit routine is invalid.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Correct the routine name on the applicable function statement. 1, 3, 15, 29.

Have the exit routine listings and linkage editor output available.

IEB822I EXIT RETURN CODE ENDED JOB

Explanation: The return code returned by the user was 16.

System Action: The program is terminated. (Return code - 16.)

Programmer Response: If a return code of 16 was not expected, check your exit routine and rerun the job.

Problem Determination: Table I, items 1, 3, 15, 29. Have the exit routine listings available.

IEB823I {SYSUT1} HAS NO RECORDS
{SYSIN }

Explanation: The SYSUT1 or SYSIN data set, as indicated in the message text, contains no records.

System Action: For the SYSUT1 data set, processing continues with the next member, if any. (Return code - 4.)

For the SYSIN data set, the program is terminated. (Return code - 12.)

Programmer Response: Insert data statements for the SYSIN data set or ensure that the proper SYSUT1 data set is specified, as necessary.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB825I ALIAS IGNORED - SEQUENTIAL DATA SET

Explanation: An ALIAS statement specified an alias name for an output sequential data set.

System Action: The statement is ignored. (Return code - 4.)

Programmer Response: Probable user error. Delete the ALIAS statement.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB826I MEMBER NAME FOUND IN OM DIRECTORY AS AN ALIAS - CHANGED TO TRUE NAME IN NM DIRECTORY

Explanation: The member name is an alias name in the old master (OM) directory, and is entered as a member name in the new master (NM) directory.

System Action: Processing continues. (Return code - 0.)

Programmer Response: None.

IEB827I INVALID INPUT PARAMETER

Explanation: Either the EXEC statement contains an incorrect PARM parameter or an incorrect parameter was passed to the IEBUPDTE program.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Correct the PARM parameter of the EXEC statement.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB828I PAGE NUMBER PARAMETER INVALID

Explanation: An invalid starting page number for the message data set was passed to the IEBUPDTE program.

System Action: A page number of 1 is assigned to the first page of the printout. (Return code - 4.)

Programmer Response: Probable user error. If the default of 1 is not acceptable, correct the starting page number.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB829I DDNAME PARAMETER IS INVALID

Explanation: An incorrect DDNAME parameter was passed to the IEBUPDTE program.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Correct the DDNAME parameter.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB830I OLD AND NEW MASTER LRECL UNEQUAL

Explanation: The logical record lengths of the old and new master data sets are unequal.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Correct the LRECL subparameter of the DCB parameter on the SYSUT2 DD statement.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB831I OLD AND NEW MASTER DSORGS INCOMPATIBLE

Explanation: The data set organizations implied or specified on the SYSUT1 and/or SYSUT2 DD statements are either:

- Inconsistent with one another.
- Inconsistent with the data set organizations implied or specified on the utility control statements.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. In the first case, ensure that the space allocation specified on the SYSUT1 and/or SYSUT2 DD statements is consistent with the data set organization. Also, ensure that the DSORG subparameter, if included, is correct.

In the second case, ensure that the keywords specified on the utility control statements are consistent with the data set organizations specified or implied on the SYSUT1 and/or SYSUT2 DD statements.

Problem Determination: Table I, items 1, 3, 15, 25b, 29.

IEB832I rtne IS PROCESSING USER
{ INPUT } { HEADER } LABELS
{ OUTPUT } { TRAILER }

Explanation: User routine rtne is currently processing input or output, header or trailer labels, as indicated in the message text.

System Action: Processing continues. (Return code - 0.)

Programmer Response: None.

IEB833I xx ENTRANCES TO rtne

Explanation: The number of entrances to user routine rtne is xx.

System Action: Processing continues. (Return code - 0.)

Programmer Response: None.

IEB834I LAST RETURN CODE FROM rtne WAS xx

Explanation: Return code xx was the last return code issued by user routine rtne.

System Action: Processing continues. (Return code - 0.)

Programmer Response: None.

IEB835I { TOTALING } SUPPORTED ONLY ON
{ USER LABELS }
PS DATA SETS

Explanation: The user requested totaling exits or user label processing, as indicated in the message text, for a data set whose organization is not physical sequential.

System Action: The program is terminated. (Return code - 4.)

Programmer Response: Probable user error. Do not specify totaling exits or user label processing for partitioned data sets.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB836I TRAILER LABEL PROCESSING NOT SUPPORTED FOR UPDATE=INPLACE

Explanation: The user specified user trailer label exits with an UPDATE=INPLACE operation.

System Action: The program is terminated. (Return code - 4.)

Programmer Response: Probable user error. Do not specify trailer label processing with an UPDATE=INPLACE operation.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB837I I/O ERROR WHILE PROCESSING USER LABEL

Explanation: An uncorrectable input/output error occurred during user label processing. The results of the label processing are unpredictable.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Ensure that no DCB parameters for the data set are incorrect or missing.

Problem Determination: Table I, items 1, 3, 15, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEB839I rtne IS TAKING TOTALING EXITS

Explanation: User routine rtne is taking totaling exits prior to writing each record.

System Action: Processing continues. (Return code - 0.)

Programmer Response: None.

IEB840I rtne REQUESTED TERMINATION OF TOTALING EXITS

Explanation: A return code other than 4 was passed to the IEBUPDTE program by user totaling routine rtne.

System Action: If the return code passed to the IEBUPDTE program was 0, totaling exits are discontinued, but processing continues. (Return code - 0.)

If the return code was 8, the program is terminated. (Return code - 12.)

If the return code was 16, the program is terminated. (Return code - 16.)

Programmer Response: If termination of the totaling exit routine was not the job.

Problem Determination: Table I, items 1, 3, 15, 29. Have the exit routine listings available.

IEB841I INVALID RETURN CODE FROM rtne, TOTALING EXITS DISCONTINUED

Explanation: The return code passed to the IEBUPDTE program by user totaling routine rtne during a totaling exit was not valid - that is, the return code was not 0, 4, 8, or 16.

System Action: Totaling exits are discontinued, but processing continues. (Return code - 0.)

Programmer Response: Probable user error. Check the user routine to make sure that a valid return code was passed to the utility program; rerun the job.

Problem Determination: Table I, items 1, 3, 15, 29. Have the exit routine listings available.

IEB842I TOTALING EXITS NOT SUPPORTED FOR UPDATE=INPLACE

Explanation: The user specified totaling exits with an UPDATE=INPLACE operation.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Do not specify totaling exits with an UPDATE=INPLACE operation.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB843I INVALID CORE SIZE

Explanation: The main storage specified in the TOTAL keyword either is a non-numeric character, is less than 2 bytes, or is greater than 32K bytes.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Correct the TOTAL keyword.

Problem Determination: Table I, items 1, 3, 15, 29.

IEB844I NO USER {HEADER } LABELS EXIST ON INPUT DATA SET

Explanation: The user specified SUL on the DD statement for the input data set, but there are no header or trailer labels, as indicated in the message text, on the data set.

System Action: Processing continues. (Return code - 0.)

Programmer Response: None.

IEB845I NO USER {HEADER } LABELS CREATED ON OUTPUT DATA SET

Explanation: The user specified SUL on the SYSUT2 DD statement, but no header or trailer labels, as indicated in the message text, were copied from the SYSUT1 data set and no labels were generated via a LABEL statement.

System Action: Processing continues. (Return code - 0.)

Programmer Response: If user labels are desired on the output data set, either make sure that the SYSUT1 data set contains user labels, or supply user labels via the LABEL statement. Rerun the job.

Problem Determination: Table I, items 1, 3, 15, 29. Have the associated input data set available.

IEB

IEB846I ALIAS IGNORED FOR UPDATE=INPLACE

Explanation: ALIAS statements for partitioned data set members cannot be processed using the UPDATE=INPLACE operation.

System Action: All ALIAS statements are ignored. Processing continues. (Return code - 0.)

Programmer Response: Probable user error. Delete the ALIAS statements.

Problem Determination: Table I, items 1, 3, 15, 29.

Programmer Response: Probable user error. Make sure the operation field is correct and execute the job step again.

Problem Determination: Table I, items 3, 15, 29.

IEB904I INVALID KEYWORD

Explanation: In the statement preceding this message, a keyword is incorrect. Possibly, the keyword was misspelled.

System Action: Processing continues with the next keyword, if any. Any additional control statements are scanned for syntax errors, after which the program is terminated. (Return code - 12.)

IEBTCRIN Program Messages

IEB901A M ddd,ser,jjj,sss

Explanation: M indicates that an MTDI or MTST cartridge file is to be mounted on device ddd. The volume was required by job jjj or, if applicable, step sss of job jjj.

In the message text, ser is the volume serial number provided in the SYSUT1 DD statement. If ser is TCRINP, no serial number was provided and TCRINP will be used.

Operator Response: Mount the requested cartridge(s) on device ddd and press the START button to ready the device. If the volume cannot be mounted, issue a CANCEL command to terminate job jjj.

IEB902I INVALID NAME FIELD

Explanation: In the control statement preceding this message, the name field contains either more than eight characters or a nonalphabetic character in column 1.

System Action: Diagnosis of the preceding statement is terminated. Any additional control statements are scanned for syntax errors, after which the program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Make sure the name field is correct and execute the job step again.

Problem Determination: Table I, items 3, 15, 29.

IEB903I INVALID OPERATION

Explanation: In the control statement preceding this message, an operator other than TCRGEN or EXITS was specified.

System Action: Diagnosis of the preceding statement is terminated. Any additional control statements are scanned for syntax errors, after which the program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Make sure the control statement is correct and execute the job step again.

Problem Determination: Table I, items 3, 15, 29.

IEB905I INVALID PARAMETER VALUE

Explanation: In the statement preceding this message, a parameter value is incorrect. Possibly:

- The MAXLN parameter value contains more than 5 digits.
- The OUTHDR2 user routine name is more than 8 characters.
- The VOKCHK parameter is misspelled as VOKCHECK.
- The REPLACE parameter value is not of the form X'xx', where each x is replaced by hexadecimal characters A-F or 0-9.

System Action: Processing continues with the next keyword, if any. Any additional control statements are scanned for syntax errors, after which the program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Make sure the control statement is correct and execute the job step again.

Problem Determination: Table I, items 3, 15, 29.

IEB906I DUPLICATE OPERATION FIELD

Explanation: The operation field on the control statement preceding this message is the same as the operation field on a control statement previously processed.

System Action: Diagnosis of the preceding statement is terminated. Any additional control statements are scanned for syntax errors, after which the program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Make sure no control statements have duplicate operation fields and execute the job step again.

Problem Determination: Table I, items 3, 15, 29.

IEB907I INCONSISTENT REPLACE PARAMETER

Explanation: In the TCRGEN statement preceding this message, the REPLACE parameter is inconsistent with specified or implied TYPE, TRANS, and/or EDIT options.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Make sure the control statements is correct and execute the job step again.

Problem Determination: Table I, items 3, 15, 29.

IEB908I CONFLICTING OPTIONS SPECIFIED

Explanation: In the control statement preceding this message, either two or more keyword parameters were specified that should not appear together, or the same keyword parameter was specified more than once.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Make sure the control statement is correct and execute the job step again.

Problem Determination: Table I, items 3, 15, 29.

IEB909I EXPECTED CONTINUATION NOT RECEIVED

Explanation: The statement preceding this message is not a valid continuation statement:

- The previous statement contains a comma at the end of the operand, indicating continuation of the operand, but data in the preceding statement does not begin in columns 4 through 16.
- The previous statement contains a nonblank character in column 72, indicating continuation of a comment, but data in the preceding statement does not begin after column 3.

System Action: Diagnosis of the preceding statement is terminated. Any additional control statements are scanned for syntax errors, after which the program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Make sure that the continuation statement begins in column 4 through 16 or after column 3, as appropriate. Make sure that the control statement is correct and execute the job step again.

Problem Determination: Table I, items 3, 15, 29.

IEB910I NO SYSUT1 DD CARD - JOB TERMINATED

Explanation: No SYSUT1 DD statement was included in the job step.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Probable user error. Insert the missing SYSUT1 DD statement.

Problem Determination: Table I, items 3, 15, 29.

IEB911I NO SYSIN DD CARD - ALL DEFAULT OPTIONS ASSUMED

Explanation: No SYSIN DD statement was included in the job step.

System Action: The program is executed using all default options for the SYSIN data set. (Return code - 4.)

Programmer Response: Probable user error. If the use of all default options is desired, none. Otherwise, insert a SYSIN DD statement and any other necessary statements.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB912I NO SYSPRINT DD CARD - DUMMY ASSUMED

Explanation: No SYSPRINT DD statement was included in the job step.

System Action: The program is executed as if DUMMY was specified for the SYSPRINT data set; that is, no messages will appear in the SYSPRINT data set. (Return code - 4.)

Programmer Response: Probable user error. If no output on the SYSPRINT data set is desired, none. Otherwise, insert a SYSPRINT DD statement.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB913I NO {SYSUT2} DD CARD - DUMMY ASSUMED
{SYSUT3}

Explanation: No SYSUT2 or SYSUT3 DD statement, as indicated in the message text, was included in the job step.

System Action: The program is executed as if DUMMY was specified for the SYSUT2 (or SYSUT3) data set; that is, no data will appear in the SYSUT2 (or SYSUT3) data set. The records that are passed to the user exit will be constructed using the default value (VB) of the DCB RECFM parameter; in some cases, however, this may produce undesirable results. (Return code - 4.)

Programmer Response: Probable user error. If no output on the SYSUT2 (or SYSUT3) data set is desired, none. Otherwise, insert a SYSUT2 (or SYSUT3) DD statement.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB914I DCB SUBPARAMETER(S) MISSING IN ddn DD CARD
- DEFAULTS ASSUMED

Explanation: In DD statement ddn, the IRECL, BLKSIZE, and/or RECFM subparameters were not specified.

System Action: The program is executed using default options. (Return code - 4.)

Programmer Response: Probable user error. If the default parameters are acceptable, none. Otherwise, include the missing subparameters on DD statement ddn.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB915I DDNAME ddn CANNOT BE OPENED

Explanation: Because of an undetermined error, the data set specified on DD statement ddn cannot be opened.

System Action: The program is terminated. (Return code - 16.)

Programmer Response: None

Problem Determination: Table I, items 1, 2, 3, 15, 29. If the data set that cannot be opened is on a direct access volume, execute the IEHLIST utility program (with the LISTVTOC function) for the volume, and save the output.

IEB916I INCONSISTENT ddn DCB PARAMETERS

Explanation: Two or more DCB parameters for the data set specified on DD statement ddn are inconsistent.

System Action: The program is terminated. (Return code - 16.)

Programmer Response: Probable user error. Correct the DCB parameters on DD statement ddn and execute the job step again. 1, 2, 29.

If the DCB refers to a data set on a direct access volume, execute the IEHLIST utility program (with the LISTVTOC function) for the volume, and save the output.

IEB917I LOAD MODULE SPECIFIED FOR prn NOT FOUND

Explanation: Either a user exit routine specified in the prn keyword parameter of the EXITS statement or a user translate table specified in the prn keyword parameter of the TCRGEN statement could not be located in the job library or link library.

System Action: The program is terminated. (Return code - 16.)

Programmer Response: Probable user error. Make sure that the control statements contain no keypunch errors. If no keypunch errors are found, verify that the module is present in a link library or job library. If the module is present in the

job library, ensure that a JOBLIB statement is included, and that it is correct. Execute the job step again.

Problem Determination: Table I, items 1, 2, 3, 15, 29. Execute the IEHLIST utility program (with the LISTVTOC function) for the volume containing the load module, and save the output.

IEB918I JOB TERMINATED AFTER prn EXIT

Explanation: A user-supplied exit routine specified in the prn parameter requested termination upon return to the utility program.

System Action: The program is terminated. (Return code - 16.)

Programmer Response: None.

IEB919I INSUFFICIENT STORAGE AVAILABLE

Explanation: In a GETMAIN macro instruction, more main storage was requested than was available.

System Action: The program is terminated. (Return code - 16.)

Programmer Response: If additional storage is available, increase the value specified in the REGION parameter of the JOB or EXEC statement.

If additional storage is not available, decrease the value specified in the BUFL subparameter of the DCB parameter of the SYSUT1 DD statement.

Problem Determination: Table I, items 1, 3, 13, 29.

IEB920I ddd,devtyp,ddn,op,err,xxxx,acc

Explanation: A permanent input/output error occurred while processing on unit record device ddd.

In the message text, the error analysis information was provided by the SYNADAF data management macro instruction issued in the SYNAD routine:

ddd Unit address of the device.
devtyp Device type.
ddn Data definition name.
op Operation attempted.
err Error description.
xxxx Asterisks.
acc Access method.

System Action: The program is terminated. (Return code - 16.)

Programmer Response: Probable hardware error. Correct the error condition indicated in the message text, if possible. Execute the job step again.

Problem Determination: Table I, items 1, 2, 5a, 29.

IEB921I ddd,devtyp,ddn,op,err,xxxx,acc

Explanation: A permanent input/output error occurred while processing on tape device ddd.

In the message text, the error analysis information was provided by the SYNADAF data management macro instruction issued in the SYNAD routine:

ddd Unit address of the device.
devtyp Device type.
ddn Data definition name.
op Operation attempted.
err Error description.
xxxx Relative block number.
acc Access method.

System Action: The program is terminated. (Return code - 16.)

Programmer Response: Correct the error condition indicated in the message text. If the error recurs, call IBM for programming support.

IEB922I ddd,devtyp,ddn,op,err,xxxx,acc

Explanation: A permanent input/output error occurred while processing on direct access device ddd.

In the message text, the error analysis information was provided by the SYNADAF data management macro instruction issued in the SYNAD routine:

ddd Unit address of the device.
devtyp Device type.
ddn Data definition name.
op Operation attempted.
err Error description.
xxxx Actual track address and block number.
acc Access method.

System Action: The program is terminated. (Return code - 16.)

Programmer Response: Correct the error condition indicated in the message text. If the error recurs, call IBM for programming support.

IEB

Data Management Messages (IEC)

Component Name	IEC
Program Producing Message	Data management.
Audience and Where Produced	For operator: console.
Message Format	<pre> xx IECnnns text [Pnn] xx Message reply identification (absent, if operator reply not required). nnn Message serial number, which is coded to indicate the data management function: 0nn End of volume 1nn Open 2nn Close 3nn Catalog management 4nn Checkpoint/restart 6nn Direct access device space management (DADSM) 7nn Tape label creation 8nn BTAM/QTAM s Type code: A Action; operator must perform a specific action. D Decision; operator must choose an alternative. E Eventual action; operator must perform action when he has time. I Information; no operator action is required. text Message text. Pnn Partition which issued the message (systems with MFT only). </pre>
Comments	None.
Problem Determination	Refer to the fold-out in part IV of this publication for problem determination instructions.



End-of-Volume Messages

IEC001 { A } M ddd,ser[,labtyp[,den],jjj,sss[,dsn]
 { E }

Explanation: M indicates that a volume is to mounted on device ddd:

- If ser is a 6-digit serial number, the volume with that serial number is to be mounted on the device.
- If ser is SCRTCH, a scratch volume is to be mounted.
- If ser begins with a slash or L, the volume to be mounted is unlabeled; the number after the slash or L is an internal serial number assigned by the system to an unlabeled volume. If ser begins with L, the number after the L is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number of the data set.
- If the device indicates a 1419/1275, ser is a stack of documents to be readied on the device.

Note: In the case of message IEC001E, no reference to a 1419/1275 will occur.

In the message text, labtyp and den appear only for tape volumes. The volume has the type of label specified by labtyp: SL for standard label, NSL for nonstandard label, or NL for no label; the density is as specified by den.

The volume is being used by step sss of job jjj. If a DISPLAY DSNAME command is active, data set dsn contained on the volume is also specified in the message text.

Operator Response: If ser is SCRTCH, make sure that the file protection ring has been inserted in the volume.

Mount the volume on the device. If a scratch volume is to be mounted and a scratch volume is already on the device, mount another scratch volume. Then, ready the device.

IEC002E K ddd,ser[,labtyp][,den],jjj,sss
[,SPACE=prm][,dsn]

Explanation: K indicates that the volume on device ddd is to be demounted and returned to the library:

- If ser is a 6-digit number, it is the serial number of the volume, which contains labels.
- If ser begins with a slash or L, the volume to be demounted is unlabeled; the number after the slash or L is an internal serial number assigned by the system to an unlabeled volume. If ser begins with L, the number after the L is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number of the data set.

In the message text, labtyp and den appear only for tape volumes. The volume has the type of label specified by labtyp: SL for standard label, NSL for nonstandard label, or NL for no label; the density is as specified by den.

The volume is being used by step sss of job jjj.

For direct access volumes, if a DISPLAY SPACE command is active, the field SPACE=cccc,tttt,aaaa/yyyy,zzzz is specified:

cccc Total number of free cylinders on the volume.
tttt Total number of tracks in addition to the free cylinders.
aaaa Areas or extents dividing the cylinders and tracks.
YYYY Maximum number of contiguous free cylinders of the largest extent within the total remaining space.
zzzz Number of tracks in addition to the free cylinders of the largest extent within the total remaining space.

If an error occurred during the listing of the parameters in the SPACE field, one of the following messages is specified:

- LSPACE-PERMANENT I/O ERROR
- LSPACE-NON-STANDARD OS VOLUME
- LSPACE-NOT A DIRECT ACCESS VOL
- LSPACE-INVALID PARAMETER

If a DISPLAY DSNAME command is active, data set dsn contained on the volume is also specified in the message text.

Operator Response: Demount the volume. Mark the serial number, label type, and density on the volume, if they are not so marked. Then return it to the library. If LSPACE-PERMANENT I/O ERROR was in the message, a permanent I/O error was encountered while trying to read the VTOC. Execute the IEHLIST utility program to list the VTOC of this volume. If errors occur, take appropriate action as indicated in the message.

Problem Determination: If LSPACE-INVALID PARAMETER was in the message, see Table I, items 2, 29.

IEC003E R ddd,ser[,labtyp][,den],jjj,sss
[,SPACE=prm][,dsn]

Explanation: R indicates that the volume on device ddd is to be demounted and retained near the computer for use in the near future:

- If ser is a 6-digit number, it is the serial number of the volume, which contains labels.
- If ser begins with a slash or L, the volume to be demounted is unlabeled; the number after the slash or L is an internal serial number assigned by the system to an unlabeled volume. If ser begins with L, the number after the L is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number of the data set.

In the message text, labtyp and den appear only for tape volumes. The volume has the type of label specified by labtyp: SL for standard label, NSL for nonstandard label, or NL for no label; the density is as specified by den. The volume is being used by step sss of job jjj.

For direct access volumes, if a DISPLAY SPACE command is active, the field SPACE=cccc,tttt,aaaa/yyyy,zzzz is specified:

cccc Total number of free cylinders on the volume.
tttt Total number of tracks in addition to the free cylinders.
aaaa Areas or extents dividing the cylinders and tracks.
YYYY Maximum number of contiguous free cylinders of the largest extent within the total remaining space.
zzzz Number of tracks in addition to the free cylinders of the largest extent within the total remaining space.

If an error occurred during the listing of the parameters in the SPACE field, one of the following messages is specified:

- LSPACE-PERMANENT I/O ERROR
- LSPACE-NON-STANDARD OS VOLUME
- LSPACE-NOT A DIRECT ACCESS VOL
- LSPACE-INVALID PARAMETER

If a DISPLAY DSNAME command is active, data set dsn contained on the volume is also specified in the message text.

Operator Response: Demount the volume. Mark the serial number, label type, and density on the volume, if they are not so marked. (The internally assigned number should appear externally on the volume in case a subsequent step needs the volume; for the subsequent mounting, the system will specify the volume by the internally

assigned number.) Then retain the volume near the computer. If LSPACE-PERMANENT I/O ERROR was in the message, a permanent I/O error was encountered while trying to read the VTOC. Execute the IEHLIST utility program to list the VTOC of this volume. If errors occur, take appropriate action as indicated in the message.

Problem Determination Aids If LSPACE-INVALID PARAMETER was in the message, see Table I, items 2, 29.

IEC004E D ddd,ser[,labtyp][,den],jjj,sss
[,SPACE=prml][,dsn]

Explanation: D indicates that the volume on device ddd is to be demounted and used subsequently as a scratch volume:

- If ser is a 6-digit number, it is the serial number of the volume, which contains labels.
- If ser begins with a slash or L, the volume to be demounted is unlabeled; the number after the slash or L is an internal serial number assigned by the system to an unlabeled volume. If ser begins with L, the number after the L is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number for the data set.

In the message text, labtyp and den appear only for tape volumes. The volume has the type of label specified by labtyp: SL for standard label, NSL for nonstandard label, or NL for no label; the density is as specified by den.

The volume is being used by step sss of job jjj.

For direct access volumes, if a DISPLAY SPACE command is active, the field SPACE=cccc,tttt,aaaa/yyyy,zzzz is specified:

cccc Total number of free cylinders on the volume.
tttt Total number of tracks in addition to the free cylinders.
aaaa Areas or extents dividing the cylinders and tracks.
yyyy Maximum number of contiguous free cylinders of the largest extent within the total remaining space.
zzzz Number of tracks in addition to the free cylinders of the largest extent within the total remaining space.

If an error occurred during the listing of the parameters in the SPACE field, one of the following messages is specified:

- LSPACE-PERMANENT I/O ERROR
- LSPACE-NON-STANDARD OS VOLUME
- LSPACE-NOT A DIRECT ACCESS VOL
- LSPACE-INVALID PARAMETER

If a DISPLAY DSNAME command is active, data set dsn contained on the volume is also specified in the message text.

Operator Response: Demount the volume. Use it later when a scratch volume is requested. If LSPACE-PERMANENT I/O ERROR was in the message, a permanent I/O error was encountered while trying to read the VTOC. Execute the IEHLIST utility program to list the VTOC of this volume. If errors occur, take appropriate action as indicated in the message.

Problem Determination: If LSPACE-INVALID PARAMETER was in the message, see Table I, items 2, 29.

IEC007D E ddd,ser, jjj,sss,dsn

Explanation: E indicates that a program intended to write on the volume on device ddd; however, the expiration date for data set dsn on the volume has not occurred.

In the message text, ser is the 6-digit serial number of the volume, which contain labels. The volume is being used by step sss of job jjj. For a tape volume, only the last 17 characters of the data set name (dsn) appear. This is as much as is contained in the tape's data set labels.

Operator Response: If the expiration date is to be ignored and the volume written on, enter REPLY xx,'U'.

If the expiration date is to be honored and the volume not written on, enter REPLY xx,'M'. The system will then request that a new volume be mounted.

For a direct access volume, however, do not enter REPLY xx,'M'. Terminate the job step and notify the programmer that the expiration date on the volume has not been reached.

Note: In systems with MVT or MFT, the operator should normally terminate any job attempting to update a system data set, if this message is issued. However, if a system data set is to be updated, the job stream should be set up so that no other concurrently running job uses the data set being updated; if the job stream is set up in this manner, the operator should be instructed to respond with REPLY xx,'U' to this message.

IEC009A F ddd,ser, jjj,sss,dsn

Explanation: F indicates that the volume on device ddd is file protected; that is, its file protection ring is not inserted, so it can only be read. However, the volume is to be written on.

In the message text, ser is the 6-digit serial number of the volume and dsn is the data set name. The volume is being used by step sss of job jjj.

System Action: The system rewinds and unloads the volume.

Operator Response: If so specified by the programmer, insert a file protection ring in the volume, mount the volume, and ready the device. Otherwise, cancel the job.

IEC010D F ddd,ser,jjj,sss,dsn

Explanation: F indicates that the volume on device ddd is file protected; that is, its file protection ring is not inserted, so it can only be read.

In the message text, ser is the 6-digit serial number of the volume and dsn is the data set name. The volume is being used by step sss of job jjj.

Operator Response: If the volume should be file protected, enter REPLY xx,'U'.

If the volume must have a file protection ring, enter REPLY xx,'F'; the system will rewind and unload the volume. Then insert a file protection ring, mount the volume, and ready the device.

IEC012I I/O ERR ddd,ser

Explanation: If I/O ERR appears in the message text, an uncorrectable input/output error occurred while processing tape labels; if SEC VOL appears, a security protected tape was mounted and the programmer had specified NL or NSL in the LABEL subparameter of the DD statement describing the data set.

In the message text, ser is the serial number of the volume and ddd is the unit address.

Operator Response: Respond as indicated when the system requests that a new volume be mounted.

Problem Determination: Table I, items 1, 2, 3, 13, 28, 29.

IEC014E D ddd

Explanation: D indicates that the volume on device ddd is to be demounted. The control program has determined that this volume, mounted in response to an earlier mount message, either:

- Contains labels that cannot be read due to a permanent input/output error.
- Contains no labels or nonstandard labels when standard labels were specified.
- Contains standard labels when no labels or nonstandard labels were specified.
- Contains labels which are written in a density other than the density specified.

Operator Response: Demount the volume. The system will then request that a new volume be mounted. Mount a volume with the correct density and label type.

Problem Determination: Table I, items 1, 2, 3, 13, 28, 29.

IEC017I A ddd, ddn {1
2}

Explanation: A indicates that the volume (specified in DD statement ddn) on device ddd is recorded in ASCII and bears an American National Standard volume label or file header label. The accessibility field of the volume label (indicated by 1 in the message text) contains a nonblank character, or the file header label (indicated by 2 in the message text) contains a nonblank character other than one; this means that the volume or the file is security-protected and may not be processed by the operating system.

System Action: The system closes the data control block associated with the file on the volume, and stops further processing of the file. If the tape volume has already been mounted, it is rewind.

Programmer Response: Make sure that the correct volume and file were specified in the job control statements.

Problem Determination: Table I, items 1, 2, 13, 29.

IEC018D A ddd,ser,jjj,sss,dsn

Explanation: A indicates that the volume on device ddd is recorded in ASCII and bears an American National Standard volume label, but the programmer did not specify American National Standard labels in the job control statements. In the message text, ser is the 6-digit serial number of the volume and dsn is the 17 character data set name from the existing HDE1 label. The volume is being used by step sss of job jjj.

System Action: The system waits for the operator's reply.

Operator Response: Enter REPLY xx,'U' to permit the system to create a new volume label or write a tape mark over the American National Standard volume label. Enter REPLY xx,'M' to permit the system to rewind the tape volume and issue a mount message for a scratch tape.

Programmer Response: Make sure that the job control statements specify American National Standard labels if they are to be used.

Problem Determination: Table I, items 1, 2, 13, 29.

IEC020I 001-x, jjj,sss,ddn,ddd,ser,dsn

NO ERROR HANDLING, (SYNAD), EXIT SPECIFIED
ERROR OCCURRED WHILE CLOSING DATA SET
NON-ACCEPTABLE ERROR
DCB EROPT=ABE OR AN INVALID CODE, AND/OR
NO SYNAD EXIT SPECIFIED
GET OR READ ISSUED AFTER END-OF-FILE

Explanation: A 001 system completion code was issued for step sss of job jjj for one of the following reasons:

- If x is 1, for BSAM, BISAM, BDAM or QSAM, no error handling (SYNAD) exit was specified.
- If x is 2, an error was encountered while attempting to close the data set.
- If x is 3, for QSAM, an error was encountered that could not be accepted.
- If x is 4, for QSAM, ABE or an invalid value for EROPT parameter in the DCB and/or no error handling (SYNAD) exit was specified.
- If x is 5, for QSAM, a GET was issued after end-of-file; for BSAM, a READ was issued after end-of-file.

In the message text, ddn is the data definition name of the DD statement describing the data set, ddd is the unit name, ser is the serial number of the volume, and dsn is the data set name.

NOTE: System completion code 001 is also issued when the logical record length and block specified in the data control block or DD statement differ from the logical record length and blocksize that occur in the data set.

Programmer Response: Correct any errors that caused the abnormal termination. Then execute the job step again.

Problem Determination: Table I, items 1, 3, 5a, 13, 29.

IEC021I NO SPACE IN PASSWORD DATA SET

Explanation: The password data set on the system residence device is full. No additional entries may be added until entries are deleted or a new password data set is created.

System Action: The job step is terminated.

Operator Response: Inform the programmer responsible for the installation that you have received this message.

Programmer Response: Delete outdated entries in the present password data set or create a new password data set.

Problem Determination: Table I, items 2, 25a, 29.

ICE022I 137-rc, jjj, sss, ddn[-#], ddd, ser, dsn

Explanation: The error occurred during end-of-volume on a magnetic tape. In the message text, 137-rc associates this message with system completion code 137 and return code rc. Other fields in the message text are:

jjj job name
 sss step name
 ddn[-#] DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)

ddd device address
 ser volume serial number
 dsn data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An I/O error occurred while writing an end-of-volume label or a tape mark.
08	An I/O error occurred while positioning the tape in preparation for label processing.
0C	An I/O error occurred reading a trailer label for a data set opened with the option INPUT or INOUT. If the data set was opened with the option RDBACK, the I/O error occurred reading header label.
10	An I/O error occurred while positioning a magnetic tape at the end of the data set.
14	An I/O error occurred reading header labels for a data set opened for INPUT or INOUT. If the data set was opened for RDBACK, the error occurred while reading the trailer label.
18	An I/O error occurred while positioning a magnetic tape data set at the first data record.
1C	An invalid trailer label was read during end-of-volume processing. Execute the IEBTPCH utility program to determine the contents of the volume. Take any corrective action necessary to recreate the volume so that the information may be accessed.
20	An invalid header label was read during end-of-volume processing. Execute the IEBTPCH utility program to determine the contents of the volume. Take any corrective action necessary to recreate the volume so that the information may be accessed.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine. If the error is to be ignored, the system will attempt to close the DCB before returning to the user.

Programmer Response: Probable user error unless an I/O error has occurred. Correct the errors that caused the abnormal termination as indicated by the return code in the message text. Then resubmit the job.



If I/O error has occurred, a defective volume or device may be the cause. Rerun the job, specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC023I 237-rc, jjj, sss, ddn[-#], ddd, ser, dsn

Explanation: The error occurred during end-of-volume. In the message text, 237-rc associates this message with system completion code 237 and with return code rc. Other fields in the message text are:

jjj job name
 sss step name
 ddn[-#] DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
 ddd device address
 ser volume serial number
 dsn data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	The block count in the DCB does not match that in the trailer label. A block of data has been missed or skipped (probably due to a hardware error.)
08	The DSNAME in a header label does not match that in the JFCB on the second or subsequent volume of a magnetic tape data set. Verify that the correct volume and DSNAME were specified.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine. If the error is to be ignored, the system will attempt to close the DCB before returning to the user.

Programmer Response: Probable user error unless hardware error has occurred. Correct the errors causing the abnormal termination as indicated by the return code in the message text. Then rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC024I 337-rc, jjj, sss, ddn[-#], ddd, ser, dsn

Explanation: The error occurred when the end of a data set was reached. In the message text, 337-rc associates this message with system completion code 337 and with return code rc. Other fields in the message text are:

jjj job name
 sss step name
 ddn[-#] DDname (followed by a concatenation number if it is part of a concatenated data set and not the first DD statement in the concatenation.)
 ddd device address
 ser volume serial number
 dsn data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	The end of a data set was reached, but no end-of-data-set routine (EODAD) was specified in the DCB.

System Action: The task is terminated.

Programmer Response: Probable user error. Correct the errors causing the abnormal termination as indicated by the return code in the message text. Then rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC025I 437-rc, jjj, sss, ddn[-#], ddd, ser, dsn

Explanation: The error occurred at an end-of-volume. In the message text, 437-rc associates this message with system completion code 437 and with return code rc. Other fields in the message text are:

jjj job name
 sss step name
 ddn[-#] DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
 ddd device address
 ser volume serial number
 dsn data set name

The values of rc and their meanings are as follows:

Return Code 04 Meaning The protect key in the TCB (TCBPKF) was not the same as that in the DEB (DEBDEBID). Correct any errors that may have caused the task control block or data extent block to be modified.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine. If the error is to be ignored, the system will attempt to close the DCB before returning to the user.

Programmer Response: Probable user error. Correct the errors causing the abnormal termination as indicated by the return code in the message text. Then rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC026I 637-rc,jjj,sss,ddn[-#],dev,vol,dsn

Explanation: The error occurred during end-of-volume for a data set on magnetic tape or an end-of-volume during concatenation. In the message text, 637-rc associates this message with system completion code 637 and with return code rc. Other fields in the message text are:

jjj job name
 sss step name
 ddn[-#] DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
 ddd device address
 ser volume serial number
 dsn data set name

The values of rc and their meanings are as follows:

Return Code 04 Meaning An I/O error occurred while reading a tape label, writing a tape mark, or positioning a magnetic tape volume.
 08 Following user trailer label processing, an I/O occurred positioning a magnetic tape.
 0C Concatenation of data sets with unlike attributes was detected, but not specified in the DCB (i.e., DCBOFLGS bit 4 is 0).
 10 An I/O error occurred while positioning a magnetic tape volume at a label, if the volume has standard labels, or at the

data, if the volume does not have labels.
 14 An I/O error in tape positioning occurred for a data set with the LEAVE option specified in the OPEN macro instruction or with the LEAVE option specified in the FEOV macro instruction.
 18 An I/O error in tape positioning occurred for a data set opened with the REREAD option.
 1C An I/O error occurred in tape positioning when FEOV is issued for a data set with DISP=PASS and no OPEN option 2 specified.
 20 An I/O error occurred during a rewind and unload of a private magnetic tape volume. No option 2 is specified in the OPEN macro instruction and the DISP is not PASS.
 24 An I/O error occurred rewinding a scratch magnetic tape volume. Either FEOV with a REWIND option was issued, or no OPEN option 2 was specified when the DISP was not PASS.
 28 An I/O error occurred during a rewind and unload of a magnetic tape volume. When the error occurred, the system was attempting to unload a volume from the device to allow the mounting of a required volume.
 2C An I/O error occurred while rewinding a magnetic tape volume prior to verifying the volume label.
 30 An I/O error occurred performing a rewind and unload when the wrong volume was mounted in response to message IEC001A.
 34 An I/O error occurred during end-of-volume processing while reading the volume label of a magnetic tape volume.
 38 An I/O error occurred while positioning a tape without a label or with nonstandard labels.
 3C An I/O error occurred while positioning a concatenated magnetic tape data set. If it has standard labels, the error occurred positioning at the labels. If it has no labels, the error occurred positioning at the data.
 40 An I/O error occurred while positioning a magnetic tape data set that was opened with the option INPUT or INOUT. If it is a tape with standard labels, the error occurred positioning at the



labels. If it is a tape with no labels, the error occurred positioning at the data.

- 44 An I/O error occurred while checking sense bytes to determine if a file protect ring is on a magnetic tape containing a data set opened for INOUT.
- 48 An I/O error occurred rewinding and unloading a magnetic tape volume in preparation for a look ahead mount.
- 4C An I/O error occurred in tape positioning following user header label processing.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine. If the error is to be ignored, the system will attempt to close the DCB before returning to the user.

Programmer Response: Probable user unless I/O error has occurred. Correct the errors causing abnormal termination as indicated by the return code in the message text. Then rerun the job.

If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC027I 737-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during end-of-volume or during allocation of a secondary quantity or direct access storage as requested in the SPACE parameter of the DD statement for the data set. In the message text, 737-rc associates this message with system completion code 737 and with return code rc. Other fields in the message text are:

jjj job name
sss step name
ddn[-#] DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
ddd device address

ser volume serial number
dsn data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An I/O error occurred reading or writing a DSCB during end-of-volume processing.
08	An I/O error occurred reading a direct access volume label during end-of-volume processing.
0C	An I/O error was detected by BLDL while searching for the TTR of a concatenated member.
10	An I/O error occurred writing a file mark for a data set on a direct access device.
14	An I/O error occurred while reading a DSCB preparing for user trailer label processing.
18	An I/O error occurred reading the volume label on a 2321 Data Cell.
1C	An I/O error occurred while reading a format 3 DSCB.
20	An I/O error occurred during a look-ahead mount, and while reading a DSCB at end-of-volume.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine. If the error is to be ignored, the system will attempt to close the DCB before returning to the user.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC028I 837-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during end-of-volume for a sequential data set. In the message text, 837-rc associates this message with system completion code 837 and with return code rc. Other fields in the message text are:

jjj job name
 sss step name
 ddn[-#]
 DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
 ddd device address
 ser volume serial number
 dsn data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An I/O error occurred while reading or writing a JFCB or JFCB extension block.
08	No TTR was found for the JFCB extension. Specify more volume serial numbers for a larger volume count in the VOL parameter of the DD statement.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine. If the error is to be ignored, the system will attempt to close the DCB before returning to the user.

Programmer Response: Execute job step again.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC030I B37-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during end-of-volume. In the message text, B37-rc associates this message with system completion code B37 and with return code rc. Other fields in the message text are:

jjj job name
 sss step name
 ddn-#
 DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
 ddd device address
 ser volume serial number
 dsn data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	During end-of-volume processing the system had to demount a volume in order to mount the next volume of the data set. It was unable to demount the volume for one of the following reasons: <ul style="list-style-type: none"> • The volume was permanently resident. • The volume was reserved. • Another job had data sets allocated on the volume. • There were OPEN data sets on the volume for the failing task.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine. If the error is to be ignored, the system will attempt to close the DCB before returning to the user.

Programmer Response: Probable user error. For all cases, Allocate as many units as volumes required.

For the first two cases, if the volume to be demounted is permanently resident or reserved, set up the JCL to allocate devices that are removable.

For the third case, change the JCL to request deferred mounting, or specify more volumes than units to prevent sharing of required units.

For the fourth case, rewrite the program or change the JCL insuring that there are no open data sets on volumes that must be demounted.

In all cases, correct the errors and execute the job step again.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC031I D37-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred when an output operation to a direct access device was requested. In the message text, D37-rc associates this message with system completion code D37 and with return code rr. Other fields in the message text are:

jjj job name
 sss step name
 ddn[-#]
 DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
 ddd device address
 ser volume serial number
 dsn data set name

The values of rc and their meanings are as follows:



Return

Code	Meaning
04	A data set opened for output used all the primary space, and no secondary space was requested. Change the JCL specifying a larger primary quantity or add a secondary quantity to the space parameter on the DD statement.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine. If the error is to be ignored, the system will attempt to close the DCB before returning to the user.

Programmer Response: Probable user error. Correct the errors that caused the abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC032I E37-rc, jjj, sss, ddn[-#], ddd, ser, dsn

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jjj      job name
sss      step name
ddn[-#]  DDname (followed by a concatenation
          number if it is part of a
          concatenation and not the first DD
          statement in the concatenation.)
ddd      device address
ser      volume serial number
dsn      data set name

```

The values of rc and their meanings are as follows:

Return Code	Meaning
04	A data set opened for output used all space available to it on the current volume, and no more volumes were available. Change the JCL specifying more volumes.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine. If the error is to be ignored, the system will attempt to close the DCB before returning to the user.

Programmer Response: Probable user error. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

Open Messages

IEC101A M ddd, ser[, labtyp][, den], jjj, sss[, dsn]

Explanation: M indicates that a volume is to be mounted on device ddd:

- If ser is a 6-digit serial number, the volume with that serial number is to be mounted on the device.
- If ser is SCRATCH, a scratch volume is to be mounted.
- If ser begins with a slash or L, the volume to be mounted is unlabeled; the number after the slash or L is an internal serial number assigned by the system to an unlabeled volume. If ser begins with L, the number after the L is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number for the data set.

In the message text, labtyp and den appear only for tape volumes. The volume has the type of label specified by labtyp: SL for standard label, NSL for nonstandard label, or NL for no label; the density is as specified by den.

The volume is being used by step sss of job jjj.

If a DISPLAY DSNAME command is active, data set dsn contained on the volume is also specified in the message text.

Operator Response: If ser is SCRATCH, make sure that the file protection ring has been inserted in the volume.

Mount the volume on the device; then, ready the device.

IEC104E D ddd, ser

Explanation: D indicates that the volume on device ddd is to be demounted and used subsequently as a scratch volume:

- If ser is a 6-digit number, it is the serial number of the volume, which contains labels.
- If ser begins with a slash or L, the volume to be demounted is unlabeled; the number after the slash or L is an internal serial number assigned by the system to an unlabeled volume. If ser begins with L, the number after the L is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number of the data set.

Operator Response: Demount the volume. Use it later when a scratch volume is requested.

IEC105I ddd, jjj REDUCED ERROR RECOVERY REQUESTED

Explanation: A data set was opened on magnetic tape with a request to use the reduced error recovery facility. In the message text, ddd is the unit address and jjj is the job name.

Operator Response: None.

IEC106E R ddd,ser

Explanation: R indicates that the volume on device ddd is to be demounted and retained near the computer for use in the near future:

- If ser is a 6-digit number, it is the serial number of the volume, which contains labels.
- If ser begins with a slash or L, the volume to be demounted is unlabeled; the number after the slash or L is an internal serial number assigned by the system to an unlabeled volume. If ser begins with L, the number after the L is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number of the data set.

Operator Response: Demount the volume. Mark the serial number on the volume, if it is not so marked. (The internally assigned number should appear externally on the volume in case a subsequent step needs the volume; for the subsequent mounting, the system will specify the volume by the internally assigned number.) Then retain the volume near the computer.

IEC107D E ddd,ser,jjj,sss,dsn

Explanation: E indicates that a program intended to write on the volume on device ddd; however, the expiration date for data set dsn on the volume has not occurred.

In the message text, ser is the 6-digit serial number of the volume, which contains labels. The volume is being used by step sss of job jjj. For a tape volume, only the last 17 characters of the data set name (dsn) appear. This is as much as is contained in the tape's data set labels.

Operator Response: If the expiration date is to be ignored and the volume written on, enter REPLY xx,'U'.

If the expiration is to be honored and the volume not written on, enter REPLY xx,'M'. If another volume can be used, that is, if the original request was for a scratch volume, the system will then request that a new volume be mounted. However, if another volume cannot be used, the system will terminate the job step.

For a direct access volume, however, do not enter REPLY xx,'M'. Terminate the job step and notify the programmer that the expiration date on the volume has not been reached.

Note: In systems with MVT or MFT, the operator should normally terminate any job attempting to update a system data set, if this message is issued. However, if a system data set is to be updated, the job stream should be set up so that no other concurrently running job uses the data set being updated; if the job stream is set up in this manner, the operator should be instructed to respond with REPLY xx,'U' to this message.

IEC109A F ddd,ser,jjj,sss,dsn

Explanation: F indicates that the volume on device ddd is file protected; that is, its file protection ring is not inserted, so it can only be read. However, the volume is to be written on.

In the message text, ser is the 6-digit serial number of the volume and dsn is the data set name. The volume is being used by step sss of job jjj.

System Action: The system rewinds and unloads the volume.

Operator Response: If so specified by the programmer, insert a file protection ring in the volume, mount the volume, and ready the device. Otherwise, cancel the job.

IEC110D F ddd,ser,jjj,sss,dsn

Explanation: F indicates that the volume on device ddd is file protected; that is, its file protection ring is not inserted, so it can only be read.

In the message text, ser is the 6-digit serial number of the volume and dsn is the data set name. The volume is being used by step sss of job jjj.

Operator Response: If the volume should be file protected, enter REPLY xx,'U'.

If the volume must have a file protection ring, enter REPLY xx,'F'; the system will rewind and unload the volume. Then insert a file protection ring, mount the volume, and ready the device.

IEC111E D ddd,ser

Explanation: D indicates that the volume on device ddd is to be demounted. The control program has determined that this volume, mounted in response to an earlier mount message, is not the requested volume. In the message text, ser is the 6-digit serial number of the volume that was actually mounted.

Operator Response: Demount the volume. The system will then request that the correct volume be mounted.

IEC112I {I/O ERR} ddd,ser
{SEC VOL}

Explanation: If I/O ERR appears in the message text, an uncorrectable input/output error occurred while processing tape labels. If SEC VOL appears, a security protected tape was mounted and the programmer had specified NL or NSL in the LABEL parameter of the DD statement describing the data set, or the data set name on the tape did not match the data set name specified in the DSNAME parameter of the DD statement.

In the message text, ser is the serial number of the volume and ddd is the unit address.

System Action: The system may either abnormally terminate the task or demount the tape and request the operator to mount a scratch tape, even if a specific volume was requested in the VOL=SER parameter of the DD statement describing the data set.

Operator Response: Respond as indicated when the system requests that a new volume be mounted.

Problem Determination: Table I, items 1, 2, 3, 13, 28, 29.

IEC114E D ddd {,ser, jjj, sss, ddn-n}
 {, ddn-n }

Explanation: D indicates that the volume on device ddd is to be demounted. The control program has determined that this volume, mounted in response to an earlier mount message, either:

- Contains labels that cannot be read due to a permanent input/output error.
- Contains no labels or nonstandard labels when standard labels were specified.
- Contains standard labels when no labels or nonstandard labels were specified.
- Contains labels which are written in a density other than the density specified.
- Has a volume serial number other than the volume serial requested.

If ddn (DDNAME) is supplied in the message text, the tape volume to be demounted was recorded in ASCII; ser is the 6 digit serial number of the volume, jjj is the job name, sss is the step name, and n specifies the reason for demounting as follows:

if n equals

- 1 - The accessibility field of the volume label contains a nonblank character which means that the volume is security protected and may not be processed by the operating system.
- 2 - The accessibility field of the file header label contains a nonblank character other than one, which means that the file may not be processed by the operating system.
- 3 - The system cannot process the volume which is recorded in ASCII, because the ASCII option was not specified at system generation.
- 4 - The control program has determined that conflicting data control block attributes have been used to define the data set on the volume. Some of the conflicting attributes may be the following:

BUFOFF greater than 99.
BUFOFF not equal to L on OUTPUT or OUTIN.
BUFOFF equal to L where RECFM is not equal to D.
OPTCD not equal to Q where LABEL equals AL or AUL.
OPTCD equal to Q where DSORG is not equal to PS.
OPTCD not equal to Q where RECFM equals D.

OPTCD equal to Q where RECFM equals V.

LABEL equal to AL or AUL for a seven-track tape device.

System Action: The data set is not opened and processing continues.

Operator Response: Demount the volume. The system will then request that a new volume be mounted. Mount a volume with the correct density and label type.

Programmer Response: Probable user error. Respond as indicated for the following values of n:

- 1 - Make sure that the correct volume was specified in the job control statements.
- 2 - Make sure that the correct file and volume are being used.
- 3 - The ASCII option was not specified at system generation, so bit 6 in the CVTOPTA field of the communications vector table is 0. If it is 1, have available a record of the options specified at system generation.
- 4 - Make sure that the data control block attributes do not conflict.

Problem Determination: Table I, items 1, 2, 3, 5a, 13, 28, 29.

IEC119I ERROR-IMAGELIB, CODE=n

Explanation: An attempt to open SYS1.IMAGELIB was unsuccessful for one of the following reasons:

- CODE=1 SYS1.IMAGELIB was not a cataloged data set.
- CODE=2 The volume on which SYS1.IMAGELIB resides is not mounted.
- CODE=3 An error occurred during an attempt to read the format 1 SYS1.IMAGELIB DSCB or in filling in the fields of the DEB.

System Action: The related program was terminated if the error occurred when the output data set was being opened. If the error occurred during execution of the SETPRT macro, the problem is passed a return code and determines further processing based on the nature of the error.

Operator Response:

- If CODE=2, mount the proper volume and rerun the job.
- If CODE=1 or 3, report the message to the system programmer.

Programmer Response:

- If CODE=1, catalog SYS1.IMAGELIB.
- If CODE=3, check the format 1 DSCB for errors. Call IBM for programming support if the problem persists.

IEC120A M xxx, character set code [,FOLD][,VERIFY]

Explanation: M indicates a mounting request. The programmer has requested that the chain or train, specified by character set code, be used on UCS printer xxx.

Operator Response: Mount the train or chain that was requested and enter REPLY xx,'text' where text is the character set code.

To ignore the request and use the character set image currently loaded, enter REPLY xx,'U'.

Otherwise, mount a suitable alternate chain or train and enter REPLY xx,'text' where text is the alternate character set code followed, if applicable, by FOLD or F and/or VERIFY or V. (If FOLD or F is omitted but VERIFY or V is specified, indicate the omission of FOLD or F by specifying two consecutive commas -- for example, REPLY xx,'AN,,V'.)

If the mounting request cannot be satisfied with any available chain or train, enter REPLY xx,'CANCEL' or 'REPLY xx,'C' to cancel the UCS load. The system will terminate the job if the request occurred during execution of an OPEN macro instruction.

Note: See the publication IBM System/360 Operating System: Operator's Reference, GC28-6691, for sample printouts for the standard IBM chains and trains.

IEC121D V xxx, character set code [,FOLD]

Explanation: V indicates a verification request. The system has displayed the character set image, specified by character set code, on UCS printer xxx.

Operator Response: Verify that the image displayed corresponds to the requested image.

If the image is correct, enter REPLY xx,'VERIFIED' or REPLY xx,'V'.

If the image is incorrect, mount the correct chain or train and enter REPLY xx,'RETRY' or REPLY xx,'R'. If subsequent verifications are still incorrect, enter REPLY xx,'CANCEL' or REPLY xx,'C' to cancel the UCS load. The system will terminate the job if the request occurred during execution of an OPEN macro instruction.

Note: See the publication IBM System/360 Operating System: Operator's Reference, GC28-6691, for sample printouts for the standard IBM chains and trains.

IEC122D xxx, character set code UCS IMAGE NOT FOUND

Explanation: The character set image, specified by character set code, to be loaded in the UCS buffer of printer xxx could not be found in the image library.

Operator Response: To correct an erroneous specification, mount the requested chain or train and enter REPLY xx,'text' where text is the correct character set code.

If an alternate character set can be used, mount the alternate chain or train and enter REPLY xx,'text' where text is the alternate character set code followed, if applicable, by FOLD or F and/or VERIFY or V. (If FOLD or F is omitted but VERIFY or V is specified, indicate the omission of FOLD or F by specifying two consecutive commas -- for example, REPLY xx,'AN,,V'.)

To ignore the request and use the character set image currently loaded, enter REPLY xx,'U'.

If no alternate character set can be used, enter REPLY xx,'CANCEL' or REPLY xx,'C' to cancel the UCS load. The system will terminate the job if the request occurred during execution of an OPEN macro instruction.

Problem Determination: Table I, items 1, 3, 5a, 15, 17a, 29.

IEC123D xxx, SPECIFY UCS PARAMETER

Explanation: The current job step did not specify UCS parameters and the character set currently loaded on UCS printer xxx cannot be assumed as a default option for one of the following reasons:

- The character set is unknown to the system.
- The character set is invalid because of a previous error condition.
- The character set is not a default character set.

Operator Response: For the first occurrence of this message, mount the chain or train of a suitable default character set and enter REPLY xx,'text' where text is the character set code followed, if applicable, by FOLD or F and/or VERIFY or V. (If FOLD or F is omitted but VERIFY or V is specified, indicate the omission of FOLD or F by specifying two consecutive commas -- for example, REPLY xx,'AN,,V'.) Note that this response should be used only the first time this message is produced.

After the first occurrence of this message, enter REPLY xx,'U' to ignore the request and use the character set image currently loaded.

If no character set is available for the job step, enter REPLY xx,'CANCEL' or REPLY xx,'C'. The system will terminate the job if the request occurred during execution of an OPEN macro instruction.

Note: See the publication IBM System/360 Operating System: Operator's Procedures, GC28-6692, for sample printouts for the standard IBM chains and trains.

IEC124I xxx, ERROR OCCURRED WHILE LOADING FCB

Explanation: A permanent I/O error (forms control buffer parity error) persisted after two attempts were made to load the FCB. The error occurred while opening the data control block for printer xxx. This

- error can be caused by:
- A form control buffer parity error.
 - An attempt to load an invalid FCB image.

System Action: The related program was terminated.

Operator Response: If the associated I/O error message (IEA000I) contains a X'02' in the first sense byte, an attempt was made to load an invalid FCB image.

Specify a substitute image or correct the one in error. An image is invalid if:

- Its specified length exceeds 180 lines.
- Its specified and actual lengths are not equal.
- There is an invalid channel specified.
- The last byte of the image is not X'1x'.

If IEA000I contains a X'04' in the first sense byte a buffer parity error occurred.

Problem Determination: Table I, items 18, 24, 30.

IEC125I ERROR - REPEAT REPLY

Explanation: An invalid response was made to a previous Universal Character Set (UCS) or Forms Control Buffer (FCB) message.

Operator Response: Enter the reply again, correctly.

IEC126I xxx, UNCORRECTABLE ERROR LOADING UCS

Explanation: A permanent input/output error (UCS parity error) persisted after ten attempts were made to load the UCS buffer. The error occurred while opening the data control block for UCS printer xxx. Subsequent output on this printer may be invalid.

Operator Response: Probable hardware error.

Problem Determination: Table I, items 1, 2, 13, 18, 30.

IEC127D xxx, image-id FCB IMAGE NOT FOUND

Explanation: The FCB buffer of printer xxx was not loaded because the FCB image specified by the image-id was not in the image library.

Operator Response: To correct an erroneous specification, enter REPLY xx,'text' where text is the correct or alternate FCB image-id to be used. The image-id can then be followed by VERIFY or V or ALIGN or A.

Specifying VERIFY or ALIGN allows the operator to align forms to the new image.

The VERIFY option also provides a printout of the image loaded.

To ignore the request and use the FCB image currently loaded, enter REPLY xx,'U'.

If no alternate image can be used, enter REPLY xx,'CANCEL' or REPLY xx,'C' to cancel the FCB load. The system will terminate the job if the request occurred during execution of an OPEN macro. If the request occurred during execution of a SETPRT macro and a return code (X'04') will be placed in register 15 and control returned to the program issuing the SETPRT macro.

Problem Determination: Table I, items 1, 3, 5a, 15, 29.

IEC128D V xxx, VERIFY FORMS ALIGNMENT

Explanation: V indicates a verification request. The system was requested to verify forms alignment to the FCB image printer xxx.

Operator Response: Verify that the forms are aligned to the forms control buffer image.

When forms are aligned, enter REPLY xx,'VERIFIED' or REPLY xx,'V'.

If the VERIFY option was specified, entering REPLY xx,'RETRY' or REPLY xx,'R' causes the FCB image to be printed again. This can be repeated until forms are properly aligned.

If the image is incorrect or forms alignment is not possible, enter REPLY xx,'CANCEL' or REPLY xx,'C' to cancel the FCB image load. The system will terminate the job if the request occurred during execution of an OPEN macro. If the request occurred during execution of a SETPRT macro a return code of X'14' is placed in register 15 and control returned to the program issuing the macro.

IEC129D xxx, SPECIFY FCB PARAMETER

Explanation: The current job step did not specify FCB parameters and the image currently loaded on the printer xxx cannot be assumed as a default for one of the following reasons:

- The image is invalid because of a previous error condition.
- The image is not a default image.

Operator Response: Load the FCB buffer by entering REPLY xx,'text,' where text is the image-id to be used. In addition to the image-id, VERIFY or V or ALIGN or A can be coded.

Specifying VERIFY or ALIGN allows the operator to align forms to the new image.

The VERIFY option also provides a printout of the image loaded.

To ignore the request and use the image currently loaded, enter REPLY xx,'U'.

If no image is available for the job step, enter REPLY xx,'CANCEL' or REPLY xx,'C'. The system will terminate the job if the

request occurred during execution of an OPEN macro instruction.

IEC130I ddn - DD STATEMENT MISSING

Explanation: An OPEN macro instruction was issued for a data control block that specified ddn as the DDNAME. However, ddn does not appear in the name field of any DD statement for the job.

System Action: Processing continues. However, abnormal termination is likely if an attempt is made to read or write the data set.

Programmer Response: Probable user error. Supply the missing DD statement, and execute the job step again.

Problem Determination: Table I, items 1, 3, 5a, 15, 30.

IEC131I xx,jjj,sss,RDJFCB ISSUED FOR DCB WITH BLANK DDNAME

Explanation: A RDJFCB macro instruction was issued. A DCB in the parameter list had a blank DDNAME field.

xx - the position of the DCB in the parameter list.
jjj - job name
sss - step name

System Action: The request for this DCB is ignored and a return code of 4 is passed in register 15.

Programmer's Response: Correct the error(s) causing the DDNAME field to be blank and execute the job step again. The error is usually caused by not specifying DDNAME= when coding the DCB.

IEC134D A ddd,ser,jjj,sss,dsn

Explanation: A indicates that volume ser on device ddd bears a standard volume label or an American National Standard volume label; but the programmer did not specify standard labels or American National Standard labels in the job control statements. In the message text, ser is the 6-digit serial number of the volume and dsn is the 17 character data set name from the existing BDE1 label. The volume is being used by step sss of job jjj.

System Action: The system waits for the operator's reply.

Operator Response: Enter REPLY xx,'U' to permit the system to create a new label or write a tape mark over the existing label. Enter REPLY xx,'M' to permit the system to rewind tape volume ser and issue a mount message for a scratch tape.

Programmer Response: Make sure that the job control statements specify standard labels or American National Standard labels if they are to be used.

Problem Determination: Table I, items 1, 2, 13, 29.

IEC141I 013-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of an OPEN macro instruction. In the message text, 013-rc associates this message with system completion code 013 and with return code rc. Other fields in the message text are:

jjj job name
sss step name
ddn[-#] DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
ddd device address
ser volume serial number
dsn data set name .

The values of rc and their meanings are as follows:

Return Code	Meaning
04	ASCII labels were specified in the LABEL parameter of the DD statement but are not supported by the system. Correct the LABEL parameter of the DD statement.
08	ASCII labels were specified in the LABEL parameter of the DD statement, and the UNIT parameter specified a 7-track tape drive. ASCII labels are valid only for 9-track unit. Correct the LABEL and/or UNIT parameter(s) on the DD statement.
0C	A buffer length of 0 was specified for a BDAM data set for which dynamic buffering was requested. Correct the DCB specifying a valid buffer length.
10	An OPEN macro instruction was issued for a null data set and BLKSIZE and BUFL are both 0. Correct the DCB and specify BLKSIZE or BUFL other than 0.
14	An OPEN macro instruction was issued with OUTPUT or OUTIN specified. DCB specifies DSORG=PO or POU, but the DSCB indicates that the data set is not partitioned. Change the DCB macro instruction DSORG parameter to PS; change the DD statement DSORG subparameter to PO; imply partitioned organization by allocating space for the directory in the SPACE parameter of the DD statement; or verify that the DSNAME and VOLUME

IEC

- parameters on the DD statement are correct.
- 18 An OPEN macro instruction was issued for a partitioned data set. The DSNNAME parameter specified a member of the data set that could not be located.
- 1C An OPEN macro instruction was issued for a partitioned data set, but an I/O error was encountered searching the directory.
- 20 An OPEN macro instruction was issued for a sequential data set using the queued access technique with RECFM=FB, but BLKSIZE is not a multiple of LRECL.
- 24 An OPEN macro instruction was issued with INPUT, INOUT, RDBACK, or UPDAT specified, but the DCB did not specify a MACRF of EXCP, GET, or READ.
- 28 An OPEN macro instruction was issued with OUTPUT or OUTIN specified, but the DCB did not specify a MACRF of EXCP, PUT, or WRITE.
- 2C A sequential data set using the queued access technique with exchange buffering was opened for input, and the buffer control block address was 0. Verify that DCBBUFCB was not incorrectly modified. This type of error often occurs if a DCB is shared by two or more tasks, or is opened and closed several times within one job step.
- 30 A sequential data set using the queued access technique with exchange buffering was opened for output, but the buffer control block address is 0. Verify that DCBBUFCB was not incorrectly modified. This type of error often occurs if a DCB is shared by two or more tasks, or is opened and closed several times within one job step.
- 34 An OPEN macro instruction was issued for a data set with BLKSIZE and BUFL equal to 0. The system determined that it had to obtain buffers but was unable to do so.
- 38 An OPEN macro instruction was issued for a sequential data set on a direct access device with track overflow, but the buffer control block address was zero. Verify that DCBBUFCB was not incorrectly modified. This type of error often occurs if a DCB is shared by two or more tasks, or is opened and closed several times within one job step.
- 3C A sequential data set was opened for INPUT or OUTPUT, but the buffer control block address was 0. Verify that DCBBUFCB was not incorrectly modified. This type of error often occurs if a DCB is shared by two or more tasks, or is opened and closed several times within one job step.
- 40 A sequential or direct data set was opened for input, but the buffer control block address was 0. Verify that DCBBUFCB was not incorrectly modified. This type of error often occurs if a DCB is shared by two or more tasks, or is opened and closed several times within one job step.
- 44 An OPEN macro instruction was issued for a data set on a direct access device for which chained scheduling was specified, but the buffer control block address was 0. Verify that DCBBUFCB was not incorrectly modified. This type of error often occurs if a DCB is shared by two or more tasks, or is opened and closed several times within one job step.
- 48 An OPEN macro instruction was issued for a sequential data set using the queued access techniques, but the buffer control block address was 0.
- 4C An OPEN macro instruction was issued for a sequential data set using the queued access technique, and the DCB specified BUFL smaller than BLKSIZE.
- 50 An OPEN macro instruction issued for a data set allocated to a printer did not have OUTPUT specified as an OPEN option.
- 54 An OPEN macro instruction was issued for a data set allocated to a 1419. No secondary control unit could be found.
- 58 An OPEN macro instruction was issued for a paper tape data set and concatenation with unlike attributes was specified. (i.e., DCBOFLGS bit 4=1). Set DCBOFLGS bit 4 to 0 and do not attempt to concatenate a data set on paper tape with data sets of unlike attributes.
- 5C An OPEN macro instruction was issued for a sequential data set using the queued access technique. The data set contained spanned variable length records larger than 32,756, but GET locate mode was not specified.
- 60 An OPEN macro instruction was issued for a data set with a DCB

specifying RECFM=F, and BLKSIZE was not equal to LRECL. Correct DCB parameters to specify RECFM=FB, or make LRECL and BLKSIZE equal.

64 An OPEN macro instruction was issued for a null data set using an access method other than QSAM or BSAM. Correct DD statement to specify a real data set, or access the data set using BSAM or QSAM.

68 An OPEN macro was issued for a data set whose DCB specified BLKSIZE greater than the maximum allowed, which is 32,767.

6C An OPEN macro instruction was issued for a data set with OPTCD=T in the DCB, requesting track overflow, but the direct access device allocated does not support track overflow. Correct the DCB or allocate a device that supports track overflow by a specific request in the unit parameter or a generic name that applies only to those devices.

70 An OPEN macro instruction was issued for a data set on magnetic tape. A conflict exists among LABEL parameters on the DD statement, and DCBRECFM, DCBOPTCD, DCBBUFOF, and DCBUSASI give the appearance of mixed USASI and EBCDIC attributes to the data set; or OPTCD=Q was specified in the DCB for a data set on a device other than magnetic tape.

74 An OPEN macro instruction was issued for an optical character reader data set, but the option 1 on the OPEN macro instruction did not specify input.

78 An OPEN macro instruction was issued for an optical character reader data set. The BUFL parameter in the DCB was specified as zero, or incorrectly modified during execution.

7C An OPEN macro instruction was issued for an optical character reader data set. But LRECL parameter in the DCB was zero. Specify LRECL other than zero and rerun the job.

80 An OPEN macro was issued for an optical character reader data set, but the specified BUFL was less than LRECL. Specify BUFL equal to, or greater than, LRECL and rerun the job.

84 An OPEN macro instruction was issued for an optical character reader data set. The number of buffers specified in the buffer

pool control block is not the same as that specified in the DCBBUFNO field.

88 An OPEN macro instruction was issued for a telecommunications device but the DCBDSORG did not specify TSO.

System Action: The task is terminated.

Programmer Response: Probable user error. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC142I 113-rc, jjj, sss, ddn[-#], ddd, ser, dsn

Explanation: The error occurred during execution of an OPEN macro instruction or an OPEN macro instruction with a TYPE=J operand. In the message text, 113-rc associates this message with system completion code 113 and with return code rc. Other fields in the message text are:

jjj job name
 sss step name
 ddn[-#] DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
 ddd device address
 ser volume serial number
 dsn data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	Either an I/O error occurred reading the JFCB during OPEN, or the JFCB does not exist.
08	An I/O error occurred reading a JFCB extension block during OPEN.
0C	An OPEN TYPE=J was issued, but not JFCB exit was found in the DCB exit list. Specify a JFCB exit, supply the JFCB.
10	An I/O error occurred when writing back the JFCB during OPEN.
14	An I/O error occurred when reading a concatenated JFCB for an indexed sequential data set.
18	An I/O error, occurred reading a JFCB extension block for a direct or indexed sequential data set.

System Action: The task is terminated.



Programmer Response: Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC143I 213-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of an OPEN macro instruction for a data set on a direct access device. In the message text, 213-rc associates this message with system completion code 213 and with return code rc. Other fields in the message text are:

jjj
job name
sss
step name
ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
ddd
device address
ser
volume serial number
dsn
data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	The format 1 DSCB for the data set could not be found on the first volume (or the volume indexed by the volume sequence number) specified by the DD statement. Make sure that the DSNAME and VOLUME parameters on the DD statement are correct. A recovery attempt request may be specified in the DCB ABEND exit routine.
08	An OPEN macro instruction was issued for a password protected data set, but the system was unable to locate the PASSWORD data set. Make sure that the PASSWORD data set exists on the system residence volume. If it does not exist, build it and execute the job step again.
0C	An I/O error occurred reading a format 1 DSCB for a direct or indexed sequential data set.
10	An I/O error occurred reading a format 3 DSCB for a direct or indexed sequential data set.
18	An I/O error occurred writing back a format 1 DSCB. The data set may have been scratched or renamed during open processing, possibly by a concurrent job.
1C	An I/O error occurred while reading a format 3 DSCB for a direct or indexed sequential data set.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error. Correct the errors causing the abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC144I 313-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of an OPEN macro instruction for a data set on a direct access device. In the message text, 313-rc associates this message with system completion code 313 and with return code rc. Other fields in the message text are:

jjj
job name
sss
step name
ddn[-#]
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
ddd
device address
ser
volume serial number
dsn
data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An I/O error occurred reading a format 2 or format 3 DSCB.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. You should save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC145I 413-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of an OPEN macro instruction for a data set on magnetic tape or on a direct

access device. In the message text, 413-rc associates this message with system completion code 413 and with return code rc. Other fields in the message text are:

jjj job name
 sss step name
 ddn[-#] DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
 ddd device address
 ser volume serial number
 dsn data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	No unit is available for mounting the specified volume. The volume already on the allocated unit is either permanently resident or reserved. It could not be demounted in order to mount the required volume, or the volume cannot be demounted because another DCB is open on that device. Specify another device in the UNIT parameter of the DD statement.
08	An I/O error occurred positioning a magnetic tape volume.
0C	An I/O error occurred reading the volume label on a magnetic tape volume.
10	An I/O error occurred writing a tape mark.
14	An I/O error occurred writing EOF1 or EOF2 trailer label on a magnetic tape volume for a SYSOUT data set.
18	The specified data set was opened for input, but no volume serial number was specified on the DD statement. A recovery attempt request may be specified in the DCB ABEND exit routine.
1C	An OPEN macro instruction was issued for a data set, but volume sequence number on the associated DD statement was greater than the number of volumes containing the data set.
20	An I/O error occurred reading the volume label on a direct access volume.
24	An open macro instruction was issued for a data set on magnetic tape. A density was specified in

the DCB DEN parameter which was incompatible with the recording density of the drive allocated to the data set. Change the DD statement to specify a tape drive with the recording density specified in the DCB macro instruction.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error unless an I/O error has occurred. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC146I 513-rc, jjj, sss, ddn[-#], ddd, ser, dsn

Explanation: The error occurred during execution of an OPEN macro instruction for a data set on magnetic tape. In the message text, 513-rc associates this message with system completion code 513 and with return code rc. Other fields in the message text are:

jjj job name
 sss step name
 ddn[-#] DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
 ddd device address
 ser volume serial number
 dsn data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An OPEN macro instruction was issued for a magnetic tape data set allocated to a device that already has an open data set on it. Make sure that the first data set is closed before the second is opened, or allocate the second data set to a different device.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC147I 613-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of an OPEN macro instruction for a data set on magnetic tape. In the message text, 613-rc associates this message with system completion code 613 and with return code rc. Other fields in the message text are:

jjj job name
sss step name
ddn[-#] DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
ddd device address
ser volume serial number
dsn data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An I/O error occurred positioning a magnetic tape volume.
08	An I/O error occurred reading a label on a magnetic tape volume.
0C	An invalid label was read from a magnetic tape volume. Make sure that the correct volume was mounted, and that it contains standard labels. If it is the desired volume, recreate it, and rerun the job.
10	An I/O error occurred writing a tape label.
14	An I/O error occurred writing a tape mark after the header labels.

System Action: The task is terminated unless the error is to be ignored or recovered as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error unless an I/O error has occurred. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC148I 713-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of an OPEN macro instruction for a data set on magnetic tape or on a direct access device. In the message text, 713-rc associates this message with system completion code 713 and with return code rc. Other fields in the message text are:

jjj job name
sss step name
ddn[-#] DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in concatenation.)
ddd device address
ser volume serial number
dsn data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	A data set on magnetic tape was opened for INOUT, but the volume contained a data set whose expiration date had not been reached. The operator replied 'M' to message IEC107D. Specify a different volume on the DD statement, or open for input only by changing the OPEN macro instruction or by specifying input in the LABEL parameter of the DD statement.
08	An OPEN macro instruction was issued with INOUT for a data set on a direct access device with DISP=OLD specified on the DD statement. The expiration date on the data set had not been reached. The operator replied 'M' to message IEC107D. Specify a different volume on the DD statement, or open for input only by changing the OPEN macro instruction or by specifying input in the LABEL parameter of the DD statement.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC149I 813-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of an OPEN macro instruction for a data set on magnetic tape. In the message text, 813-rc associates this message with system completion code 813 and with return code rc. Other fields in the message text are:

jjj job name
sss step name

ddn[-#]
 DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)

ddd
 device address

ser
 volume serial number

dsn
 data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An OPEN macro instruction was issued for a data set on magnetic tape, but the data set name on the header label did not match that in the JFCB. Verify that the DD statement specifies the correct DSNNAME and volume serial number. If they are correct, ensure that the JFCB was not incorrectly modified prior to issuing the OPEN macro.

System Action: The task is terminated unless the error is to be ignored or recovered as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC150I 913-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: In the message text, 913-rc associates this message with system completion code 913 and with return code rc. Other fields in the message text are:

jjj
 job name

sss
 step name

ddn[-#]
 DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)

ddd
 device address

ser
 volume serial number

dsn
 data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An OPEN macro instruction was issued for a magnetic tape data set with ASCII labels. The volume accessibility byte (offset X'0A') in the volume label is not

blank. This indicates that the label was not written on an IBM system or that it was written by the user. If the volume accessibility byte is not blank, the tape cannot be used on an IBM system. Make sure that the correct volume is mounted. If it is the correct volume, it must be recreated for use on an IBM system.

08
 An OPEN macro instruction was issued for a magnetic tape data set with ASCII labels. The security byte in the header label was not blank and not equal to X'F1'. This means that the label was either not created on an IBM system or was created by the user. Make sure that the correct volume is mounted. If it is the correct volume, it must be recreated for use on an IBM system.

0C
 An OPEN macro instruction was issued for a password protected data set, but the operator failed to supply the correct password in response to message IEC310A. Supply the operator with the correct password and execute the job step again, or have the correct password added to the PASSWORD data set.

System Action: The task is terminated unless the error is to be ignored (unless the return code is 0C which cannot be ignored) as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC151I A13-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: In the message text, A13-rc associates this message with system completion code A13 and with return code rc. Other fields in the message text are:

jjj
 job name

sss
 step name

ddn[-#]
 DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)

ddd
 device address

ser
 volume serial number

dsn
 data set name



The values of rc and their meanings are as follows:

Return

Code	Meaning
04	The OPEN macro instruction was issued for a data set on magnetic tape; the tape was positioned at the load point because the data set was not found. Make sure that the file sequence number in the LABEL parameter of the DD statement is correct. Also make sure that the volume is correct.

System Action: The job is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC152I B13-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: In the message text, B13-rc associates this message with system completion code B13 and with return code rc. Other fields in the message text are:

jjj job name
sss step name
ddn[-#] DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
ddd device address
ser volume serial number
dsn data set name

The values of rc and their meanings are as follows:

Return

Code	Meaning
04	An OPEN macro instruction was issued for a data set allocated to a printer. The requested character set type could not be verified because the UCS image is not in the SYS1.IMAGELIB data set. Make sure that the correct character set type was requested. If it is the correct one, contact the system programmer and have him update SYS1.IMAGELIB to include the associated UCS image.
08	An I/O error occurred during an attempt to locate the requested UCS image in the SYS1.IMAGELIB data set.
0C	An I/O error occurred loading the UCS buffers.

10	An I/O error occurred verifying that the correct UCS image was loaded.
14	An OPEN macro instruction was issued to a data set allocated to a printer. The operator replied 'CANCEL' to message IEC121D. Specify the correct character set type, or have the operator mount the proper chain and execute the job step again.
18	An I/O error occurred loading a forms control buffer for a 3211 printer.
1C	The operator replied 'CANCEL' to message IEC128I. Verify that the correct forms control buffer is loaded.
20	An OPEN macro instruction was issued for a data set to be printed, but no main storage was available for opening SYS1.IMAGELIB.
24	An OPEN macro instruction was issued for a data set to be printed, but the volume containing SYS1.IMAGELIB was not mounted.
28	An OPEN macro instruction was issued for a data set to be printed, but an I/O error occurred searching SYS1.IMAGELIB for the UCS image.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error unless an I/O error has occurred. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC153I C13-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of an OPEN macro instruction for a concatenated partitioned or graphics data set. In the message text, C13-rc associates this message with system completion code C13 and with return code rc. Other fields in the message text are:

jjj job name
sss step name
ddn[-#] DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
ddd device address
ser volume serial number

dsn
data set name

The values of rc and their meanings are as follows:

<u>Return Code</u>	<u>Meaning</u>
04	The format 1 DSCB of a concatenated partitioned data set could not be located on the specified volume. Correct the DSNAME and VOLUME parameters of the DD statement.
08	An I/O error occurred reading the JFCB of a concatenated partitioned data set.
0C	An I/O error occurred reading the format 3 DSCB of a concatenated partitioned data set.
10	An OPEN macro instruction was issued specifying OUTPUT for a concatenated partitioned data sets. Output data sets cannot be concatenated.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error unless an I/O error has occurred. Correct the errors causing abnormal termination as indicated by the return code in the message text. Then submit the job again.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC154I 140-rc, j, s, d, ser, dsn

Explanation: The error occurred during execution of a RDJFCB macro instruction. In the message text, 140-rc associates this message with system completion code 140 and with return code rc. Other fields in the message text are:

j, s, d, ser, dsn
job name
step name
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
device address
volume serial number
data set name

The values of rc and their meanings are as follows:

<u>Return Code</u>	<u>Meaning</u>
04	A RDJFCB macro instruction was issued, but an I/O error occurred while reading the JFCB.

System Action: The task is terminated.

Programmer Response: Execute the job step again.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC155I 240-rc, j, s, d, ser, dsn

Explanation: The error occurred during execution of a RDJFCB macro instruction. In the message text, 240-rc associates this message with system completion code 240 and with return code rc. Other fields in the message text are:

j, s, d, ser, dsn
job name
step name
DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
device address
volume serial number
data set name

The values of rc and their meanings are as follows:

<u>Return Code</u>	<u>Meaning</u>
04	A RDJFCB macro instruction was issued, but the DCB did not contain a foundation extension block. Specify a JFCB exit in the DCB exit list. If the DCB is correct, verify that it was not modified during execution.
08	A RDJFCB macro instruction was issued, but no EXLST address was found in the DCB. Specify a JFCB exit in the DCB exit list. If the DCB is correct, verify that it was not modified during execution.
0C	A RDJFCB macro instruction was issued, but no JFCB exit was specified in the DCB exit list. Specify a JFCB exit in the DCB exit list and execute the job step again.
10	A RDJFCB macro instruction was issued, but the JFCB buffer is not within the user's main storage. Correct any errors that may have caused the exit list to be incorrectly modified and execute the job step again.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC156I 03D-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a QISAM or BISAM OPEN macro instruction or a BDAM OPEN macro instruction. In the message text, 03D-rc associates this message with system completion code 03D and with return code rc. Other fields in the message text are:

jjj job name
 sss step name
 ddn[-#] DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
 ddd device address
 ser volume serial number number
 dsn data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An OPEN macro instruction was issued for an indexed sequential or direct data set. The volume serial numbers on the DD statement were not specified in the same order that the data set was created. Change the JCL respecifying the volume serial numbers in the correct order.
08	An OPEN macro instruction was issued for an indexed sequential data set. The first volume of the data set does not have a format 2 DSCB.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error. Correct the errors causing abnormal termination as indicated by the return code in the message text. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

Close Messages

IEC202E K ddd,ser[,labtyp][,den],jjj,sss
 [,SPACE=prm][,dsn]

Explanation: K indicates that the volume on device ddd is to be demounted and returned to the library:

- If ser is a 6-digit number, it is the serial number of the volume, which contains labels.
- If ser begins with a slash or L, the volume to be demounted is unlabeled; the number after the slash or L is an internal serial number assigned by the system to an unlabeled volume. If ser begins with L, the number after the L is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number for the data set.

In the message text, labtyp and den appear only for tape volumes. The volume has the type of label specified by labtyp: SL for standard label, NSL for nonstandard label, or NL for no label; the density is as specified by den.

The volume is being used by step sss of job jjj.

For direct access volumes, if a DISPLAY SPACE command is active, the field SPACE=cccc,tttt,aaaa/yyyy,zzzz is specified:

cccc	Total number of free cylinders on the volume.
tttt	Total number of tracks in addition to the free cylinders.
aaaa	Areas or extents dividing the cylinders and tracks.
yyyy	Maximum number of contiguous free cylinders of the largest extent within the total remaining space.
zzzz	Number of tracks in addition to the free cylinders of the largest extent within the total remaining space.

If an error occurred during the listing of the parameters in the SPACE field, one of the following messages is specified:

- LSPACE-PERMANENT I/O ERROR
- LSPACE-NON-STANDARD OS VOLUME
- LSPACE-NOT A DIRECT ACCESS VOL
- LSPACE-INVALID PARAMETER

If a DISPLAY DSNNAME command is active, data set dsn contained on the volume is also specified in the message text.

Operator Response: Demount the volume. Mark the serial number, label type, and density on the volume, if they are not so marked. Then return it to the library. If LSPACE-PERMANENT I/O ERROR was in the message, a permanent I/O error was encountered while trying to read the VTOC. Execute the IEHLIST utility program to

list the VTOC of this volume. If errors occur, take appropriate action as indicated in the message.

Problem Determination: If LSPACE-INVALID PARAMETER was in the message, see Table I, items 2, 29.

IEC204E D ddd,ser[,labtyp][,den],jjj,sss
[,SPACE=prml[,dsn]

Explanation: D indicates that the volume on device ddd is to be demounted and used subsequently as a scratch volume:

- If ser is a 6-digit number, it is the serial number of the volume, which contains labels.
- If ser begins with a slash or L, the volume to be demounted is unlabeled; the number after the slash or L is an internal serial number assigned by the system to an unlabeled volume. If ser begins with L, the number after the L is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number for the data set.

In the message text, labtyp and den appear only for tape volumes. The volume has the type of label specified by labtyp: SL for standard label, NSL for nonstandard label, or NL for no label; the density is as specified by den.

The volume is being used by step sss of job jjj.

For direct access volumes, if a DISPLAY SPACE command is active, the field SPACE=cccc,tttt,aaaa/yyyy,zzzz is specified:

cccc Total number of free cylinders on the volume.

tttt Total number of tracks in addition to the free cylinders.

aaaa Areas or extents dividing the cylinders and tracks.

YYYY Maximum number of contiguous free cylinders of the largest extent within the total remaining space.

zzzz Number of tracks in addition to the free cylinders of the largest extent within the total remaining space.

If an error occurred during the listing of the parameters in the SPACE field, one of the following messages is specified:

- LSPACE-PERMANENT I/O ERROR
- LSPACE-NON-STANDARD OS VOLUME
- LSPACE-NOT A DIRECT ACCESS VOL
- LSPACE-INVALID PARAMETER

If a DISPLAY DSNAME command is active, data set dsn contained on the volume is also specified in the message text.

Operator Response: Demount the volume. Use it later when a scratch volume is requested. If LSPACE-PERMANENT I/O ERROR

was in the message, a permanent I/O error was encountered while trying to read the VTOC. Execute the IEHLIST utility program to list the VTOC of this volume. If errors occur, take appropriate action as indicated in the message.

Problem Determination: If LSPACE-INVALID PARAMETER was in the message, see Table I, items 2, 29.

IEC209I jjj ser ddd TR=nnn,TW=nnn,EG=nnn,CL=nnn,
N=nnn,SIO=nnnnn

Explanation: This message is issued to indicate the number of errors accumulated on a particular volume. (The message appears only if console output was specified for the ESV option at system generation (ESV=CON).) In the message text, the fields are:

jjj Job name.
ser Serial number of the volume.
ddd Unit address of the device.
TR=nnn Number of temporary read errors.
TW=nnn Number of temporary write errors.
EG=nnn Number of erase gaps.
CL=nnn Number of cleaner actions.
N=nnn Number of noise blocks.
SIO=nnnnn Number of Start I/O operations.

Operator Response: Check the local operating procedures to see if the number of errors specified in message text indicates that the volume should be reconditioned.

IEC210I 214-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a CLOSE macro instruction for a data set on magnetic tape. In the message text, 214-rc associates this message with system completion code 214 and with return code rc. Other fields in the message text are:

jjj job name
sss step name
ddn[-#] DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
ddd device address
ser volume serial number
dsn data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An I/O error occurred reading a user label on magnetic tape.
08	An I/O error positioning a magnetic tape volume during execution of a CLOSE macro instruction.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC211I 314-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during the execution of a CLOSE macro instruction for a data set on a direct access device. In the message text, 314-rc associates this message with system completion code 314 and with return code rc. Other fields in the message text are:

jjj	job name
sss	step name
ddn[-#]	DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
ddd	device address
ser	volume serial number
dsn	data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An I/O error occurred reading a DSCB for a data set on a direct access device during execution of a CLOSE macro instruction.
08	An I/O error occurred reading a format 1 DSCB during execution of a CLOSE macro instruction and standard user labels were specified.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC212I 414-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a CLOSE macro instruction for a data set on a direct access device. In the message text, 414-rc associates this message with system completion code 414 and with return code rc. Other fields in the message text are:

jjj	job name
sss	step name
ddn[-#]	DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
ddd	device address
ser	volume serial number
dsn	data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An I/O error occurred writing a DSCB during execution of a CLOSE macro instruction.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device

in the UNIT parameter of the DD statement.
Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC213I 514-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a CLOSE macro instruction. If the message text, 514-rc associates this message with system completion code 514 and with return code rc. Other fields in the message text are:

jjj job name
sss step name
ddn[-#] DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
ddd device address
ser volume serial number
dsn data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An I/O error occurred reading a JFCB during execution of a CLOSE macro instruction.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Execute the job step again.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC214I 614-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a CLOSE macro instruction for a data set on a direct access device. In the message text, 614-rc associates this message with system completion code 614 and with return code rc. Other fields in the message text are:

jjj job name
sss step name
ddn[-#] DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
ddd device address
ser volume serial number
dsn data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An I/O error occurred writing a file mark for a data set on a direct access device during execution of a CLOSE macro instruction.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC215I 714-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a CLOSE macro instruction for a data set on magnetic tape. In the message text, 714-rc associates this message with system completion code 714 and with return code rc. Other fields in the message text are:

jjj job name
sss step name
ddn[-#] DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
ddd device address
ser volume serial number
dsn data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An I/O error occurred writing trailer label 1 for a data set on magnetic tape during execution of CLOSE macro instruction.
08	An I/O error occurred writing trailer label 2 for a data set on magnetic tape.

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0C An I/O error occurred writing a tape mark during execution of a CLOSE macro instruction.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC216I A14-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a CLOSE macro instruction for a data set on a direct access device. In the message text, A14-rc associates this message with system completion code A14 and with return code rc. Other fields in the message text are:

jjj job name
sss step name
ddn[-#] DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
ddd device address
ser volume serial number
dsn data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An I/O error occurred during execution of a CLOSE macro instruction attempting a partial release of space on a direct access device.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem. Rerun the job specifying a different volume or device. If a scratch

volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination Aid: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC217I B14-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a CLOSE macro instruction for a partitioned data set opened for output to a member. In the message text, B14-rc associates this message with system completion code B14 and with return code rc. Other fields in the message text are:

jjj job name
sss step name
ddn[-#] DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
ddd device address
ser volume serial number
dsn data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	A duplicate name was found in the directory of a partitioned data set. The close routine attempted to add a member name to the directory using the STOW macro instruction, but a code of 4 was returned, indicating that the member already exists. Specify a different member name, or remove the old member name using the IEHPROGM utility, or specify DISP=OLD on the DD statement.
08	The close routine was unable to find a member of a partitioned data set. The close routine attempted to update the directory of a partitioned data set and replace a member name, but a code of 8 was returned, indicating that the member does not exist. Change the DD statement specifying DISP=MOD, which indicates that the specified member is to be added rather than replaced.
0C	The close routine attempted to update the directory of a partitioned data set; however, a code of 12 was returned by the STOW macro instruction,

indicating that there is no space left in the directory. Execute the utility IEBCOPY to compressing data data set in place to release unused space in the directory, or copy the data set to a scratch volume, reallocate space for the data set specifying more directory blocks, and then copy it back using IEBCOPY.

10 An I/O error occurred trying to update the directory of a partitioned data set.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Probable user error unless an I/O error has occurred. Correct the errors causing abnormal termination as indicated by the return code in the message text. Then rerun the job.

If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem. Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination Aid: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC218I 117-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a BSAM CLOSE macro instruction with a TYPE=T operand. In the message text, 117-rc associates this message with system completion code 117 and with return code rc. Other fields in the message text are:

jjj job name
 sss step name
 ddn[-#] DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
 ddd device address
 ser volume serial number
 dsn data set name

The values of rc and their meanings are as follows:

<u>Return Code</u>	<u>Meaning</u>
04	An I/O error occurred writing a file mark for a data set on a direct access device during execution of a CLOSE macro instruction with a TYPE=T operand.
08	A CLOSE macro instruction with a TYPE=T operand was issued for a data set that was opened with the options RDBACK and LEAVE or INOUT and REREAD. An I/O error occurred in tape positioning while performing a forward space file past a tape mark.
0C	An I/O error occurred when writing the second tape mark following trailer labels during the execution of a CLOSE macro instruction with a TYPE=T operand.
10	An I/O error occurred in tape positioning during execution of a CLOSE macro instruction with a TYPE=T operand. A backspace file past the tape mark following trailer labels was being attempted.
14	An I/O error occurred in tape positioning during execution of a CLOSE macro instruction with a TYPE=T operand. The data set was opened with the options RDBACK and LEAVE or INOUT and REREAD.
18	An I/O error occurred in tape positioning during execution of a CLOSE macro instruction with TYPE=T operand. A forward space file was being performed past a tape mark preceding data for a data set with standard labels opened for RDBACK.
1C	An I/O error occurred in tape positioning during execution of a CLOSE macro instruction with a TYPE=T operand. A forward space file was being performed past a tape mark preceding data for a data set with no labels opened for RDBACK.
20	An I/O error occurred in tape positioning during the execution of a CLOSE macro instruction with a TYPE=T operand for a data set with no labels opened for input, or a data set with standard labels opened for output.
24	An I/O error occurred in tape positioning during the execution of a CLOSE macro instruction with a TYPE=T operand. A forward space file past a tape mark preceding the data was being attempted.

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28 An I/O error occurred in tape positioning during execution of a CLOSE macro instruction with a TYPE=T operand. A backspace file past the tape mark following data was being attempted for a data set opened with the options INPUT and LEAVE.

2C An I/O error occurred in tape positioning during the execution of a CLOSE macro instruction with a TYPE=T operand. A tape mark was written following the last data record. During this operation, end-of-volume condition was encountered. The close routine attempted to backspace file past the tape mark prior to calling EOV, and encountered an I/O error.

30 An I/O error occurred in tape positioning during execution of a CLOSE macro instruction following user trailer label processing.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement.

Problem Determination Aid: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC219I 217-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a BSAM CLOSE macro instruction with a TYPE=T operand. In the message text, 217-rc associates this message with system completion code 217 and with return code rc. Other fields in the message text are:

jjj job name
 sss step name
 ddn[-#] DD name (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
 ddd device address
 ser volume serial number
 dsn data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An I/O error occurred reading the JFCB during execution of a CLOSE macro instruction with a TYPE=T operand.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Execute the job step again.

Problem Determination Aid: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC220I 317-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a BSAM CLOSE macro instruction with a TYPE=T operand for a data set on a direct access device. In the message text, 317-rc associates this message with system completion code 317 and with return code rc. Other fields in the message text are:

jjj job name
 sss step name
 ddn[-#] DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
 ddd device address
 ser volume serial number
 dsn data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An I/O error occurred reading a DSCB during the execution of a CLOSE macro instruction with a TYPE=T operand.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC221I 417-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a BSAM CLOSE macro instruction with a TYPE=T operand for a data set on a direct access device. In the message text, 417-rc associates this message with system completion code 417 and with return code rc. Other fields in the message text are:

jjj job name
sss step name
ddn[-#] DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
ddd device address
ser volume serial number
dsn data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An I/O error occurred writing an updated DSCB during execution of a CLOSE macro instruction with a TYPE=T operand.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC222I 717-rc,jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: The error occurred during execution of a BSAM CLOSE macro instruction with a TYPE=T operand for a data set on magnetic tape. In the message text, 717-rc associates this message with system completion code 717 and with return code rc. Other fields in the message text are:

jjj job name
sss step name
ddn[-#] DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
ddd device address
ser volume serial number
dsn data set name

The values of rc and their meanings are as follows:

Return Code	Meaning
04	An I/O error occurred writing a tape mark following the last data record during execution of a CLOSE macro instruction with a TYPE=T operand.
08	An I/O error occurred during execution of a CLOSE macro instruction with a TYPE=T operand, writing trailer label 1 or trailer label 2.
0C	An I/O error occurred writing the first tape mark following the trailer labels during execution of a CLOSE macro instruction with a TYPE=T operand.
10	An I/O error occurred reading trailer label 1 in order to update the DCB block count during execution of a CLOSE macro instruction with a TYPE=T operand.

System Action: The task is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: If an I/O error has occurred, a defective volume or device may be the cause. Save the output from the failing job to aid in the analysis of the problem.

Rerun the job specifying a different volume or device. If a scratch volume was being used when the I/O error occurred, request a different volume. If that does not solve the problem, request a different device in the UNIT parameter of the DD statement. If a specific volume is needed, try requesting a different device in the UNIT parameter of the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC223I jjj,sss,ddn[-#],ddd,ser,dsn

Explanation: A CLOSE macro instruction was issued for the specified data set. The system discovered an invalid control

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block. Either the data extent block (DEB) or the task control block (TCB) was incorrectly modified, or the DEB was not on the TCB DEB chain, or the protect key of the DEB in the DEBDEBID field was different from that of the TCBPKF field in the TCB. In the message text, the fields are:

jjj job name
 sss step name
 ddn[-#] DDname (followed by a concatenation number if it is part of a concatenation and not the first DD statement in the concatenation.)
 ddd device address
 ser volume serial number
 dsn data set name

System Action: Processing is discontinued for the DCB in error. Other DCBs in the CLOSE parameter list will be processed.

Programmer Response: Probably user error. Correct any errors causing the control block(s) to be incorrectly modified. Rerun the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

Catalog Management Messages

IEC301A S JOB jjj, STEP sss, DDNAME ddn [,CONC n] DSNAME dsn

Explanation: S indicates that the data set referred to in the message text is security protected, and a password is required before the data set can be accessed.

If the message has the first format, a program is attempting to open the security protected data set defined in the DD statement whose data definition name is ddn; the data set is being opened by step sss of job jjj. If the data set is part of a concatenated data set, CONC n appears in the message text to identify the concatenation number or the sequence position of the data set in question. If the message has the second format, a program is attempting to scratch or rename the security protected data set.

Operator Response: If the indicated OPEN, SCRATCH, or RENAME function is authorized, enter REPLY xx,'yyyyyyyy', where yyyyyyyy is the programmer supplied password for the data set referred to in the message text. The password can have a maximum of eight characters. For a data set that is part of a concatenation, the password entered must be the one supplied for concatenation number n. If the indicated function is not authorized or if no password was supplied, cancel the job.

Checkpoint/Restart Messages

IEC400A M ddd,ser/dsn

Explanation: M indicates that a tape volume is to be mounted on device ddd for data set dsn. The ser is the six-digit serial number of the volume.

Operator Response: Mount the volume on the device. Then, ready the device.

IEC401A F ddd,ser/dsn

Explanation: F indicates that the volume on device ddd for output data set dsn is file protected; that is, its file protection ring is not inserted, so it can only be read. However, the volume is to be written on. The ser is the six-digit serial number of the volume.

System Action: The system rewinds and unloads the volume.

Operator Response: Insert a file protection ring in the volume, mount the volume, and ready the device.

IEC402D F ddd,ser/dsn

Explanation: F indicates that the volume on device ddd for input/output data set dsn is file protected; that is, its file protection ring is not inserted, so it can only be read. However, the volume is to be written on. The ser is the six-digit serial number of the volume.

Operator Response: If the volume should be file protected, enter REPLY xx,'U'.

If the volume must have a file protection ring, enter REPLY xx,'F'; the system will rewind and unload the volume. Then insert a file protection ring in the volume, mount the volume, and ready the device.

IEC403A M ddd,ser

Explanation: M indicates that a direct access volume is to be mounted on device ddd. If ddd is followed by a slash, the number after the slash is the bin number of a 2321 device. The ser is the six-digit serial number of the volume.

Operator Response: Mount the volume on the device. Then, ready the device.

Direct Access Device Space Management Messages

IEC601D M ddd,ser REPLY=SKIP VOL OR MOUNTING

Explanation: M indicates that a volume is to be mounted on device ddd, so that a data set can be scratched. The ser is the 6-digit serial number of the volume to be mounted.

Operator Response: If the volume can be mounted, enter REPLY xx,'MOUNTING'; then, mount the volume and ready the device.

If the volume cannot be mounted but the job step is to continue, enter REPLY xx,'SKIP VOL'; the system will ignore the volume.

If the volume cannot be mounted and the job step must not continue unless the data set or volume is scratched, terminate the job step.

Tape Label Creation Messages

IEC701D M ddd, VOLUME TO BE LABELED ser

Explanation: M indicates that a volume is to be mounted on device ddd. If ser is a 6-digit serial number, a standard label containing the serial number will be written on the volume. If ser is absent, a nonstandard label will be written on the volume.

Operator Response: For the first appearance of this message, mount a volume on device ddd, ready the device, and enter REPLY xx,'M'. The volume mounted should be a scratch volume, unless the programmer supplied a volume to be used.

If this message is repeated immediately after message IEC702I, the system attempted to write a label on the volume but the label could not be verified.

Inspect the tape for irregularities:

- If irregularities appear, remove the bad section of tape or, if the volume was a scratch volume, substitute another volume. Then, mount the correct or substituted volume, ready the device, and enter REPLY xx,'M'.
- If the irregularities are uncorrectable and the volume was supplied by the programmer, enter REPLY xx,'S'.
- If no irregularities are found, mount the tape volume again, ready the device, and enter REPLY xx,'M'.
- If only this message is repeated, enter REPLY xx,'S'. Report the message sequence to the programmer, asking him to check the program for improper recording characteristics. If the program is not at fault, a customer engineer should be called to check the tape drive.

If this message is repeated immediately after message IEC703I a label cannot be written on the volume because the volume is file protected:

- If the volume is to be labeled, insert a file protection ring in the volume, mount the volume, ready the device, and enter REPLY xx,'M'.
- If the volume is not to be labeled, demount the volume, mount a new scratch volume with a file protection ring, ready the device, and enter REPLY

xx,'M'.

- If only this message is repeated, enter REPLY xx,'S'. Report the message sequence to the programmer.

Problem Determination: Table I, items 1, 2, 15, 28, 29.

IEC703I ddd, VOLUME IS FILE PROTECTED

Explanation: The volume on device ddd is file protected; that is, its file protection ring is not inserted, so it can only be read. A label cannot be written on the volume.

System Action: The system rewinds and unloads the volume. Immediately or in a short time, the system issues message IEC701D.

Operator Response: Respond as indicated for message IEC701D, which follows this message.

IEC704A L ddd

Explanation: L indicates that label information is required for the output tape volume mounted on device ddd.

System Action: The system will write a standard volume label containing information supplied by the operator.

Operator Response: Enter REPLY xx,'ser,yyyy' where ser is the 6-digit serial number of the volume and yyyy consists of 10 characters specifying the owner's name or similar identification. (The yyyy field may be omitted.) If the tape volume is not to be used, enter REPLY xx,'M'.

IEC705I TAPE ON ddd, ser IS labtyp,den BPI

Explanation: A standard volume label has been created, rewritten, or destroyed on output tape mounted on device ddd.

In the message text, ser is the serial number of the volume. The volume has the type of label specified by labtyp: SL for standard label, NSL for nonstandard label, or NL for no label; the density is as specified by den.

Operator Response: At the end of the job, make any necessary changes to the contents label.

Problem Determination: Table I, items 1, 2, 15, 28, 29.

BTAM/QTAM Messages

IEC801I lna THRESHOLD TRANS=nnn DC=nnn IR=nnn TO=nnn

Explanation: During QTAM or BTAM certain errors before a specified transmission count was reached on a line.

The errors are data check errors, intervention required errors, or non-text time-out errors.

In the message text, the fields are:

lna
Line address, in hexadecimal.
TRANS=nnn
Number of transmissions, in decimal, before an error threshold was reached.
DC=nnn
Number of data check errors, in decimal, in the above number of transmissions.
IR=nnn
Number of intervention required errors, in decimal, in the above number of transmissions.
TO=nnn
Number of non-text time-out errors, in decimal, in the above number of transmissions.

Operator Response: None.

IEC802I lna LINE TOTALS TRANS=nnnnnnn DC=nnnnn
IR=nnnnn TO=nnnnn

Explanation: This message is produced, at the request of the user, to indicate total counts for a line being used in BTAM processing.

In the message text, the fields are:

lna
Line address, in hexadecimal.
TRANS=nnnnnnn
Total number of transmissions, in decimal.
DC=nnnnn
Total number of data check errors, in decimal.
IR=nnnnn
Total number of intervention required errors, in decimal.
TO=nnnnn
Total number of non-text time-out errors, in decimal.

Operator Response: None.

IEC804A lna CONTROL UNIT NOT OPERATIONAL. REPLY
CONT OR POST

Explanation: A not operational SIO condition occurred in a line during BTAM or QTAM processing. In the message text, lna is the line address.

Operator Response: Make sure the control unit is operational. Enter one of the following replies:

- REPLY xx,'CONT'. The system retries the condition. If the retry is successful, processing continues; if the retry is not successful, this message is issued again.
- REPLY xx,'POST', for BTAM. The operation is posted comple-with-error and the not-operational SIO bit will be on in the DECERRST field of the data event control block (DECB).

- REPLY xx,'POST', for QTAM. The system ignores the line until a STARTLN macro instruction is issued or sent.

If a reply is not entered before the requesting job is canceled, the system may enter wait state. If the problem recurs, call IBM for hardware support.

IEC805I I/O ERROR - CHECKPOINTS TERMINATED

Explanation: An uncorrectable input/output error occurred while writing the current checkpoint record in the checkpoint data set. The record could not be written.

System Action: Processing continues, but no checkpoint records are written.

Operator Response: Either allow the job to continue, or restart the job at the last checkpoint by reloading the program. If the job is restarted, processing will continue as usual and checkpoint records will be written as specified.

Problem Determination: Table I, items 1, 2, 3, 5a, 15, 29.

IEC806I lna, LINE UNAVAILABLE, ENDING STATUS NOT RECEIVED

Explanation: The error occurred during execution of the QTAM open line group. The line, lna, failed to return ending status to commands within 30 seconds.

Operator Response: Check the control unit to determine whether the line is in CE mode. If the line is in CE mode, it should be taken out of that mode, ending status should be sent for that command, and the line should be restarted.

To send ending status for that command, the customer engineer should return the following sequence:

Channel End
Device End
Unit Check
Equipment Check

To restart the line, the appropriate message must be sent to a QTAM message processing program. The message processing program will then issue a STARTLN macro instruction for that line. If the system has the operator control facility, a STARTLN operator control message for that line may be entered directly from the telecommunications control terminal. If the line is not in CE mode and the problem recurs, call IBM for hardware support.

IEC807I cuu ONLINE TEST xx yy tt nn id

Explanation: This message reports the results of an online test in which BTAM sends test messages to a remote computer or terminal, or in which BTAM sends a request-for-test message specifying a test type (X field) of 0. This message appears

once for each online test, following transmission of all requested test messages.

In the message text, the fields are:

- cuu Address of the communication line (channel and unit).
- xx Test type specified in the request-for-test message.
- yy Number of test message transmissions requested, as specified by the Y field of the request-for-test message.
- tt Number of time-out errors that occurred during the test message transmissions.
- nn Number of NAK responses to BTAM-transmitted test messages.
- id Terminal identification sequence of the terminal to which the BTAM-transmitted test message or request-for-test message was sent, for multipoint terminals only.

Operator Response: None.

IEC808I cuu ONLINE TEST xx yy tt ll dd

Explanation: This message reports the results of an online test in which BTAM receives test messages from a remote computer or terminal. This message appears once for each online test, following receipt of all test messages from the remote computer or terminal.

In the message text, the fields are:

- cuu Address of the communication line (channel and unit).
- xx Test type specified in the request-for-test message received from the remote computer or terminal.
- yy Number of test message transmissions received from the remote computer or terminal.
- tt Number of time-out errors that occurred while receiving test messages.
- ll Number of lost-data errors that occurred while receiving test messages.
- dd Number of data checks that occurred while receiving test messages.

Operator Response: None.

IEC809I lna CONTROL UNIT NOT OPERATIONAL

Explanation: This message indicates that a not operational SIO condition occurred in a line during BTAM or QTAM processing. In the message text, lna is the line's address.

Operator Response: Reactivate the appropriate control unit.

```
IEC815I { cuu tttt yy ERS z
          { cuu xx tttt THRESHLD
          { cuu xx tttt yy eeee zzzz yy eeee zzzz yy
            eeee zzzz yy eeee zzzz
          { cuu ww tttt eeeeeee zzzz eeeeeee zzzz
            eeeeeee zzzz eeeeeee zzzz }
```

Explanation: This message provides the results of a scan of the error file of an IBM 2715 Transmission Control Unit. The scan occurs when the error threshold for one of the area stations connected to the 2715 is exceeded (threshold value is eight) or when manually requested at the 2715, the 2740 terminal attached to the 2715, or the central system console. BTAM prints the message on the master console, the teleprocessing console, or the system maintenance console, depending on the routing code specified at the 2715.

In all four formats of the message text, cuu is the address in EBCDIC of the communications line (channel and unit), xx is the address in hexadecimal of the area station for which the error scan is reported, tttt is the time (0001 - 2400) when the error occurred, and ww is the address in hexadecimal of a particular adapter within the 2715. Fields appearing uniquely within a message format are described below.

The first format of the message is issued when five or more of the eight errors involved a particular one of the devices attached to the area station. In the message text, yy is the address in hexadecimal of the device for which the errors occurred, and z is the number of errors (from decimal 5 to 8) that occurred for the device.

The second format of the message indicates that the threshold value of eight has been reached for the area station whose address is xx, but that no one device attached to the station accounted for as many as five of the errors.

The third format of the message is issued twice whenever an error scan for a particular area station is manually requested at the 2715, the 2740 terminal attached to the 2715, or the central system console. The address of device yy for which the error data eeee was recorded at time zzzz is given four times in each message; the two messages together thus provide information about the eight most recent error occurrences for area station xx.

The fourth format of the message is issued twice whenever an error scan for a particular 2715 adapter is manually requested at the 2715, the 2740 terminal attached to the 2715, or the central system console. The error data eeeeeee for adapter ww recorded at time zzzz is given four times in each message; the two messages together thus provide information



about the eight most recent error occurrences for adapter ww.

Operator Response: None.

IEC900I INVALID ABEND CODE PASSED TO MODULE
XXXXXXXXXX

Explanation: The module xxxxxxxx is an OPEN/CLOSE/EOV Problem Determination routine. It did not recognize the passed abnormal termination code, so it issued an Fxx abnormal termination code where xx=

13 for OPEN
14 for CLOSE
17 for CLOSE TYPE=T
37 for EOVS.

Register 12 contains the abnormal termination code passed to the module.

System Action: The task is terminated.

Programmer Response: None.

Problem Determination: Table I, items 1, 4, 5a, 7b, 16, 29. Table II, Format 3.

IEC901I INABLE TO RECOVER DUE TO I/O ERR ON
JOBQUEUE

Explanation: The error was encountered in OPEN/CLOSE/EOV and recovery was attempted. During the recovery attempt, an I/O error occurred reading or writing a JFCB extension block.

System Action: The job is terminated unless the error is to be ignored as specified in the DCB ABEND exit routine.

Programmer Response: Correct the errors causing recovery to be attempted. Then resubmit the job.

Problem Determination: Table I, items 1, 4, 5a, 16, 29. Table II, Format 3.

IEC950I 003-x 3525 ASSOCIATED DATA SET I/O
SEQUENCE ERROR

Explanation: This is an explanatory message for the system completion code 003. A sequence I/O error has occurred for a 3525 reader punch. In the message text, x defines the nature of the error.

- If x is 1, the error occurred because of a READ I/O sequence error.
- If x is 2, the error occurred because of a PUNCH I/O sequence error.
- If x is 3, the error occurred because of a PRINT I/O sequence error.

System Action: The system terminates the task.

Programmer Response: Probable user error. Specify the I/O macro instructions in the proper sequence and rerun the job.

Problem Determination: Table I, items 1, 5a, 15, 16, 29.

IEC951I 004 INVALID FORMAT CARD OR INVALID DEVICE
FOR OMR

Explanation: Either the format card for Read Column Eliminate (RCE) or for Optical Mark Read (OMR) is invalid, or the device indicated with OMR is ineligible for OMR. Register 15 has the return code X'05.'

System Action: The system terminates the task.

Programmer Response: Probable user error. Verify the referenced fields and rerun the job.

Problem Determination: Table I, items 1, 5a, 15, 16, 29.

IEC952I 004 CONFLICTING/INVALID DCB FUNC OR
RELATED PARAMETER

Explanation: This is an explanatory message for system completion code 004. A conflicting or invalid DCB parameter (FUNC or related parameter) was specified. The contents of register 15 indicate the nature of the error:

Register 15
Contents in
Hexadecimal

<u>Hexadecimal</u>	<u>Explanation</u>
'01'	An invalid DCB FUNC parameter was specified.
'02'	An invalid combination of the DCB FUNC parameter and CNTRL macro instruction was specified.
'03'	Conflicting associated data set access methods were specified.
'04'	An invalid DCB was specified with a 3505 or 3525.

System Action: The system terminates the task.

Programmer Response: Probable user error. Verify the referenced fields and rerun the job.

Problem Determination: Table I, items 1, 5a, 15, 16, 29.

IEC953I 004 DATA PROTECTION IMAGE NOT FOUND

Explanation: This is an explanatory message for the system completion code 004. A data protection image was not found. This is indicated by a X'06' return code in register 15.

The image was not found for one of the following reasons:

1. It is not in the SYS1.IMAGELIB data set.
2. The volume containing SYS1.IMAGELIB is not mounted.
3. The SYS1.IMAGELIB data set is not cataloged.

System Action: The system terminates the task.

Programmer Response: Probable user error. Verify the referenced fields and rerun the job.

Problem Determination: Table I, items 1, 5a, 15, 16, 29.

IEC

Telecommunication Access Method Messages (IED)

Component Name	IED
Program Producing Message	TCAM (Telecommunications Access Method)
Audience and Where Produced	For operator: console For system programmer: console or operator control station.
Message Format	xx IEDnns xx Message identifier (absent, if operator reply not required). nnn Message serial number. s Action indicator: A Action; operator must perform a specified action. D Decision; operator must choose an alternative. I Information; no operator action is required.
Associated Publications	<u>IBM System/360 Operating System:</u> <u>TCAM Programmer's Guide and Reference Manual</u> , GC30-2024. <u>IBM TOTE Configurator User's Manual</u> , Part No. 5172900.
Problem Determination	Refer to the fold-out in part VI of this publication for problem determination instructions.

IED

IED001I TCAM JOB jjj,sss,proc ADDRESS OF AVT addr

Explanation: A TCAM Message Control Program (MCP) identified in the message text by the job name jjj, the step name sss, and the procedure step name proc, is being started. In the message text, addr is the absolute address in main storage of the beginning of the Address Vector Table (AVT).

System Action: Processing continues.

Programmer Response: None.

Operator Response: None required. This address may be used to alter the MCP from the console, if requested by the systems programmer.

Programmer Response: If the operator enters REPLY xx,'U', the system will issue message IED004A, which identifies and asks for the missing keyword, unless 'U' is the missing keyword. Provide the required values according to the directions for dynamic specification of INTRO operands at INTRO execution time as provided in the TCAM Programmer's Guide (GC30-2024).

Operator Response: Enter the Values for the required operands that were omitted and for other INTRO operands according to the detailed directions for dynamic specification of INTRO operands that should have been provided by the system programmer. If the system programmer has not provided the information, contact him.

IED002A SPECIFY TCAM PARAMETERS

Explanation: At least one of the following operands has been omitted from the INTRO macro instruction: STARTUP=(S=), KEYLEN=(K=), LNUNITS=(B=) or, if DISK=YES is coded in INTRO, CPB=(D=). If any of these operands is omitted from the INTRO macro instruction at assembly, it must be specified at execution time.

System Action: The system enters a wait state until the proper response is received. The message will then be repeated until the required keywords and "U" are specified.

Problem Determination: Table I, items 2, 10, 29.

IED003A INVALID KEYWORD xxxx

Explanation: An invalid response keyword has been entered in a response to message IED002A. In the message text, xxxx represents the four characters of the unrecognizable keyword.

System Action: The system enters a wait state until the response is provided. All keywords to the right of the unidentified four characters are ignored.

Operator Response: Probable user error. Enter a new response, respecifying the

keyword in error, if required. Since all operands to the right of the keyword in error are ignored, all such operands must be respecified.

Problem Determination: Table I, items 2, 10, 29.

IED004A REQUIRED PARAMETER MISSING. SPECIFY xxx

Explanation: A "U" has been coded at the end of a response to message IED002A at execution time, indicating that all operands have been specified, but a value has not yet been specified for one or more of the following operands:

STARTUP=, KEYLEN=, LNUNITS= or, if
DISK=YES is coded, CPB=.

In the message text, xxx is the name of the missing operand.

System Action: The system enters a wait state until the response is received.

Programmer Response: Provide the operator with the necessary information to complete the response.

Operator Response: Probable user error. Enter a value for the specified operand in your response to this message. If the system programmer has not provided you with this information, contact him.

Problem Determination: Table I, items 2, 10, 29.

IED005A MSUNITS (M) SPECIFICATION NOT PERMITTED. CONTINUE RESPONSE

Explanation: Either MSUNITS=0 was coded in the INTR0 macro instruction or the MSUNITS= operand was omitted from the INTR0 macro instruction. As a result, the operator may not assign buffer units to a main storage message queues data set in response to the message IED002A.

System Action: The system enters a wait state until the response is continued.

Programmer Response: If a message queues data set in main storage is required, cancel the job, code a positive integer in the MSUNITS= operand of the INTR0 macro instruction, and reassemble and reexecute the MCP.

Operator Response: Probable user error. Either continue with the response, or contact the system programmer for information.

Problem Determination: Table I, items 2, 10, 29.

IED006A INVALID OPERAND ON KEYWORD. RESPECIFY xxx

Explanation: The keyword indicated by xxx was coded with an incorrect value in the operator's response to the previous message. Either a decimal value was not within an acceptable range, or a

non-decimal integer was coded when a decimal value was needed, or a character string more than eight characters long was coded.

System Action: The system enters a wait state until the response is entered. All keywords to the right of the invalid keyword are ignored.

Programmer Response: Provide a valid value for the incorrect keyword.

Operator Response: Probable user error. Enter a new response, specifying (if required) the keyword with a valid value. Since all keywords to the right of the one in error are ignored, all such keywords should also be respecified. If you do not know what a valid value is, notify the

Problem Determination: Table I, items 2, 10, 29.

IED007I xxx IS AN ILLEGAL DESTINATION

Explanation: This message is generated whenever the terminal name table sort routine is unable to calculate a valid offset into the terminal name table after it has been sorted into collating sequence. The destination named in the message to be in an invitation, cascade or distribution list. A terminal which has been specified as an alternate destination by the ALTDEST= operand of a TERMINAL or TPROCESS macro instruction, or a station that does not have the capability to accept messages will also generate this message.

System Action: A return code of X '10' is passed to the initialization routine (IEDQ0A) in register 15. IEDQ0A does not call any of the other INTR0 non-resident initialization routines but writes out the error message IED065I and returns to INTR0 which passes control to the next instruction.

Programmer Response: Probable user error. The incorrect ALTDEST= operand (indicated by xxx) should be corrected, and the Message Control Program reassembled and executed again.

Problem Determination: Table I, items 5a, 10, 29.

IED008I TCAM OPEN ERROR xxx=y IN DCB zzz descriptor

Explanation: In attempting to open the data set represented by the DD statement named zzz, TCAM's Open Executors encountered an error. xxx is a three-digit code indicating what type of data set was being opened when the error was encountered. Possible codes and their meanings are as follows:

Code	Explanation
040	The error occurred in opening a line group data set.

041 The error occurred in opening a message queues data set.

In the message text, y is a reason code naming the specific error that was encountered, and descriptor is a one-word abbreviation corresponding to y. Possible values for y are:

Code	y	Explanation
040	1	Insufficient main storage to build a line group data extent block (DEB).
	2	Non-compatible devices specified in the same line group.
	3	A unit control block (UCB) for a line in this line group specifies something other than telecommunications or graphics devices.
	4	A UCB for a line in this line group specifies an unsupported control unit type.
	5	A UCB for a line in this line group specifies a non-standard terminal type.
	6	The device characteristics table generated for this line does not contain the right characteristics for this terminal type as defined by the UCB.
	7	Insufficient main storage was available to build a line control block.
	8	Insufficient main storage was available to build a station control block.
	9	The characteristics of a binary synchronous device do not agree with those values in the UCB for the line.
	A	The DD cards for this data control block contain no valid UCB addresses.
	B	The header prefix size and the number of idle characters plus one reserved for receiving operations exceed one logical unit in length.
	C	No data set has been specified for disk or core queuing for a specified terminal.
	D	There are no lines in the line group (i.e., one or more of the lines in the group have not been opened due to some other error).
	E	A relative line of zero has been specified.
	F	A conflict was found between the optional features specified in the UCB and the optional features reflected in the device characteristics entry for this line. Verify that all DD statements specify the correct attributes for the device being opened.
	G	Insufficient main storage was available to satisfy a GETMAIN request to build a TCAM control area.
	H	Invitation lists have not been provided for each line in the line group.

- 041 1 An incorrect length address vector table (AVT) has been specified to support disk message queuing.
- 2 The keylength specified by the INTRO macro instruction and the keylength used in formatting the message queues data set are not equal.
- 3 Dissimilar disk types have been defined for message queuing.
- 4 Something other than reusable and non-reusable disk message queuing has been specified.
- 5 Insufficient main storage was available to build a message queues DEB.
- 6 Insufficient main storage was available to build a message queues input-output block (IOB).
- 7 The message queue was not formatted correctly prior to opening the message queues data set.

System Action: The action taken is dependent upon the return code provided by the user asynchronous error routine. If no error routine is provided, TCAM will terminate with the system completion code indicated in the message text by xxx.

Programmer Response: Probable user error. No action is required if the programmer has provided a user ABEND entry in the problem-program exit list named by the EXIST= operand of the DCB macro instruction whose DD statement is named by zzz. The routine specified by the entry is given control from the TCAM Open Error Handler. If no user routine is provided, TCAM issues an ABEND macro instruction for the MCP causing it to terminate abnormally with the system completion code indicated in the message text by xxx.

Problem Determination: Table I, items 5a, 10, 29.

IED009I CHECKPOINT DISK ALLOCATION ERROR - DATA SET NOT OPENED

Explanation: The amount of disk space specified on the DD statement for the checkpoint data set is insufficient for minimum checkpoint requirements. The checkpoint data set is not opened.

System Action: The checkpoint facility is not available to the Message Control Program (MCP). Limited processing continues without checkpoint.

Programmer Response: Probable user error. If the checkpoint facility is required, terminate the MCP, reallocate the checkpoint data set giving it more space, and run the MCP job again with DISP=NEW coded in the DD statement for the checkpoint data set.

Problem Determination: Table I, items 5a, 10, 29.

IED

IED010I CHECKPOINT - INSUFFICIENT CORE

(DATA SET NOT OPEN xxx)
ENVIRON xxx
INCIDENT xxx
CKREQ name xxx

Explanation: A GETMAIN macro instruction issued by a checkpoint routine cannot be satisfied because insufficient main-storage is available. The xxx qualifier is the number of bytes of storage requested. For a checkpoint request record the name qualifier is the name of the process entry in the terminal table for which a checkpoint request record would have been taken had sufficient main storage been available.

System Action: If the data set was not opened, processing will continue without the checkpoint facility. If the data set has been opened successfully, the checkpoint record indicated in the message was not taken, but the checkpoint facility is still active and will continue processing.

Programmer Response: Probable user error. Specify a larger region or partition and do a TCAM warm restart. A warm restart uses the checkpoint facility to recreate the environment prior to a normal closedown. The warm restart is specified as the STARTUP=W operand of the INTRO macro instruction or as a REPLY xx,'S=W,U' response to message IED002A.

Problem Determination: Obtain an ABEND dump of the Message Control Program taken immediately after the error message was issued.

IED011I SYSTEM INTERVAL CANNOT BE ALTERED

Explanation: A system interval of zero or no system interval at all was specified in the INTVAL= operand of the INTRO macro instruction or in the operator's response to a message issued at execution time, or the Time-Sharing Option (TSO) is active and an operator command was entered to modify the value of the interval. The interval, a time during which polling and addressing are suspended on multipoint lines to polled stations, cannot be altered.

System Action: The requested action is not taken. Normal processing continues.

Operator Response: If the interval feature is required, close down the system. Either reassemble with a positive value specified in the INTVAL= operand of the INTRO macro instruction and restart, or restart the job with a non-zero value provided in the REPLY xx,'I=nn,U' response to message IED001A. If the interval feature is not required, refrain from entering the MODIFY id, INTERVAL=SYSTEM[,nn] operator commands.

Problem Determination: If a non-zero system interval is specified and this

response is received, check Table I, items 2, 29.

Have a listing of the Message Control Program available.

Have the console listing or the terminal listing for the device which entered the command available.

IED012I TSO SESSION ON LINE xxx COMMAND REJECTED

Explanation: An operator command to stop the line xxx has been entered, but a TSO session is currently in progress on the line.

System Action: The command is rejected. Normal processing continues.

Operator Response: None. Information only. If the line must still be stopped, wait until the TSO session has been completed and reenter the command.

Problem Determination: Table I, items 2, 10, 29. If TSO is not currently active, or if xxx in the response does not agree with the value specified in the command. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.

IED013I STOP REQUEST FOR SELF - VARY COMMAND REJECTED

Explanation: An operator command to stop a line was entered, but the line specified is associated with the station that entered the command.

System Action: The line is not stopped. Normal processing continues.

Operator Response: None.

IED014I TCAM ALREADY IN SYSTEM

Explanation: The TCAM initialization routine has detected the presence of another Message Control Program (MCP) in this system.

System Action: Initialization of the second MCP is terminated. A return code of X'04' is returned to the user code immediately following the INTRO macro instruction in the MCP. If the MCP is not halted, results are unpredictable, and may cause the previous MCP to also become unpredictable.

Programmer Response: Close down the MCP currently in the system before attempting to restart the MCP for which this message is issued. An invalid procedure in closing down the previous MCP may leave a non-zero value in CVT+X'FO'. When TCAM starts, the word must be zero to avoid this error condition. Make sure there is no other TCAM MCP operating before attempting to set this word to zero.

Problem Determination: Table I, items 2, 29.

IED016I STATION xxx NOT FOUND

IED015I TCAM AP OPEN ERROR 043-x yyy zzz

Explanation: In attempting to open the application program data set represented by the DD statement named yyy in the job named zzz, TCAM's Open Executors encountered an error. In the message text, x is a one-byte reason code naming the specific error that was encountered. Possible values for x and their explanations are:

- 01 An application program OPEN has been issued but there is no Message Control Program (MCP) active in the system.
- 02 The QNAME= parameter of a DD statement for an application program is not the name of a process entry in the terminal table, or the process entry named is inconsistent with the DCB macro instruction format.
- 03 A process entry named on a DD statement associated with an application program is currently being used by another data control block.
- 04 Insufficient main storage was available in the MCP to build internal control blocks.
- 05 Insufficient main storage was available in the application program area to build internal control blocks.

System Action: TCAM will terminate the application program with a system completion code of 043.

Operator Response: Report this message to the system programmer.

Programmer Response: The possible values of x and their appropriate responses are:

- 01 Verify that an MCP is active before attempting to start an application program.
- 02,03 Recode the QNAME= parameter specifying the name of a valid process entry.
- 04 Specify a larger region or partition size in the JOB statement for the MCP.
- 05 Specifying a larger region or partition size in the JOB statement for the application program or restart the system, specifying a larger system queue space.

Problem Determination: Table I, items 2, 10, 29.

Explanation: An operator command referring to a station named xxx was entered, but xxx is not an entry in the TCAM terminal table.

System Action: The action requested by the command is not taken. Normal processing continues.

Operator Response: Verify the spelling of the station name. Remember that lower-case characters entered from a station other than the system console are not generally equivalent to upper case characters. Respecify the command.

Problem Determination: If the station name is correct, and the response is still received, see Table I, items 2, 10, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.

IED017I LINE xxx NOT OPEN

Explanation: An operator command referring to a line named xxx is entered, but the line is either not open or has been opened idle.

System Action: The requested action is not taken. Normal processing continues.

Operator Response: Verify that the line referred to is open and active. Reenter the command. If the line is open but inactive, it may be activated with a VARY (line), ONTP operator command before reentering the command which provided this response.

Problem Determination: Table I, items 2, 10, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.

IED018I xxx COMMAND INVALID

Explanation: An operator command is entered, and a field in the operand list is incorrectly formatted, or required operands are missing, or operands are in the incorrect order. In the message text, xxx is the verb of the command in error.

System Action: The requested action is not taken. Normal processing continues.

Operator Response: Check the required format of the operator command and correct the operand in error. Respecify the command.

Problem Determination: Table I, items 2, 10, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.

IED

IED019I xxx ALREADY STARTED

Explanation: An operator command to start the line or station named by xxx is entered. The line or station is already active.

System Action: The command is ignored and normal processing continues.

Operator Response: None.

IED020I xxx STARTED

Explanation: An operator command to start the line or station named xxx is entered. The line or station is started, and the message is a confirmation of the action taken.

System Action: The line or station is started. Normal processing continues.

Operator Response: None.

IED021I AUTO POLL STARTED FOR xxx

Explanation: An operator command to start autopolling on the line named xxx was entered. This response confirms that the action was taken.

System Action: Autopolling begins for the line named xxx. Normal processing continues.

Operator Response: None.

IED022I AUTO POLL ALREADY STARTED FOR xxx

Explanation: A request to start autopolling on the line named xxx was entered. The line is already being autopollled.

System Action: Normal processing continues.

Operator Response: None.

IED023I TRACE STARTED FOR xxx

Explanation: An operator command to start TCAM's line I/O interrupt trace was entered for the line named xxx. This message confirms that the action has been taken. The line I/O interrupt trace is a sequential recording in main storage of I/O interrupts on a line.

System Action: I/O trace is started on the line named xxx. Normal processing continues.

Operator Response: None.

IED024I TRACE ALREADY STARTED FOR xxx

Explanation: An operator command to start TCAM's line I/O interrupt trace for the line named xxx was entered, but I/O trace was already active for this line.

System Action: Normal processing continues.

Operator Response: None.

IED025I xxx ALREADY STOPPED

Explanation: An operator command to stop the line or station named xxx is entered. This line or station is not currently active.

System Action: Normal processing continues.

Operator Response: None.

IED026I xxx STOPPED

Explanation: An operator command to stop the line or station named xxx is entered. The line or station is stopped. This message confirms the action taken.

System Action: The line or station stops. Normal processing continues.

Operator Response: None.

IED027I AUTO POLL STOPPED FOR xxx

Explanation: A request to stop autopolling on the line named xxx was entered. This message confirms that autopolling has been stopped.

System Action: Autopolling stops on the line. Processing continues.

Operator Response: None.

IED028I AUTO POLL ALREADY STOPPED FOR xxx

Explanation: An operator command to stop autopolling on the line named xxx was entered. Autopolling on the line is not in progress at this time.

System Action: Processing continues.

Operator Response: None.

IED029I TRACE STOPPED FOR xxx

Explanation: An operator command to stop line I/O interrupt trace for the line named xxx was entered. This response confirms that tracing is stopped.

System Action: Line I/O trace is stopped on the line. Processing continues.

Operator Response: None.

IED030I TRACE ALREADY STOPPED FOR xxx

Explanation: An operator command to stop line I/O interrupt trace on the line named xxx is entered. Line I/O trace is not currently active on this line.

System Action: Processing continues.

Operator Response: None.

IED031I xxx QUEUE SIZE=yyy QUEETYP=bb,
STATUS=zzz,...PRIORITY=aaa,...

Explanation: An operator command to display the queue for the station named xxx is entered. This message displays the fields of the queue. In the message text, yy is the number of messages currently on the queue; zzz is the equivalent of the status bits currently on; aaa represents the priority levels for the priority queues associated with the master queue for the station; and bb is the queuing type for this queue.

System Action: Processing continues.

Operator Response: None.

IED032I xxx LNSTAT=zzz,...ERR=aaa,...

Explanation: An operator command to display the status of the line named xxx is entered. In the message text, zzz is the equivalent of the status bits currently on in the line control block, and aaa represents the equivalent of the bits currently on in the message error record for the line.

System Action: Processing continues.

Operator Response: None.

IED033I xxx STATUS=yyy,...INTENSE=zz IN-SEQ=aaa
OUT-SEQ=bbb

Explanation: An operator command to display the fields of the entry for the station named xxx is entered. In the message text, yyy represents the equivalents of the status bytes of the entry, zz is the setting of the error recording field, and aaa and bbb are the input and output sequence numbers, respectively.

System Action: Processing continues.

Operator Response: None.

IED034I xxx HAS NO yyy OPTION

Explanation: An operator command to display or modify the contents of the option field named yyy for the station named xxx is entered. No option field named yyy exists for this station.

System Action: The requested action is not taken. Processing continues.

Programmer Response: Verify that the option named yyy is spelled correctly and is defined for the station named xxx. Reenter the command.

Problem Determination: If the option field named by yyy exists for the station named xxx, and the message recurs check Table I, items 2, 10, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.

IED035I xxx OPTION yyy=zzz

Explanation: An operator command to display the contents of the option field named yyy for the station xxx is entered. In the message text zzz represents the requested contents.

System Action: Processing continues.

Operator Response: None.

IED036I xxx ACTIVE=yyy,...

Explanation: An operator command to display the list of active stations associated with the line named xxx is entered. In the message text, yyy represents the entries which meet this requirement.

System Action: Processing continues.

Operator Response: None.

IED037I xxx INACTIVE=yyy,...

Explanation: An operator command to display the list of inactive stations associated with the line named xxx is entered. In the message text, yyy represents the names of the entries which meet this requirement.

System Action: Processing continues.

Operator Response: None.

IED038I xxx IS ON LINE yyy zzz aaa

Explanation: An operator command to display the line information associated with the station named xxx is entered. In the message text, yyy is the ddname of the line on which the station is an entry, zzz is the relative line number and aaa is the unit control block identification (the hardware address) of the line associated with the station.

System Action: Processing continues.

Operator Response: None.

IED039I NO STATIONS INTERCEPTED

Explanation: An operator command requesting the display of the list of all currently intercepted (held) stations in the system is entered. No stations are currently being held.

System Action: Processing continues.

Operator Response: None.

IED040I INTERCEPTED STATIONS=xxx,...

Explanation: An operator command requesting display of the list of all stations which are currently intercepted (held) is entered. In the message text, xxx represents the name of the stations which meet this requirement.

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System Action: Processing continues.

Operator Response: None.

IED041I PRIMARY=xxx

Explanation: An operator command requesting display of the name of the current primary operator control station is entered. In the message text, xxx is the name of the current primary control station.

An operator command requesting that the station named xxx be made the primary operator control station is entered. This response confirms that the action was taken.

System Action: Processing continues. If the command entered was MODIFY id,PRIMARY=xxx, the named station is made the primary operator control station.

Operator Response: Retry the command.

IED042I xxx ALREADY PRIMARY

Explanation: An operator command requesting that the station named xxx be made the primary operator control station was entered, but xxx is already the primary operator control station.

System Action: Processing continues.

Operator Response: None.

IED043I SECONDARY=xxx,...

Explanation: An operator command requesting display of the list of all secondary operator control stations is entered. In the message text, xxx represents the names of all entries which meet this requirement. The system console (SYSCON) will not be listed as a secondary operator control station unless there are no other secondary stations. If the primary operator control station is not the system console, it will be listed as a secondary station.

System Action: Processing continues.

Operator Response: None.

IED044I xxx NOT ELIGIBLE FOR PRIMARY

Explanation: An operator command requesting that the station named xxx be made the primary operator control station was entered, but xxx is not eligible to be made the primary (i.e., it is not defined as a secondary operator control station).

System Action: The primary operator control station remains unchanged. Processing continues.

Operator Response: Retry the command.

Problem Determination: If the station is a valid secondary operator control station, see Table I, items 2, 10, 29. Save the terminal listing for the device which entered the command available.

IED045I SYSTEM INTERVAL ALREADY ACTIVE

Explanation: An operator command to activate the system interval is entered, but a previous request has already been honored.

System Action: Processing continues. The system interval is being activated already.

Operator Response: None.

IED046I LINE FOR xxx IS OUTPUT ONLY STATION

Explanation: An operator command to start or stop a terminal for entering messages is received, but the line has no capability to enter messages. In the message text, xxx is the name of the station to be started or stopped.

System Action: The requested action is not taken. Processing continues.

Operator Response: Retry the command.

Problem Determination: If the station named xxx in the response is not an output only station or is not identical to the named specified in the command, check Table I, items 2, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.

IED047I SYSTEM INTERVAL IS {xxx }
 {ACTIVE }

Explanation: If the message text includes xxx, an operator request to change the system interval has been entered and the response (this message) confirms that the requested action has been taken. If the message text contains ACTIVE, an operator request to start or stop a line group has been entered but the system interval is active, the message indicates that the request is rejected.

System Action: The value of the system interval has been changed to xxx, or the command has been rejected.

Operator Response: None.

IED048I POLLING DELAY FOR xxx IS yyy

Explanation: An operator command to change the polling interval for the line on which the station named xxx is a member to a new value of yyy is entered. This message verifies that the requested action is taken.

System Action: The polling delay for the line group on which the named station is a member is changed to yyy. Processing continues.

Operator Response: None.

IED049I OLT CONTROLS LINE xxx COMMAND REJECTED

Explanation: A command to start or stop a line was entered, but the line is currently controlled by the Online Test (OLT) feature.

System Action: The requested function is not performed. Processing continues.

Operator Response: Refrain from attempting to start or stop the line until it is freed for use by OLT.

Problem Determination: If the line named by xxx is not identical to that specified in the command, or if on-line test is not active in the system, see Table I, items 2, 10, 29. Save the terminal listing for the device which entered the command.

IED050I xxx OPTION yyy MODIFIED

Explanation: An operator command to modify the contents of the option field named yyy associated with the station named xxx is entered. This message confirms that the requested action is taken.

System Action: The option field is modified as requested. Processing continues.

IED051I xxx SET FOR HOLD, SEQ-OUT=yyy

Explanation: An operator command to intercept (hold) the station named xxx is entered. This message confirms that the action is taken. In the message text, yyy is the output sequence number associated with the station at the time the station is intercepted.

System Action: The named station is intercepted. Processing continues.

Operator Response: None.

IED052I xxx ALREADY SET FOR HOLD

Explanation: An operator command to hold the station named xxx was entered, but the station is already intercepted.

System Action: The requested action is not taken. Processing continues.

Operator Response: Retry the command.

IED053I xxx ALREADY RELEASED

Explanation: An operator command to release the station named xxx is entered. The station is already released.

System Action: The requested action is not taken. Processing continues.

Operator Response: None.

IED054I xxx RELEASED, SEQ-OUT=yyy

Explanation: An operator command to release the station named xxx is entered. This message confirms that the station is released. In the message text, yyy is the sequence number for output currently associated with the station.

System Action: The station named xxx is released. Processing continues.

Operator Response: None.

IED055I I/O TRACE CANNOT BE ALTERED

Explanation: An operator command to start or stop the TCAM line I/O interrupt trace facility was entered, but there is no trace table available into which entries can be made.

System Action: The requested action is not taken. Processing continues.

Operator Response: If the trace feature is required, close down the system and restart; when message IED002A is issued, enter REPLY xx,'T=nn,U,' where nn is a non-zero value. Otherwise, refrain from attempting to start or stop the trace facility.

Problem Determination: If a non-zero value is specified for trace and the message recurs, check Table I, items 2, 10, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.

IED056I xxx OPTION yyy DATA FORMAT INVALID

Explanation: An operator command to modify the contents of the option field named yyy associated with the station named xxx is entered, but the data format specified in the command differs from the definition of the option field format.

System Action: The option field is not modified. Processing continues.

Operator Response: Verify that the type specified in defining the option matches that specified in the command. Respecify the command.

Problem Determination: If the types are identical and the problem recurs, or if the station named xxx or the option named yyy in the response do not agree with the corresponding values in the command, check Table I, items 2, 10, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.

IED057I xxx NOT CAPABLE OF AUTOPOLL

Explanation: An operator command to start or stop autopolling on the line named xxx is entered, but the line is not capable of

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being autopollled (per its unit control block).

System Action: The requested action is not taken. Processing continues.

Operator Response: None.

IED058I xxx SENSE COUNT=yy SETTING=zz

Explanation: An operator command to modify the setting of the sense information for the station or line named by xxx is entered. yy is the requested sense count and zz is the requested sense type. This message confirms that the requested action is taken.

System Action: Sense information is modified for the station or line named. Processing continues.

Operator Response: Retry the command.

Problem Determination: If the line or station named xxx, the sense count or the setting in the response do not agree with the corresponding values in the command, check Table I, items 28 10, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.

IED059I xxx LIST STATUS=zzz,...

Explanation: An operator command to display the status of the invitation list for the line named xxx is entered. In the message text, zzz represents the equivalents of the status information bits.

System Action: Processing continues.

Operator Response: None.

IED060I xxx CANNOT BE HELD

Explanation: An operator command to hold the station named xxx is entered, but the station is not capable of being held (for instance, it is associated with a main-storage only queue, it is on a line which is not open or has been opened idle, or no HOLD macro has been coded in the Message Control Program).

System Action: The requested action is not taken. Processing continues.

Operator Response: None.

IED061I POLLING DELAY FOR xxx CANNOT BE ALTERED

Explanation: An operator command to modify the polling interval for the line associated with the station named xxx is entered, but the line is a switched (dial) line.

System Action: The requested action is not taken. Processing continues.

Operator Response: None.

IED062I xxx OPTION yyy CANNOT ACCEPT SPECIFIED DATA

Explanation: An operator command to modify the contents of the option field named yyy associated with the station named xxx is entered, but the data to replace the current setting of the option field is greater in length than the field.

System Action: The requested action is not taken. Processing continues.

Operator Response: Verify that the data length defining the option is not less than that specified in the command. Reenter the corrected command.

Problem Determination: If the replacement data will fit in the option field and the problem recurs, or if the station named xxx or the option named yyy in the response do not agree with the corresponding values in the command, check Table I, items 2, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.

IED063I CLOSEDOWN IN PROGRESS - [yyy] COMMAND REJECTED

Explanation: System closedown is in progress. All further operator commands will be rejected.

System Action: The requested action is not taken. System closedown continues.

Operator Response: Refrain from entering TCAM operator commands.

IED064I LINE addr CONTROL UNIT NOT OPERATIONAL

Explanation: The Transmission Control Unit (TCU) to which the specified line is connected is not operational. The line is not immediately available for message transmission.

System Action: Processing continues, but stations on the line named by addr cannot be used for message transmission.

Operator Response: Probable user error. The TCAM job that is being started may be cancelled and restarted after the control unit is made operational, or after the TCU is made operational this line may be activated by entering VARY (line), ONTP. If the control unit is online and the problem recurs, call IBM for hardware support.

IED065I INITIALIZATION ERROR xxx

Explanation: The non-resident initialization routines have returned a decimal return code, represented in the message text by xxxx, to the INTRO macro instruction. This code is passed on to the user's next instruction by the INTRO macro instruction. The values of xxxx and their meanings are:

0004 The Message Control Program (MCP) initialization routine has detected the presence of another MCP in this system.

0008 Sufficient main storage was not available to satisfy a GETMAIN request in one of the non-resident initialization routines.

0012 Sufficient main storage was not available to satisfy a GETMAIN request in one of the non-resident initialization routines.

0016 A terminal definition error. The module has found one or more incorrectly specified TERMINAL macro instructions, while sorting the terminal name table.

0020 One of the following errors in defining the primary operator control terminal:

- a) The terminal defined as the primary operator terminal could not be found in the terminal name table.
- b) The primary operator control terminal did not have send and receive capabilities.
- c) The primary operator control terminal was not defined as being a possible secondary operator control terminal.

System Action: Initialization of the MCP is terminated. The error code is returned to the user in register 15 by the INTRO macro instruction. If the MCP is not halted when INTRO's return code is non-zero, results are unpredictable.

Programmer Response: If xxxx is 0008 or 0012, either increase the region or partition size, or specify smaller optional features. If xxxx is 0004, close down the MCP currently in the system before attempting to restart the MCP for which this message is issued. If xxxx is 0016 or 0020, verify that the terminal table entries are correct in the assembly, close down the MCP currently in the system, and reassemble and restart the job with the corrected entries.

Operator Response: Contact the system programmer.

Problem Determination: Table I, items 5a, 10, 29.

IED067I TCAM INITIALIZATION BEGUN

Explanation: The parameters on the IEDQDATA DD statement have been examined and found to be satisfactory. Formatting of the message queues data set by the IEDQXA utility has begun.

System Action: Processing continues.

Programmer Response: None. Information only.

Operator Response: None. Information only.

IED068I UNABLE TO OPEN IEDQDATA

Explanation: An attempt has been made to format a message queues data set on disk by the IEDQXA utility program, but the IEDQDATA DD statement for this utility is missing. This message may be due to a possible error while attempting to read the JFCB for the IEDQDATA DD statement.

System Action: The IEDQXA utility abnormally terminates with an error code of 20 in register 15.

Programmer Response: Probable user error. Supply the missing DD statement and resubmit the initialization job. Have a listing of the utility JCL available before calling IBM for programming support.

Operator Response: Contact the system programmer.

IED069I INVALID KEYLEN FOR IEDQDATA

Explanation: Either the DCB= operand of the IEDQDATA DD statement for the IEDQXA formatting utility program has been omitted, or DCB=KEYLEN=integer has been coded on this DD statement and the integer is less than 31.

System Action: The IEDQXA utility abnormally terminates with a return code of 8 in register 15.

Programmer Response: Probable user error. Supply a correct IEDQDATA DD statement and resubmit the initialization job. If the problem recurs, have a listing of the utility JCL available before calling IBM for programming support.

Operator Response: Contact the system programmer.

IED070I IEDQDATA DOES NOT SPECIFY CONTIG SPACE IN CYLINDERS

Explanation: The SPACE= keyword on the IEDQDATA DD statement for the IEDQXA disk-initialization utility has specified CYL but not CONTIG, or CONTIG but not CYL, or neither. The following is an example of a properly coded SPACE= parameter:

```
//IEDQDATA DD (other operands),SPACE=
(CYL,(2,2),,CONTIG)
```

System Action: The IEDQXA utility abnormally terminates with a return code of 16.

Programmer Response: Probable user error. Correct the SPACE= parameter on the IEDQDATA DD statement and resubmit the initialization job. If the problem recurs, have a listing of the utility JCL available before calling IBM for programming support.

Operator Response: Contact the system programmer.

IED071I UNEQUAL PRIMARY AND SECONDARY EXTENTS ON IEDQDATA

Explanation: The SPACE= keyword on the IEDQDATA DD statement for the IEDQXA disk-initialization utility does not specify a number of cylinders for secondary allocation equal to the number of cylinders specified for primary allocation; TCAM requires that the primary and secondary allocation be equal.

System Action: The IEDQXA utility abnormally terminates with a return code of 16 in register 15.

Programmer Response: Probable user error. Respecify the SPACE= parameter of the IEDQDATA DD statement so that the primary and secondary allocation are equal, and resubmit the initialization job. Have a listing of the utility JCL available before calling IBM for programming support.

Operator Response: Contact the system programmer.

IED072I I/O ERROR ON IEDQDATA

Explanation: An I/O error from which recovery cannot be made has occurred during an attempt to format a message queues data set by means of the IEDQXA utility.

System Action: Initialization is terminated with a return code of 12 in register 15. The data set is not completely formatted.

Programmer Response: Use the IEHPROGM system utility to scratch the data set, and resubmit the initialization job. If possible, try to avoid the allocation of the same area, as it probably contains a bad track.

Operator Response: Start TCAM only if it does not require the message queue data set defined by the IEQDATA DD statement in the message text. Otherwise, contact the system programmer. If the problem recurs, use the IBCDASDI independent utility to assign alternates for defective tracks on the volume being used.

Operator Response: To temporarily bypass the error, substitute SYSPRINT DD DUMMY for the existing SYSPRINT DD statement. The SYSPRINT data set is only a copy of the messages displayed at the console. Then scratch the old IEDQDATA data set and rerun the job. If the problem recurs, call IBM for hardware support.

IED074I TCAM INITIALIZATION COMPLETE

Explanation: A message queues data set on disk has been completely formatted by the IEDQXA utility program, and is ready for use by a RCAM Message Control Program.

System Action: Normal end of job.

Operator Response: None. Information only.

IED075I END OF EXTENT. RECORD COUNT IS rrrrrrrr, TIME IS nnnn SEC

Explanation: One extent (volume) of a message queues data set residing on disk has been formatted by the IEDQXA utility program. The record count, indicated by xxx, is the cumulative total. That is, xxx is the total number of records formatted thus far in the entire data set, and not just in this one extent.

rrrrrrrr= cumulative record count
nnnn= cumulative elapsed time

System Action: Processing continues.

Operator Response: None. Information only.

IED076I TCAM NON-REUSABLE DISK THRESHOLD CLOSEDOWN

Explanation: The message queues data set located on nonreusable disk has received enough messages so that the percentage of the data set area on disk specified by the THRESH= operand of the DCB macro instruction for the data set has been exceeded.

System Action: The system begins a flush closedown of the TCAM MCP. A flush closedown sends all queued messages to their destinations before closing.

Operator Response: Contact the system programmer.

Programmer Response: Reformat the non-reusable disk message queue data set with the IEDQXA utility, and start the job with S=C coded for the INTRO macro instruction. If this message is followed by a system completion code 045 with a user code of 001, the THRESH= value specified was too high, and register 6 points to a CPB.

Problem Determination: If the value in CPB+X'2D' (3 bytes in length) greatly exceeds the total number of records formatted in the non-reusable disk data set, check Table I, items 5a, 10, 29.

IED077I xxx OPTION yyy DATA CHARACTER INVALID

Explanation: An operator command to modify the contents of the option field named yyy associated with the station named xxx is entered, but the contents of the modification data do not agree with the framing characters surrounding the data.

System Action: The requested action is not taken. Processing continues.

Operator Response: Verify that the data specified within the framing characters is invalid for the framing characters used. Reenter the correct command.

Problem Determination: If the data is valid and the problem recurs, or if the station named xxx or the option named yyy in the response do not agree with the corresponding values in the command, check Table I, items 2, 10, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.

IED078I DLQ TERM ERROR

Explanation: The station named in the DLQ= operand of the INTRO macro is not eligible to be a dead-letter queue, since it is a TSO station.

System Action: The terminal number of the terminal defined as the dead-letter queue is not stored in the address vector table (AVT) and normal processing continues.

Programmer Response: Probable user error. If no action is taken, the dead-letter queue is not defined for this Message Control Program (MCP). If a dead-letter queue is desired, terminate the job, specify a valid station for the DLQ-operand of INTRO (either by recoding INTRO and re-assembling, or by entering REPLY xx,'Q=name,U' to message IED002A at execution time) and resubmit the job.

Problem Determination: Table I, items 5a, 10, 29.

IED079I ENDING STATUS NOT RECEIVED FROM LINE
addr-LINE UNAVAILABLE

Explanation: The Transmission Control Unit to which this line is connected is not operational. An interrupt indicating successful completion of the initial channel program has not occurred for this line, and the line is not available for sending or receiving.

System Action: The error message is written to the console and the next line in the line group is checked to see if the initial channel program has completed. If it has not, the error message is written again.

Operator Response: Attempt to start the line by entering VARY (addr),ONTP. If the problem recurs, call IBM for hardware support.

IED080I START OF TCAM SYSTEM DELAY

Explanation: Someone has entered MODIFY id,INTERVAL= SYSTEM which activated the system interval.

System Action: Polling and addressing on multipoint lines are suspended for the duration of the interval currently defined for the system. Switched (dial) lines are not affected. If there are no dial lines in the system, this message will be followed by what seems to be a system WAIT state. At the end of the interval, operations will automatically resume.

Operator Response: None. At the end of the system interval, normal operations will resume. Changing the length of the delay interval with an operator command will not affect this delay, only subsequent ones. TCAM may be stopped or cancelled during a system delay.

IED081I END OF TCAM SYSTEM DELAY

Explanation: The system interval has expired.

System Action: The Message Control Program is resuming normal operations.

Operator Response: None. Information only.

IED082I CHECKPOINT DISK ERROR -- DATA SET NOT OPENED

Explanation: Either the control record for the checkpoint data set could not be read during a restart, or none of the environment records could be read during a restart. As a result, the checkpoint data set is not open.

System Action: The checkpoint data set is not opened, the environment is not reconstructed, and the checkpoint facility is not available to the Message Control Program. Limited processing continues.

Programmer Response: The IBCDASDI utility program should be used following closedown to clean up the disk on which the data set is located, if the checkpoint facility is desired. If the problem recurs, call IBM for hardware support.

IED083I CHECKPOINT DISK ERROR -- RECOVERY FROM PREVIOUS RECORD

Explanation: TCAM's checkpoint routine could not read the environment record that was to be used to reconstruct the environment. If possible, the next-most-recent environment is used to reconstruct.

System Action: The next-most-recent environment record is used to reconstruct the TCAM environment.

Programmer Response: Information -- the environment is not as well reconstructed when older records are used. If the problem recurs frequently, the IBCDASDI utility program should be used to clean up the disk on which the data set is located. In this case, a cold restart only can be performed. If the problem recurs, call IBM for hardware support.

IED084I CHECKPOINT DISK ERROR -- RECOVERED

Explanation: An error occurred while TCAM was writing an environment, checkpoint request or incident record into the checkpoint data set, but space for another such record was available in the data set.

IED093I SET SYSTEM INTERVAL COMMAND ACCEPTED

Explanation: The operator entered a command requesting activation of the system interval, which suspends polling and addressing on multipoint lines to polled stations. This message confirms that the command has been accepted.

System Action: A system interval is activated. Processing continues.

Operator Response: None.

IED094I CORE REQUESTED FOR ON-LINE TEST NOT AVAILABLE

Explanation: The amount of main storage requested by the OLTEST= operand of the INTRO macro instruction is not available. However, the minimum amount of main storage required to run one on-line test is available.

System Action: Only one on-line test may be run at a time. Limited processing continues.

Programmer Response: Probable user error. If more than one on-line test is to be run simultaneously, close down the Message Control Program (MCP) and rerun with a larger region specified.

Problem Determination: Table I, items 10, 29.

IED095I MODIFY OLT REJECTED - OLT NOT ACTIVE

Explanation: The request for an on-line test (OLT) is rejected because the subtask that handles the requests has either terminated or was never activated (because OLTEST=0 (O=0) was specified in the INTRO macro).

System Action: The command is rejected. Normal processing continues.

Operator Response: Close down the TCAM MCP and rerun; when message IED002A is issued, enter REPLY xx,'O=nn,U', where nn is a non-zero value.

Problem Determination: Table I, items 10, 29.

IED096I { CHECKPOINT } CONTROL NO LONGER ACTIVE
 { OPERATOR }
 { COMWRITE }

Explanation: The indicated subtask of TCAM has abnormally terminated, and the related functions will no longer be performed.

System Action: Limited processing continues.

Programmer Response: Determine the reason for the abnormal termination, correct and rerun. Close down the TCAM job and rerun.

Operator Response: Closedown the TCAM job and rerun.

Problem Determination: Table I, items 5a, 10, 29.

IED097I TCAM IS CLOSED DOWN

Explanation: A TCAM closedown has been completed and control has returned to the code which follows the READY macro instruction coded in the Message Control Program.

System Action: Normal end of job.

Programmer Response: None.

Operator Response: None.

IED098I DCB OPEN FOR MESSAGE PROCESSING PROGRAM - jjj

Explanation: A TCAM closedown has started, but a TCAM DCB in an application program is still open.

System Action: The closedown will not complete until the closedown is performed for the DCB(s).

Operator Response: Cancel the job named jjj. Inform the application programmer that his job was cancelled so that closedown of the Message Control Program could proceed.

IED099I ROUTINE LOADED

Explanation: The routine that was called by the command MODIFY id,DEBUG=L,yyy is loaded and initialized.

System Action: Normal processing continues.

Operator Response: None. Information only.

IED100I ROUTINE DEACTIVATED

Explanation: The routine designated in the command MODIFY id,DEBUG=D,yyy is deactivated and deleted.

System Action: Normal processing continues.

Operator Response: None. Information only.

IED101I RESTART IN PROGRESS

Explanation: The requested operation cannot be processed because TCAM is being restarted.

System Action: The command is ignored. Normal processing continues.

Operator Response: Reenter the command after the restart is completed. If the problem recurs, obtain a SYSABEND dump of the region in which the Message Control Program resides before calling IBM for programming support.



IED102I INVALID OPERAND

Explanation: The format of the command MODIFY id,DEBUG=subparameter, routine is incorrect.

System Action: The command is ignored. Normal processing continues.

Operator Response: Probable error caused by improper command specification. Check for errors in one or more of the following operands:

- A subparameter other than L or D is specified.
- An invalid routine named is specified. Valid names are IEDQFE10, IEDQFE20 and IEDFE30. Reenter the command with the correct format.

Problem Determination: Table I, items 2, 29.

IED103I ROUTINE ALREADY ACTIVE

Explanation: An operator command requesting activation of a debugging routine is entered, but the routine is already active.

System Action: The command is ignored. Normal processing continues.

Operator Response: None.

Problem Determination: Table I, items 2, 11, 29. Have available the IMDSADMP output, formatted using IMDPRDMP showing the nucleus and the TCAM REGION.

IED104I ROUTINE NOT ACTIVE

Explanation: A request has been made to deactivate a debugging routine that is not active.

System Action: The command is ignored. Normal processing continues.

Operator Response: None.

Problem Determination: Table I, items 2, 11, 29. Have the operator control console listing available. Have available the IMDSADMP output, formatted using IMDPRDMP and showing the nucleus and the TCAM region.

IED105I RETURN CODE = xx

Explanation: A user-written routine has passed a return code to a debugging routine of the operator control facility.

System Action: Normal processing continues.

Programmer Response: The indicated return code probably denotes an exceptional condition in the user routine. Determine the problem from the return code given and correct the problem.

IED106I MULTIPLE REQUEST

Explanation: The routine requested is already active in the system.

System Action: The request is ignored. Normal processing continues.

Programmer Response: The requested routine was probably not loaded via a program other than by the MODIFY id, DEBUG=x,yyy operator command. Determine how the module was loaded previously and correct.

Problem Determination: Table I, items 2, 11, 29. Have available the IMDSADMP output, formatted using IMDPRDMP and showing the nucleus and the TCAM region.

Operator Response: Notify the system programmer.

IED107I COMWRITE NOT ACTIVE

Explanation: A request has been made to activate a debugging routine which requires that the FE Common Write task (COMWRITE) be active. COMWRITE is not active because COMWRITE=YES was not specified on the INTRO macro instruction.

System Action: The request is ignored. Normal processing continues.

Programmer Response: Probable user error. Instruct the operator to enter REPLY xx,'G=YES' as a response to message IED002A to insure proper initialization of the debugging aids. Make sure that a DD card is present specifying the COMWRITE data set, either on magnetic tape or disk.

Operator Response: Notify the system programmer.

Problem Determination: Table I, items 2, 11, 29. Have available the output of IMDSADMP, formatted by IMDPRDMP showing the nucleus and the TCAM region.

IED109I ROUTINE NOT DELETED

Explanation: A request has been made to deactivate a routine, and the SVC 9 (DELETE) function failed.

System Action: The routine is not deleted. Normal processing continues.

Programmer Response: This message is a result of a failure of the DELETE function of the OS supervisor. The requested module to be deleted could not be found by OS; however, it was found by the TCAM operator control facility.

Problem Determination: Table I, items 2, 11, 29. Have available the IMDSADMP output, formatted by IMDPRDMP showing the nucleus and TCAM region.

IED110I LESS THAN 4 ENTRIES

Explanation: An attempt has been made to activate the subtask control block (STCB) trace dump, but there are less than four STCB trace entry slots in the STCB trace table.

System Action: The STCB trace dump is not activated. Normal processing continues.

Programmer Response: Probable user error. The IEDQFE20 printing utility requires a minimum of four trace entries in order to properly function. If this message recurs frequently, instruct the operator to restart the MCP, specifying a larger value for nn in the response REPLY xx,'A=nn,U' to the message IED002A.

Operator Response: Contact the system programmer.

Problem Determination: Table I, items 2, 5a, 10, 13, 29.

IED111I NO TRACE TABLE

Explanation: An attempt has been made to activate the subtask control block (STCB) trace dump, but no STCB trace table has been provided.

System Action: The STCB trace dump is not activated. Normal processing continues.

Programmer Response: Probable user error. If a trace facility is required, close down and restart the Message Control Program (MCP), specifying a non-zero integer value for nn in the response REPLY xx,'A=nn,U' to message IED002A.

Operator Response: Contact the system programmer.

Problem Determination: Table I, items 2, 5a, 10, 29.

IED112I TCAM REQUESTED COMWRITE CLOSEDOWN

Explanation: TCAM is closing down and is closing the FE Common Write (COMWRITE) subtask.

System Action: Normal end of job follows.

Operator Response: None. Information only.

IED113I I/O ERROR
addr,statsens,recordtype,COMWRITE CLOSING

Explanation: A permanent error has been detected on the indicated device. In the message text, addr, is the hardware line address, statsens is the CSW status byte and sense byte, and recordtype is the type of record (BUFF, IOTR, or STCB) being written when the I/O error occurs.

System Action: The FE Common Write (COMWRITE) task terminates abnormally with a system completion code of 044.

Operator Response: Probable hardware error. Check recording medium (tape or disk) for damage. If COMWRITE is required, TCAM must be stopped and restarted specifying another device for COMWRITE.

Problem Determination: Table I, items 18, 30.

IED114I Sxxx ABEND COMWRITE CLOSING

Explanation: The FE Common Write (COMWRITE) task has abnormally ended with the system completion code indicated by xxx.

System Action: The COMWRITE task is terminated with the indicated code.

Programmer Response: A system completion code of 044 is normally caused by invalid or missing JCL. Examine the job control statements, and ensure that a COMWRITE DD card exists and is valid. Rerun the job.

Operator Response: Contact the system programmer.

Problem Determination: Table I, items 5a, 29.

IED115I userid DATA AREA EXCEEDS CORE

Explanation: This message is caused by an invalid parameter list being passed to the FE Common Write (COMWRITE) task.

System Action: The request is ignored. Normal processing continues.

Operator Response: Contact system programmer.

Programmer Response: Probable user error. Examine the user routine using "userid" and correct any errors.

Problem Determination: Table I, items 2, 11, 29. Have the COMWRITE output data set. Have available the IMDSADMP output, formatted by IMDPRDMP, showing the nucleus and the TCAM region.

IED116I userid PARMLIST NOT ON FULLWORD BOUNDARY

Explanation: This message is caused by an invalid parameter list being passed to the FE Common Write (COMWRITE) task.

System Action: The request is ignored. Normal processing continues.

Operator Response: Contact system programmer.

Programmer Response: Probable user error. Examine the user routine using "userid" and correct any errors.

Problem Determination: Table I, items 2, 11, 29. Have the COMWRITE output data set. Have available the IMDSADMP output formatted by IMDPRDMP, showing the nucleus and the TCAM region.

IED117I userid BLKSIZE EXCEEDS DEVICE SPECS

Explanation: A parameter list passed to the FE common write (COMWRITE) task describes a block of data whose length exceeds the maximum that the device containing the COMWRITE data set can handle.

System Action: The request is ignored. Normal processing continues.

Operator Response: Contact system programmer.

Programmer Response: Probable user error. Examine the user routine using "userid" and correct any error.

Problem Determination: Table I, items 2, 11, 29. Have the COMWRITE output data set. Have available the IMDSADMP output, formatted by IMDPRDMP, showing the nucleus and the TCAM region.

IED118I PERMANENT I/O ERROR ON TRACE UNIT

Explanation: While reading the SYSUT1 data set, a permanent I/O error has been encountered.

System Action: Processing terminates.

Operator Response: Check the recording medium (tape or disk) of the trace data set for damage. If the medium is tape, clean the device.

Problem Determination: Table I, items 18, 30.

IED119I UNABLE TO OPEN ddname

Explanation: The system was unable to open the data set named ddname.

System Action: Processing terminates.

Operator Response: Probable user error. Check and correct the job control language for the indicated data set and rerun the job. This message is normally caused by the lack of a DD statement or by the ddname being misspelled.

Problem Determination: Table I, items 1, 2, 29.

IED120I BLOCK= PARM REQUIRES TAPE INPUT

Explanation: The BLOCK= keyword parameter was specified in the EXEC statement for the COMEDIT formatting utility, but the SYSUT1 DD card specified a direct access device.

System Action: The trace data set is formatted with the BLOCK= parameter ignored. Normal processing continues.

Programmer Response: None.

Problem Determination: Table I, items 1, 5a, 29. Instruct the operator to cancel the job, requesting a dump and save the output.

IED121I REQUESTED TIME NOT FOUND

Explanation: The time specified in the BLOCK= parameter of EXEC statement for the COMEDIT printing utility was not found on the tape data set described by the SYSUT1 DD statement. Two conditions may cause the error:

- There were no subtask control blocks (STCBs) or buffers on the trace data set.
- The time specified is later than the latest time recorded in the trace data set.

System Action: Processing terminates. No printout is provided.

Programmer Response: Probable user error. Ensure that STCBs are being traced and the BLOCK= parameter is correctly specified. The time stamp fields in the various trace records on tape are chronologically earlier than the BLOCK= parameter.

Problem Determination: Table I, items 1, 2, 29. Have a listing of the COMWRITE data set available.

IED122I INVALID MESSAGE CHAIN

Explanation: The chaining sequence of the message queues data set has been invalidated.

System Action: Processing terminates.

Programmer Response: None.

Problem Determination: Before calling IBM for programming support make sure that listing of the message queues data set is available.

IED123I INVALID PARAMETERS

Explanation: While scanning the EXEC statement parameters for the IEDQXB or IEDQXC printing utilities, an error has been detected.

System Action: If the IEDQXB utility is being used, the error is noted on the SYSPRINT data set. For either utility, processing terminates.

Programmer Response: Probable programmer error. Check and correctly specify the parameters on the EXEC statement. For the proper specification of parameters, refer to the TCAM Programmer's Guide (GC30-2024).

Problem Determination: Table I, items 1, 2, 29.

IED124I QUEUE HAS BEEN WRAPPED

Explanation: While running the IEDQXC printing utility, the message queues data set has run out of space and started to overlay the beginning of the data set (wrap-around).

System Action: Since the message queues data set can no longer be formatted reliably, the IEDQXA printing utility is terminated.

Programmer Response: In order to obtain the printed output from the message queues, process it via a system utility. To avoid the wrap-around in the future, format a larger message queues data set with the IEDQXA utility.

Problem Determination: Before calling IBM for programming support, make sure that a listing of the message queues data set is available.

IED125I xxx BYTES NEEDED

Explanation: The operator entered MODIFY id,DEBUG=x,yyy, but insufficient main storage exists for loading the requested debugging aid.

System Action: The requested debugging aid is not loaded. Normal processing continues.

Programmer Response: Specify a larger region or partition size for the TCAM Message Control Program (MCP).

Operator Response: Specify a larger region or partition size for the TCAM MCP, if possible. Otherwise, contact the system programmer.

Problem Determination: Table I, items 2, 10, 11, 29. Have available the IMDSADMP output formatted by IMDPRDMP showing the nucleus and TCAM region.

IED126I OLT REQUEST REJECTED, NO DCHB FOR CONTROL TERMINAL

Explanation: This message is issued when a Test Request Message (TRM) specifies a control terminal which does not have a Device Characteristics Record in the Device Characteristics Block (DCHB) library. Before a terminal can be used as an on-line test control terminal, it is necessary to define the device characteristics by executing a Telecommunications On-line Test Executive (TOTE) configuration run.

System Action: The TRM is cancelled. Normal processing continues.

Operator Response: Before a terminal can be used as an on-line test control terminal it is necessary to define the device characteristics by executing a TOTE configuration run. If the configuration has been run, check the contents of the DCHB to ensure that the configuration is correct. Reenter the TRM.

Problem Determination: If there is a record in the DCHB for the control terminal and problem recurs, obtain and have available the following before calling IBM for programming support:

- The TRM that was cancelled.
- The configuration for the terminal.
- The contents of the DCHB.
- Any error printouts received.

IED127I OLT REQUEST REJECTED, CONTROL TERMINAL UNIDENTIFIED

Explanation: This message is issued when the symbolic name of the control terminal specified in the Test Request Message (TRM) is not contained in the TCAM terminal table.

System Action: The TRM is cancelled. Normal processing continues.

Operator Response: Reenter the TRM and specify a valid control terminal. If there is a valid translate table for the TRM, no more than eight characters between the prefix and the first slash, and the control terminal is identical to the name of an entry in the TCAM terminal table, obtain and have available the following and call IBM for programming support:

- A listing of the TCAM Message Control Program.
- The TRM that was cancelled.
- The control terminal printout.

IED128I ALTERNATE PRINTER REQUESTED BY OLT ALREADY IN USE

Explanation: This message is issued when the alternate printer requested in the option field of a Test Request Message (TRM) has already been assigned to another On-line Test (OLT). The TRM is cancelled and must be reentered to initiate an OLT.

System Action: The TRM is cancelled. Normal processing continues.

Operator Response: Reenter the TRM and specify an alternate printer not in use.

Problem Determination: If this problem recurs and the alternate printer is not in use, obtain and have available the following before calling IBM for programming support:

- A listing of the TCAM Message Control Program.
- The TRM that was cancelled.
- The control terminal printout.

IED129I OLT REQUEST REJECTED, C. T. LINE CANNOT BE STARTED

Explanation: This message is issued when TCAM cannot start the control terminal line and returns an error code to the request to start a line. The Test Request Message (TRM) is cancelled.

IED

System Action: The TRM is cancelled.
Normal processing continues.

Operator Response: Attempt to restart the line by entering VARY (line),ONTP.
Reenter the TRM.

Problem Determination: If the problem recurs, obtain and have available the following before calling IBM for programming support:

- The TRM.
- The control terminal printout.

IED130I OLT REQUEST REJECTED, CONTROL TERMINAL NOT OPEN

Explanation: This message is issued when TCAM cannot open the control terminal. The problem could be that the required DD card is missing from the TCAM JCL. The Test Request Message (TRM) is cancelled.

System Action: The TRM is rejected and normal processing continues.

Operator Response: Check JCL for a DD card for the control terminal. Restart the Message Control Program with a valid DD card for this terminal. Reenter the TRM.

Problem Determination: If the problem recurs, obtain and have available the following before calling IBM:

- The TRM.
- The control terminal printout.

IED131I TRM CANCELLED, NOT ENTERED FROM SWITCHED C. T.

Explanation: This message is issued when a Test Request Message (TRM) has specified a control terminal on a switched line but the TRM was entered from some other terminal. To use a switched terminal as control terminal, the TRM must be entered from the terminal.

System Action: The TRM is cancelled and normal processing continues.

Operator Response: Reenter the TRM from the specified control terminal.

Problem Determination: If the problem recurs when the TRM is entered from the control terminal, obtain and have available the following before calling IBM:

- The TRM that was entered.
- The control terminal printout.

IED132D CAN OLT USE FOR NON-CONCURRENT MODE LINES xxx,xxx,xxx,xxx... (up to 11 lines)

Explanation: This message is issued when exclusive use of specified lines xxx,...,xxx is needed for the duration of testing, where xxx is the physical address of the line(s).

System Action: TCAM continues normal processing. The On-line Test (OLT) enters a wait state for three minutes. If the response is not received at the end of this time, the OLT is cancelled, and normal processing continues.

Operator Response: If all activity on specified lines can be suspended for the duration of the test, enter REPLY xx,'YES'. Otherwise enter REPLY xx,'NO'.

IED133I C. T. REQUESTED BY OLT ASSIGNED TO ANOTHER OLT

Explanation: This message is issued when the control terminal device requested in the Test Request Message (TRM) has already been assigned to another On-line Test (OLT). The TRM is cancelled and must be reentered to initiate an OLT.

System Action: The TRM is cancelled. Normal processing continues.

Operator Response: Reenter the TRM and specify a control terminal not in use.

Problem Determination: If this problem recurs and the control terminal is not in use, have the following available before calling IBM for programming support:

- A listing of the TCAM Message Control Program.
- The TRM that was cancelled.
- The control terminal printout.

IED134I xxxxxxxx TERMINAL FAILED, OLT CANCELLED

Explanation: This message is issued when an unrecoverable error occurs while the telecommunications on-line test executive or an On-line Test (OLT) is trying to communicate with a remote control terminal or alternate printer terminal, where xxxxxxxx is the symbolic name of the terminal. The OLT is cancelled.

System Action: Normal processing continues. The OLT is cancelled.

Operator Response: Reenter the Test Request Message (TRM).

Problem Determination: If the problem recurs, obtain and have available the following before calling IBM:

- The TRM that was entered.
- The control terminal printout.

IED135I message

Explanation: Messages with this number are directed to the control terminal for CE communication. The meaning of the message is found in the 'TOTE/Configurator User's Guide'.

System Action: Normal processing continues.

Operator Response: Refer to 'TOTE/Configurator User's Guide'.

IED136D message

Explanation: Messages with this number are directed to the control terminal for CE communication and require a response. The meaning of the message and the proper responses are found in the 'TOTE/Configurator User's Guide'.

System Action: The On-line Test goes into

System Action: The On-line Test goes into wait state until response is received. Normal processing continues.

Operator Response: Refer to 'TOTE/Configurator User's Guide'.



Master Scheduler Messages (IEE)

Component Name	IEE
Program Producing Message	Master scheduler.
Audience and Where Produced	For operator: console.
Message Format	xx IEEnnns text [Pnn] xx Message reply identification (absent, if operator reply not required). nnn Message serial number. s Type code: A Action; operator must perform a specific action. D Decision; operator must choose an alternative. E Eventual action; operator must perform action when he has time. I Information; no operator action is required. W Wait: processing stopped until action is determined and performed. text Message text. Pnn Partition which issued the message (systems with MFT only).
Comments	None.
Problem Determination	Refer to the fold-out in part VI of this publication for problem determination instructions.

IEE

IEE019I cm QUOTE(S) MISSING.

Explanation: In the cm command, one or more apostrophes that should appear are missing.

System Action: The system did not execute the command.

Operator Response: Probable user error. Enter the command again, making sure that the required apostrophes are used.

Problem Determination: Table I, items 2, 7ab, 29.

IEE023I cm CLASSNAME ERROR.

Explanation: In the cm command, the class specified was not a valid job class or system output class.

System Action: The system did not execute the command.

Operator Response: Probable user error. Enter the command again, making sure that the class name is correct.

Problem Determination: Table I, items 2, 7ab, 29.

IEE025I UNIT ddd HAS NO PATHS

Explanation: In a Model 65 Multiprocessing system, a vary command was entered for a device having no available path.

System Action: The command is not executed.

Operator Response: Enter a VARY PATH command to make a path available.

Problem Determination: Table I, items 2, 11, 29.

IEE026I cm NOT SUPPORTED.

Explanation: If cm is LOG or WRITELOG, the system log is not being supported for one of the following reasons:

- The system log was deleted at system generation time.
- One or both of the log data sets, SYS1.SYSVLOGX and SYS1.SYSVLOGY, were not cataloged and mounted during system start.
- The system log task terminated abnormally.

If cm is an RJE central command, remote job entry was not in the system or had not completed initialization when the command

was issued. (If cm is RJE, a START RJE command was issued.)

If cm is DDR (or SYSRES), dynamic device reconfiguration (or the SYSRES option of dynamic device reconfiguration) is not in the system. The system cannot complete the SWAP request entered by the operator.

If cm is HIARCHY, a START or MOUNT command specifying the 'H=' parameter was issued. However, Hierarchy support was not included in the system during system generation.

System Action: The system did not execute the command.

Operator Response: Probable user error. If cm is LOG or WRITELOG, and if the system log is supposed to be kept, report the message to the system programmer at the installation. If cm is an RJE central command, reenter the command after RJE is started and has completed initialization. If cm is DDR or SYSRES, no action is necessary. If cm is HIARCHY, reenter the command omitting the 'H=' parameter.

Problem Determination: Table I, items 2, 7ab, 17ab, 29. If the function denoted by the command is supported, and any necessary data sets are cataloged and mounted, and you must have the function before proceeding, check Table I, items 11, 29.

IEE032I WRITELOG COMMAND PENDING. CLASSNAME = x.

Explanation: A WRITELOG command was entered to write the currently recording system log data set, SYS1.SYSVLOGX or SYS1.SYSVLOGY, on the system output writer of class x. However, execution of a previously entered WRITELOG command is still pending.

System Action: The WRITELOG command will be honored after execution of the previously issued WRITELOG command has completed.

Operator Response: None.

IEE033I HALT OR WRITELOG CLOSE COMMAND HAS BEEN ISSUED

Explanation: A HALT or WRITELOG CLOSE command was entered to close the data control block of the data set currently recording. However, the execution of a previously entered HALT or WRITELOG CLOSE command has not completed.

System Action: The second HALT or WRITELOG CLOSE command is ignored. After execution of the first command has completed, the log is no longer supported.

Operator Response: None.

IEE034I WRITELOG EXECUTION DEFERRED. NO BACKUP DATASET

Explanation: A WRITELOG command was entered to write a system log data set (either SYS1.SYSVLOGX or SYS1.SYSVLOGY) on a SYSOUT device. However, the other system log data set is currently being written, or waiting to be written, on a SYSOUT device.

System Action: The command will be honored when the other log data set is written on SYSOUT and becomes available for log entries.

Operator Response: None.

IEE037I LOG NOT SUPPORTED

Explanation: For this loading of the system, the system log is not being supported for one of the following reasons:

- Both log data sets, SYS1.SYSVLOGX and SYS1.SYSVLOGY, were not cataloged during system start.
- The job abnormally terminated.

Operator Response: None, unless the system log should be supported. In that case, report this message to the programmer responsible for the system. If the data sets are not cataloged, they should be cataloged and the system started again.

Problem Determination: If you must have the log function before proceeding, see Table I, items 2, 7ab, 29.

IEE038I LOG NOT SUPPORTED. ser NOT MOUNTED.

Explanation: For this loading of the system, the system log is not being supported because a volume containing a system log data set (SYS1.SYSVLOGX and SYS1.SYSVLOGY) is not mounted. The volume's serial number is ser.

Operator Response: None, unless the system log should be supported. In that case, mount volume serial number ser and start the system again.

Problem Determination: Table I, items 2, 7ab, 29. If you must have the log function before proceeding, check item 11.

IEE039I LOG SYS1.SYSVLOG{X} NOT FOUND ON ddd
{Y}

Explanation: The data control block for the SYS1.SYSVLOGX or SYS1.SYSVLOGY data set, as indicated in the message text, could not be opened because the data set could not be found on the volume on device ddd.

System Action: The log is no longer supported.

Operator Response: Report this message to the programmer responsible for the system at the installation.

Problem Determination: Table I, items 7a, 25bd, 29.

IEE040I LOG I/O ERROR ON ddd

Explanation: During execution of a LOG command or a WTL macro instruction, an uncorrectable input/output error occurred while writing text into the system log data set, SYS1.SYSVLOGX or SYS1.SYSVLOGY, on device ddd.

System Action: The text is written in the alternate system log data set.

Operator Response: None.

Problem Determination: Table I, items 2, 29.

IEE041I LOG NOW RECORDING ON SYS1.SYSVLOG{X}
ON ddd {Y}

Explanation: The SYS1.SYSVLOGX or SYS1.SYSVLOGY data set, as indicated in the message text, is located on device ddd and is currently recording.

Operator Response: None.

IEE042I LOG DATA SET SYSVLOG{X} ON ddd CLOSED
{Y}

Explanation: The data control block for the SYS1.SYSVLOGX or SYS1.SYSVLOGY data set, as indicated in the message text, was closed for one of the following reasons:

- At IPL time, if both the SYS1.SYSVLOGX and SYS1.SYSVLOGY data sets are not empty, the data control block for the data set containing the least data is closed.
- The data set is full.
- An input/output error occurred while processing the data set.
- A WRITELOG command was issued.

Operator Response: None.

IEE043I LOG DATA SET{X} QUEUED TO SYSOUT CLASS x
{Y}

Explanation: The SYS1.SYSVLOGX or SYS1.SYSVLOGY data set, as indicated in the message text, was queued to be written on the system output writer of class x for one of the following reasons:

- The data set is full.
- An input/output error occurred.
- A WRITELOG command was issued.

System Action: The data set is queued to system output and the alternate data set is opened and made available for log entries.

Operator Response: None.

IEE044I{LOG}ABEND COMPLETION CODE = hhh
{SMF}

Explanation: During the execution of the system log or System Management Facilities function, the task abnormally terminated

with the completion code hhh, in hexadecimal.

System Action: The system log or System Management Facilities function is no longer supported.

Operator Response: Report this message to the programmer responsible for the system at the installation.

Problem Determination: If the indicated function is required before proceeding, see Table I, items 2, 7ab, 11, 29.

IEE045I LOG INACTIVE

Explanation: Both log data sets, SYS1.SYSVLOGX and SYS1.SYSVLOGY, are currently being written or waiting to be written on system output devices. During this time, all previously entered log records are held in main storage.

System Action: Subsequent log records will be honored when a log data set is written on system output and becomes available for log entries. Until then, incoming log entries will be sent to the operator via message IEF147I.

Operator Response: None, unless a system output device needs to be started.

IEE046I LOG NOW ACTIVE

Explanation: A log data set was written on system output (SYSOUT) and is now available for log entries.

System Action: Log records are now written in the log data set currently recording.

Operator Response: None

IEE047I WRITELOG DEFERRED, INSUFFICIENT QUEUE SPACE

Explanation: The operator entered the WRITELOG command to have the contents of a log data set put in one of the output queues. However, there was not enough system queue space to allow the log to be written.

System Action: The system will retry the WRITELOG operation each time a task enters allocation until the operation has completed.

Operator Response: As active jobs and system tasks start and stop, display the output queues until it is evident that the log has been written. It is not necessary to reenter the WRITELOG command. If the transfer does not complete and there are no tasks starting or stopping, it may be necessary to start a task (perhaps an initiator) so that the WRITELOG operation can complete.

IEE050A SMF OPTION CANCELED - REPLY U TO CONTINUE

Explanation: During execution of the System Management Facilities function, the task abnormally terminated.

System Action: No jobs in the system will terminate until the reply U is given. All data currently residing in the System Management Facilities buffers will be preserved. It is necessary to restart the system in order to reinstate the System Management Facilities function.

Operator Response: If the system should proceed without recording System Management Facilities records, enter REPLY xx,'U'. If the System Management Facilities function must be active, restart the system and inform the programmer responsible for the system.

Problem Determination: If the indicated function is required before proceeding, see Table I, items 2, 7ab, 11, 29.

IEE051I SQA {addr1 addr2 ffff }
 {addr1K addr2K ffff }

Explanation: In response to a DISPLAY command with SQA in its operand, the message gives the high and low boundaries of the system queue area and the amount of free space within.

The first case of the message text represents the message for systems with MFT. addr1 is the 8 byte address of the low boundary, addr2 is the 8 byte address of the high boundary and ffff represents the amount of free space within.

The second text represents the format of the message for systems with MVT. addr1 is the 5 byte address of the low boundary, addr2 is the 5 byte address of the high boundary, ffff is the amount of free space and K indicates that the address is rounded to the nearest multiple of 1024.

Operator Response: None.

IEE070I hh.mm.ss CPU/CHANNEL [id]

Explanation: This is the control line of the Status Display initiated by a DISPLAY M command entered to an MVT system to request a CPU/CHANNEL display.

[id]

A three-digit decimal identification number. It is used in conjunction with the CONTROL C,D command for canceling status displays being written on typewriter or printer consoles or being displayed in-line (not in a display area) on a display (CRT) console. This identification number does not appear when the display is presented in a display area on a display console.

Operator Response: None.

IEE071I hh.mm.ss DEVICE STATUS [id]

Explanation: This is the control line of the status display initiated by a DISPLAY M command entered in an MVT system to request a device status display.

[id]

A three-digit decimal identification number. It is used in conjunction with the CONTROL C,D command for canceling status displays being written on typewriter or printer consoles or being displayed in-line (not in a display area) on a display (CRT) console. This identification number does not appear when the display is presented in a display area on a display console.

Operator Response: None.

IEE072I NO STORAGE OFFLINE

Explanation: In response to a DISPLAY configuration matrix command, this message indicates that no storage is offline.

System Action: The system continues processing.

Operator Response: None.

IEE073I cm IMPROPER CHANNEL NUMBER SPECIFICATION

Explanation: In the cm command, a channel number was specified for a channel that was not in the system at system generation.

System Action: The command was not executed.

Operator Response: Probable user error. Enter the command again correctly, specifying a channel that is in the system.

Problem Determination: Table I, items 11, 29.

IEE090I cm-x I/O ERROR DUMP TERMINATED

Explanation: During execution of a dump command, an uncorrectable input/output error occurred. If x is 1, the error occurred before the dump was taken. If x is 2, a partial dump was taken.

System Action: Dump command processing is terminated.

Operator Response: If x is 2, invoke the IMDPRMST service aid program to print the partial dump. If x is 1, enter the command again.

Problem Determination: Table I, items 2, 7a, 29.

IEE091I cm-x SYS1.DUMP DATA SET FULL OR IN USE

Explanation: While writing a core image dump into the SYS1.DUMP data set, one of the following occurred:

- If x is 1, a unit exception was detected on tape.
- If x is 2, the data set is full.
- If x is 3, the data set is in use.

System Action: Dump command processing is terminated.

Operator Response: If x is 1, rewind and unload the tape and mount another nonlabel tape. Reissue the command. If x is 2, execute the IMDPRDMP service aid program to print the dump or mount a new SYS1.DUMP tape, and reissue the command. If x is 3, enter the command again when the current dump is complete.

IEE092I CORE DUMP SUCCESSFULLY COMPLETED

Explanation: The processing of the dump command has successfully completed.

Operator Response: Execute the IMDPRDMP service aid program to print the dump data set.

IEE093I op OPERAND IS INVALID REPLY FOR DUMP COMMAND

Explanation: In response to a dump command, the operand op is invalid.

System Action: The command was not expected.

Operator Response: Probable user error. Correct the operand, and reissue the dump command.

IEE094D SPECIFY OPERAND(S) FOR DUMP COMMAND

Explanation: A dump command has been issued from the operator's console. This message allows the operator to specify the storage locations to be dumped.

System Action: Dump command processing waits pending the operator's reply.

Operator Response: If a full core dump is desired, reply ALL or U. If the dump is to represent storage locations, reply STOR=(x,y,{x,y}) where x represents starting addresses in decimal or hexadecimal, and y represents ending addresses in decimal or hexadecimal format. The decimal addresses must represent a multiple of 1024 (1K). For example:

STOR=(X0BA040,X0CA044) - HEX
STOR=(00456K,00508K) - DEC

Note: SDATA may also be specified with STOR. Refer to Operator Reference Manual for further explanation.

IEE095I cm-x-retcde INVALID RETURN CODE FROM SVC DUMP

Explanation: During execution of a dump command an unusual condition occurred. If x is 1, the return code (retcde) from SVC dump is not valid. If x is 2, there is a system error in the SVC dump interface.

System Action: Dump command processing is terminated.

Operator Response: Enter the command again.

IEE096I cm-x SYS1.DUMP DEVICE NOT SPECIFIED OR SUPPORTED

Explanation: During execution of a dump

Problem Determination: Table I, items 2, 7a, 29. command, one of the following occurred:

- If x is 1, no SYS1.DUMP data set was specified at system initialization.
- If x is 2, the SYS1.DUMP data set is not allocated to tape or direct access (2321 direct access is not supported).

System Action: Dump Command processing is terminated.

Operator Response: Probable user error. The SYS1.DUMP data set must be allocated to tape or direct access at IPL time.

IEE101A READY

Explanation: Nucleus initialization has been completed and the master scheduler has received control.

System Action: The system entered wait state to receive a SET DATE command.

Operator Response: Enter a SET DATE command.

IEE102I hh.mm.ss ACTIVE DISPLAY [id]

STRADDR ENDADDR SQA
xxxxxxx xxxxxxxx xxxx

R SUBT NAME1 NAME2 NAME3
x xx xxxxxxxx xxxxxxxx xxxxxxxx

Explanation: This is the control line of the Status Display indicated by the DISPLAY A or MONITOR A commands entered to an MVT system. The label line names the fields of data.

[id] A three-digit decimal identification number. It is used in conjunction with the CONTROL C,D command for canceling status displays being written on typewriter or printer consoles or being displayed in-line (not in a display area) on a display (CRT) console. This identification number does not appear when the display is presented in a display area on a display console.

STRADDR

Starting address, in decimal of the region (or part of the region located within a hierarchy) occupied by the task. This field is zero for an initiator waiting for main storage, a data set, or work.

ENDADDR

Ending address, in decimal, of the

region (or part of the region located within a hierarchy) occupied by the task. This field is zero for an initiator waiting for main storage, a data set, or work.

SQA

Number of bytes, in decimal, at supervisor queue area required to control the job step.

R

This field is one of the following:

- Blank is the region occupied by the task is owned.
- B if the region occupied by the task is borrowed.
- R if the region occupied by the task is rolled out.

SUBT

Number, in decimal, of subtasks created in the step.

NAME1

This field is one of the following:

- The jobname for a job attached by an initiator.
- The procedure name for a system task.
- The initiator identifier for an initiator.
- MASTER SCHEDULER for the master task.

NAME2

This field is one of the following:

- The stepname for a job attached by an initiator.
- The identifier for a system reader or system writer.
- The jobname for an initiator processing a job step.
- Blank for the master task or for an initiator waiting for work.
- The procedure stepname for a procedure called by a step.

NAME3

This field is one of the following:

- The stepname for a step that called a cataloged procedure.
- Blank if there is no cataloged procedure.

Note: The STRADDR, ENDADDR and R fields are repeated for each additional region occupied by the task.

Operator Response: None.

IEE102I TIME SHARING y a1 a2 qs x

Explanation: As a result of Display Active command, the Time Sharing regions will be shown as above where:

y

is the region number.

a1

is the beginning address of the time sharing region.

a2

is the end address of the time sharing region.

qs

is the amount of LSQS within that region.

x

is the number of users for that region.

All of the above are decimal numbers.

Operator Response: None.

IEE103I S proc[.ident][,ddd][,ser][,DSNAME=dsn] *

Explanation: In systems with automatic START commands, this message is issued at system initialization to permit the operator to retain or reject the automatic commands.

In the message text, the fields are:

proc

Cataloged procedure name.

ident

Identifier.

ddd

Device name.

ser

Serial number of the volume.

dsn

Data set name.

*

Indicates an automatic START command.

System Action: The commands retained in response to this message are executed.

Operator Response: Enter a SET command to indicate which of the automatic commands are to be retained:

- In the AUTO subparameter, specify Y if a command is to be retained and N if a command is to be rejected. (For example, if three messages are issued and the three commands are to be rejected, include the subparameter AUTO=NNN. If only the third command of the three commands specified is to be rejected, include the subparameter AUTO=YNN.)
- If all the commands are to be retained, the AUTO subparameter may be omitted.
- If all the commands are to be rejected, the subparameter AUTO=NONE may be included.

IEE110I [REPLY IDS: xx][READY UNITS: ddd]
[AVR MOUNT PENDING]

Explanation: In response to a DISPLAY command with R in its operand, the system is displaying the following information:

REPLY IDS: xx

The messages whose message identifiers, xx, are listed above are awaiting replies.

READY UNITS: ddd

The devices, ddd, listed above are waiting for mount requests to be fulfilled. If one of the devices is a data cell, the message text will appear as ddd/b where ddd is the device address and b is the bin number.

AVR MOUNT PENDING

A volume listed in message IEF504A is waiting to be mounted.

Operator Response: For each xx listed, find the last message on the console

printout with that identifier and reply as indicated by the message.

For each ddd listed, find the last mount message on the console printout for that device (and bin number, if applicable) and mount the indicated volume.

If AVR MOUNT PENDING is specified, find the last message (or group of messages) numbered IEF504A on the console printout and mount each unmounted volume as indicated by the message.

IEE111I NO OUTSTANDING REQUESTS

Explanation: In response to a DISPLAY command with R in its operand, this message indicates that there are no messages awaiting replies and there are no unfulfilled mount requests.

Operator Response: None.

IEE114A DATE=yy.ddd, CLOCK=hh.mm.ss REPLY WITH SET PARAMETERS OR U.

Explanation: The time-of-day clock is operative, and the current date and time are displayed to the operator for verification. In the message text, yy specifies the year (60-99), ddd specified the day (001-366), hh specifies the hour (00-23), mm specifies the minute (00-59), and ss specifies the second (00-59).

System Action: The system waits until the operator enters a reply.

Operator Response: If the date and time indicated in the message text are correct, and if you do not want to use any SET command parameters, enter REPLY xx, 'U'.

If the date and time indicated in the message text are correct and you want to use one or more of the SET command parameters, enter REPLY xx, parm, where parm may be Q, AUTO, or PROC or any combination of the three. Do not depress the TOD clock enable switch.

If the date and/or time indicated in the message is incorrect, enter REPLY xx, parm, where parm may be CLOCK=hh.mm.ss and/or DATE=yy.ddd (use the date and time format indicated in the explanation above). If you wish to use any other SET command parameters, they may be included in the reply as shown above. After you have typed the appropriate response, depress the TOD enable switch and hold it down while you signal end-of-block.

(Note: The TOD clock settings are entirely dependent on the way the operator responds to this message. If both the TIME= and DATE= parameters are specified, the clock will be updated in accordance with both parameters. If only one parameter is specified, the clock will be updated in accordance with that parameter and the value not specified will be assumed to be correct.)

IEE115I INSUFFICIENT STORAGE AVAILABLE TO PROCESS SELECTED OPTION

Explanation: Sufficient storage is not available at the moment for the control program to produce the display associated with the selected option.

System Action: The option is discarded and the display is not produced.

Operator Response: Select the desired option again at a later time.

IEE116A TOD CLOCK INVALID- REPLY WITH SET PARAMETERS

Explanation: The value of the time-of-day clock is incorrect because of a power-down or a hardware error. The problem may or may not have been resolved when this message is issued.

System Action: The system waits for the operator's reply.

Operator Response: Enter REPLY xx, 'DATE=yy.ddd' where yy is the year (60-99) and ddd is the day (001-366). Any other valid SET command parameters may also be specified in the REPLY command. If this response fails to reset the clock correctly, call IBM for hardware support.

IEE117A INTERVENTION REQUIRED ON TOD CLOCK ENABLE SWITCH

Explanation: During initial program load, the time-of-day clock enable switch was not depressed at the right time for the command setting the clock to be registered.

System Action: This message is issued fifteen seconds after the command setting the time-of-day clock was entered, if the enable switch was not depressed properly. If the switch still has not been depressed after one minute, the system issues this message again. If after another minute the switch has not been depressed, the system will terminate the initialization procedure and issue message IEE119I.

Operator Response: Depress the enable switch and hold it until the system issues message IEE118I to indicate that the command setting the clock has been accepted.

Problem Determination: If message IEE118I does not appear, see Table I, items 2, 17a, 29.

IEE118I SET PARAMETER(S) ACCEPTED.

Explanation: The time-of-day clock has been updated and any other valid SET command parameters have been processed successfully.

System Action: Processing continues.

Operator Response: None.

IEE119I SET PARAMETER(S) NOT ACCEPTED - ENABLE SWITCH NOT DEPRESSED.

Explanation: The time-of-day clock enables switch was not depressed within two minutes and fifteen seconds after the command setting the clock was entered. The parameters specified in the command are not accepted, and the original value of the clock is retained.

System Action: If this message appears during initial program load, the system issues message IEE112I and then reissues message IEE101A, and the SET command parameters must be reentered.

If this message appears after the system has been started, processing continues as if the SET command parameters has not been entered.

Operator Response: If this message is issued during initial program load respond as indicated to message IEE112I. Otherwise, enter the command with the SET parameters again, specifying the correct time. Be sure to depress the enable switch and hold it down until message IEE118I is issued.

Problem Determination: If message IEE118I does not appear and the correct procedures have been followed, see Table I, items 2, 29.

IEE120I Q SEARCH I/O ERROR

Explanation: An uncorrectable input/output error occurred while the queue manager was reading or writing in the SYS1.SYSJOBQE data set.

System Action: The read or write operation was not performed. Processing continues.

Operator Response: Report the message to the programmer responsible for the system.

Problem Determination: If unable to continue, see Table I, items 2, 8a, 11, 29.

IEE121I JOB QUEUE I/O ERR DURING COMMAND EXEC

Explanation: During processing of a START or MOUNT command, an uncorrectable input/output error occurred in reading or writing the input work queue entry in the SYS1.SYSJOBQE data set.

System Action: The system did not execute the command.

Operator Response: Enter the command again.

Problem Determination: Table I, items 2, 8a (b if known), 11, 29.

IEE122I START COMMAND JCL ERROR

Explanation: Either a START RDR or START WTR command was specified incorrectly, or

the cataloged reader procedure or cataloged writer procedure invoked by the command contains incorrect job control statements.

System Action: The system did not execute the command.

Operator Response: Probable user error. Look in the SYSOUT data set for message(s) associated with this command; these messages will describe any errors found in the reader or writer procedure or in the overriding job control statements generated from the START RDR or START WTR command. After making corrections, enter the command again.

Problem Determination: Table I, items 2, 4, 7ab, 26d, 29.

IEE124I MOUNT COMMAND JCL ERR

Explanation: The procedure invoked by a MOUNT command contains invalid job control statements.

System Action: The system did not execute the command.

Operator Response: Probable user error. Look in the SYSOUT data set for message(s) beginning with IEF and associated with this command; these messages will describe any errors found in the procedure. If possible, correct the job control statements in the procedure; otherwise, report this message to the programmer responsible for the system at the installation.

Problem Determination: Table I, items 2, 4, 7ab, 26d, 29.

IEE130I TIMEOUT - TERMINAL RESET

Explanation: The 2740 console, upon which this message appears, timed out because the operator did not terminate his input message with EOB (end-of-block) within 28 seconds of requesting entry to the console or entering the last character of data.

System Action: The system reset the terminal to stand by state and ignored the operator's incomplete input message.

Operator Response: Reenter the input message and terminate with EOB.

IEE132I START COMMAND DEV ALLOC ERR

Explanation: During processing of a START RDR or START WTR command, an error was detected during allocation of the device specified in the command.

System Action: The system did not execute the command.

Operator Response: Probable user error. Make corrections indicated by other messages on the console or in the SYSOUT data set. Then enter the command again.

Problem Determination: Table I, items 2, 4, 7ab, 26d, 29.

IEE134I MOUNT COMMAND DEV ALLOC ERR

Explanation: During processing of a MOUNT command, an error was detected during allocation of the device specified in the command.

System Action: The system did not execute the command.

Operator Response: Probable user error. Make corrections indicated by other messages on the console or in the SYSOUT data set. Then enter the command again.

Problem Determination: Table I, items 2, 4, 7ab, 26d, 29.

IEE135I ERR - REQUESTED DEVICE RESERVED

Explanation: A MOUNT command specified a device that is either reserved or permanently resident.

System Action: The system did not execute the command.

Operator Response: Probable user error. Change the MOUNT command to specify a different device, or enter an UNLOAD command and wait for the device that was specified to be released.

Problem Determination: Table I, items 2, 4, 7ab, 29.

IEE136I TIME=hh.mm.ss DATE=yy.ddd

Explanation: In response to a DISPLAY T command, this message indicates the time of day and the date. In the message text, hh specifies the hour (00-23), mm specifies the minute (00-59), ss specifies the second (00-59), yy specifies the year, and ddd specifies the day (001-366).

Operator Response: None.

IEE137I cm VALID ONLY IN MCS

Explanation: Command cm was issued in an environment without multiple console support (MCS). However, the command is valid only in an environment with multiple console support.

System Action: The command was not executed.

Operator Response: None.

IEE138I cm ALREADY IN SYSTEM

Explanation: Command cm was issued. However, the command is currently being processed in the system.

System Action: The system did not execute the command.

Operator Response: None.

IEE139I INITIALIZATION FAILED CODE=n

Explanation: During system initialization, the master scheduler failed to recatalog the SYS1.PROCLIB data set. The code supplied in the message text (n) is the return code from the catalog routines:

CODE	MEANING
04	The SYSCATLG data set could not be found
20	The SYSCATLG data set is full.
28	A permanent I/O error occurred while the catalog was being read.

System Action: The system will reissue the automatic start commands and the "READY" message to allow the operator to retry initialization.

Operator Response: In all cases, retry initialization by setting the date again. If the error recurs, initialize an alternate system and list the catalog data set of the original system using the IEHLIST utility program. Give the catalog list to the system programmer or installation manager.

Programmer Response: SYS1.PROCLIB must be found and cataloged before initialization can continue. The most common return code from catalog is 20, in which case some entries in the catalog should be deleted or the size of the catalog expanded. If the return code is 4, insure that the catalog has not been lost. If the code is 28, move the volume containing the catalog to another drive. Retry initialization.

Problem Determination: Table I, items 2, 13, 18, 25d, 29.

IEE140I SYSTEM CONSOLES

CONSOLE/ALT	COND	AUTH	ID	AREA	ROUTED
{console/alt	H	auth1	nn	x,a-b	routcd
{SYSLOG					
console/alt	{M	auth2	nn	x,a-b	routcd
	{A				
	{N				

Explanation: After the consoles have been initialized, this message provides a display of the system console configuration. The first format of the message appears if a hard copy device is indicated; the second format appears for each other console.

In the message text, the fields are:

CONSOLE

console
ddd
device address of the primary console, which is either an output device or an input/output device.
ddd,ddd
device addresses of the composite primary console.

SYSLOG
the SYSLOG is the hard copy device.

ALT
alt
ddd
device address of the alternate console.
ddd,ddd
device addresses of the composite alternate console.

COND
H
hard copy device.
M
master console.
A
active console.
N
non-active console.

AUTH
auth1
CMDS
Operator and system commands and all responses are to be written on the hard copy log.
STCMDS
Operator and system commands and status displays are to be written on the hard copy log.
INCMDS
Operator and system commands and inline responses are to be written on the hardcopy log.
NOCMDS
Operator and system commands and responses are not to be written on the hardcopy log.
auth2
SYS
Commands authorized for console are CANCEL, CENOUT, DEFINE, HALT, HOLD, MODE, MODIFY, QUIESCE, RELEASE, RESET, SET, START, STOP, USERID, and WRITELOG.
IO
commands authorized for console are MOUNT, UNLOAD, and VARY.
CONS
command authorized for console is VARY, plus use of the routing location operand.

INFO
commands authorized for console are BRDCST, DISPLAY, LOG, MSG, and SHOW, CONTROL, MONITOR, MSGRT, STOPMN, REPLY

ALL
commands authorized for console are all the commands listed above under SYS, IO, CONS, and INFO.

NONE
no command authority, which occurs with an output only device.

ID nn
the system identification number for

AREA
x,a-b specifies the range of display area identifiers for this console, where x is the identifier of the message area, a is the bottom display area, and b is the top display area.

ROUTCD
routcd
x,x,...
the routing codes assigned to the console or hard copy device; if a composite console, the routing codes assigned to the output device.
ALL
all of the routing codes.
NONE
none of the routing codes.

Operator Response: Examine the console configuration for errors, omissions and consoles that should be in a different status. Enter a VARY command for each console that requires modification.

Note: In an MCS system which has no CRT consoles sysgened, the AREA column will not be displayed. This message also exists as a single line of data pertaining to each console in the system. Each single line of data from the larger display is routed seperately to the console that it describes.

IEE141A MASTER AND ALL ALTERNATES UNAVAILABLE - ISSUE VARY MSTCONS

Explanation: An attempt to switch from a master console to an alternate console has failed because no alternate consoles are active. The attempt to switch consoles was either initiated automatically by the device support processor because of an uncorrectable input/output error, or by the operator pressing the external interrupt key.

System Action: The system continues processing.

Operator Response: Any operator receiving this message can enter a VARY MSTCONS command declaring his console or another active secondary console as the master console. The VARY MSTCONS command will be accepted from the first console to issue the command. The console identified as the master console in the command will assume the functions of the master console and will receive message IEE143I. (Since the system continues to queue messages to the master console while it is waiting for the VARY MSTCONS command to be entered, the command should be entered as soon as possible.)
If the console switch was caused by the pressing of the interrupt key, no additional response is required.

Problem Determination: If the console switch occurred as a result of an uncorrectable input/output error, see Table I, items 2, 30.

IEE142I ddd NOW RECEIVING HARDCOPY

Explanation: The hard copy log function has been assumed by console ddd for one of the following reasons:
• The system log data sets are unavailable.

- A VARY MSTCONS command was entered, but the hard copy function was being performed by the master console.
- The system was erroneously asked to switch the hard copy log to a graphic console.

System Action: The hard copy log is switched to console ddd.

Operator Response: If ddd is an acceptable hard copy log, no response is necessary. Otherwise, a VARY HARDCPY command must be issued from the master console to switch the log to an acceptable console.

IEE143I OLD=console NEW=console VALDCMD=auth
IEE143I ROUTCDE=routcd T=a H=b

Explanation: This message provides a display of the console's attributes after a console switch has occurred. The switch occurred for one of the following reasons:

- The system detected an uncorrectable input/output error on a console.
- A VARY MSTCONS command was entered.
- The INTERRUPT key was pressed on the operator's control panel.

In the message text, the fields are:

```
console
  ddd          device address of the console.
  ddd,ddd     device addresses of the
              composite console.

auth
  SYS         commands authorized for console
              are CANCEL, CENOUT, DEFINE,
              HALT, HOLD, MODE, MODIFY,
              QUIESCE, RELEASE, RESET, SET,
              START, STOP, USERID, and
              WRITELOG.
  IO          commands authorized for console
              are MOUNT, UNLOAD, and VARY.
  CONS        command authorized for console
              is VARY.
  INFO        commands authorized for console
              are BRDCST, DISPLAY, LOG, MSG,
              REPLY and SHOW.
  ALL         commands authorized for console
              are all the commands listed
              above under SYS, IO, CONS, and
              INFO.
  NONE        no command authority, which
              occurs with an output only
              device.

routcd
  x,x,...     the routing codes assigned to
              the console or hard copy device;
              if a composite console, the
              routing codes assigned to the
              output device.
  ALL         all of the routing codes.
  NONE        none of the routing codes.
```

```
a
  M          master console.
  S          secondary console.

b
  Y          yes; hard copy log.
  N          no; not a hard copy log.
```

System Action: The system continues processing.

Operator Response: If the console switch was caused by a VARY MSTCONS command or by the pressing of the INTERRUPT key, no response is required.

Problem Determination: If the console switch occurred as a result of an uncorrectable input/output error, see Table I, items 2, 30.

IEE147I 'text'

Explanation: If the log is being supported, both log data sets (SYS1.SYSVLOGX and SYS1.SYSVLOGY) are currently being written or waiting to be written on system output devices.

If the log is not being supported, a WTL macro instruction was issued by a problem program.

System Action: The system sends each incoming log record as the text of this message.

Operator Response: If the log is being supported, none, unless a system output device needs to be started.

If the log is not being supported, report the message to the system programmer at the installation.

IEE150I CHANGE OPTIONS IF DESIRED

Explanation: The operator at a CRT console issued a REFERENCE type CONTROL command, requesting a display of some current CONTROL options. The display, in CONTROL command format, appears in the entry area.

System Action: None.

Operator Response: If no changes are desired, perform the CANCEL action. If desired, change the command and ENTER it. The new values become effective immediately.

IEE151I DELETE REQUEST

```
INCONSISTENT - { NO DELETABLE MESSAGES
                  INVALID RANGE
                  SEG=0
                  INVALID OPERAND
                  NO DISPLAY ON SCREEN
                  NO DISPLAY IN AREA
                  USE STOPMN TO DELETE }
```

Explanation: One of the following error conditions occurred:

NO DELETABLE MESSAGE

CONTROL E,F, CONTROL E,SEG, or CONTROL E,nn [,nn] was issued, but there were no messages that could be erased by this request.

INVALID RANGE

CONTROL E,nn [,nn] was issued, but one or more of the message numbers specified was not displayed in the visible message area.

CONTROL E,nn [,nn] was issued, but the specified message numbers were invalid.

CONTROL E,nn [,nn] was issued, but the specified message numbers included blank lines.

SEG = 0

CONTROL E,SEG was issued, but SEG was specified with a value of zero.

INVALID OPERAND

CONTROL EX - comma does not follow E.

NO DISPLAY ON SCREEN

CONTROL E,N was issued, but the message line numbers were already removed.

CONTROL E,D was issued, but no status display is on the screen.

NO DISPLAY IN AREA

CONTROL E,D,L=cca was issued, but no status display is in the area specified by cca.

USE STOPMN TO DELETE

CONTROL E,D[,idl] was issued to erase a dynamic display. The STOPMN command must be used to tell the system the dynamic display is no longer required. This results in an automatic erase of the display currently on the screen.

System Action: The command is not executed.

Operator Response: Correct the command and reissue it. D C, K may be entered to obtain a display which explains the CONTROL command.

IEE152I *ENTER* *CANCEL* *D C,K*

Explanation: This message appears upon initialization only if the console device is a 2250 Display Unit. It permits the operator to use the light pen for ENTER and CANCEL actions, and to request a display of the CONTROL command. The message appears whenever the instruction line is not required for another message.

(Positioning the light pen on ENTER has the same effect as pressing the alternate coding (ALTN CODING) and numeric 5 (END) keys. Positioning the light pen on CANCEL has the same effect as pressing the alternate coding (ALTN CODING) and numeric 0 (CANCEL) keys. Positioning the light pen on D C, K has the same effect as typing D C,K in the entry area and

performing an ENTER action; this action will cause a display of the CONTROL command with a brief explanation of all its operands.)

System Action: None.

Operator Response: If desired, position the light pen on D C,K for an explanation of the CONTROL command (displayed in the status display area.) If an ENTER or CANCEL action is desired, position the light pen on the word that represents the desired action.

IEE153E ERROR - ENTRY GREATER THAN 126 CHARACTERS

Explanation: The 127th position in the entry area contains a character other than a blank (or EOM symbol on the 2260.) The cursor appears under the 127th character to aid the operator in correcting the command.

System Action: Until the 127th position contains a blank (or EOM symbol), the system ignores all commands.

Operator Response: Correct the command that appears in the entry area and make sure that a blank is typed in the 127th position. Then perform an ENTER action.

If it is desired to clear the entry area before making the correction, perform the CANCEL action. Then enter the command correctly and perform an ENTER action.

IEE154I ILLEGAL CURSOR OPERATION - CURSOR REPOSITIONED

Explanation: The following are the only valid places for positioning the cursor:

- Any position on a non-action message line.
- The asterisk on an action message line.
- Instruction line detects on ENTER or CANCEL or D C,K.
- Any position in the entry area.
- On any one of the detectable options in the control line of a display which is equivalent to a CONTROL command.

If the cursor is positioned at any other place, it is an error.

System Action: The screen remains the same and the cursor is repositioned to the left of the entry area.

Operator Response: Position the cursor properly to perform the desired operation.

IEE155E NO HARD COPY-CON=Y, DEL=N

Explanation: This message appears on the instruction line if the operator specifies CON=N and either DEL=Y, DEL=R or DEL=RD but there is no device available to provide hard copy.

This message appears on the warning line at all times if there is no hard copy device. The message is removed when the hard copy device is fixed.

System Action: The system does not accept the option; it remains in conversational mode (CON=Y) and no automatic message deletion (DEL=N).

Operator Response: When the message appears on the instruction line and conversational mode is not desired, or if roll mode or automatic message deletion is desired, allocate a device to provide hard copy. If the operand was not the only or last operand specified in the command, reenter the command, specifying the other operands. Any valid operands specified previous to the invalid operand are accepted by the system.

When the message appears on the warning line, have the hard copy device fixed. Meanwhile, verify all messages that are to be deleted.

IEE156I cm INVALID OPERAND - XXXXXX

Explanation: In the CONTROL command, one of the following error conditions occurred:

- The specification (S) operand was invalid.
- The first character after CONTROL (or K) was not E, S, D, M, N, or A.
- The operand following CONTROL D (of K D) was not N, or N, HOLD, or F, or H, or U.
- The operand S, DL=nn was used to define a display area. The DL operand has been replaced by the command CONTROL A,nn (or K A,nn). See SRL Form number GC27-6949 for a complete explanation of the A operand.
- RNUM or RTIME specified a value of zero.
- The K N,PFK command contains an error. The type of error is indicated by the location of the cursor:
 - a. If the cursor is positioned under the first letter of a keyword (CMD, KEY, PFK, or CON), that keyword or its trailing equal sign is incorrect.
 - b. If the cursor points to the number of the key being defined, that key is either not a numeric character, not defined during system generation, or is being defined as a list of keys when it is already contained within another list of keys.
 - c. If the cursor points to a key number after the KEY=parameter, that key is either not a numeric character, the number of the key that is being defined, a key which has been defined as a list of keys, or a key that was not defined during system generation.
 - d. If the cursor points to some other location, a syntax error exists at the position indicated by the cursor.

In the message text, XXXXXX represents the first six characters of the invalid operand.

System Action: The command was not executed.

Operator Response: Correct the command by positioning the cursor under the characters to be changed and typing the correct information. Then perform the ENTER action.

If the DL operand was being used to define display areas, the command should be changed to the correct form of K A command and the ENTER action performed.

If desired, the command may be cancelled.

IEE157E DELETION REQUESTED

Explanation: The operator issued a deletion request in conversational mode. The deletion request appears in command form in the entry area, and the messages selected for deletion are indicated by vertical lines displayed in position 3 of the message line.

System Action: No messages are deleted until the operator has responded to this message.

Operator Response: Respond in one of the following ways:

- To remove the indicated messages, perform an ENTER action, or position the light pen on the same message.
- To change the deletion request, position the cursor under the proper character(s) and type the desired information. (Also, the light pen may be positioned on message line.) Then perform an ENTER action. All messages that are to be deleted will be marked with vertical lines. Verify that the messages so marked are correct and perform an ENTER action.
- To retain the messages, perform a CANCEL action. This restores the screen, blanks the entry area, and repositions the cursor at the left side of the entry area.

IEE158K REQUEST

INCONSISTENT - (STATUS ALREADY EXISTS
NO DISPLAY ON SCREEN
NO DISPLAY IN AREA
LAST FRAME DISPLAYED
FRAME NOT COMPLETE
DISPLAY IS NOT DYNAMIC)

Explanation: One of the following error conditions occurred when the CONTROL (K) command was issued.

- STATUS ALREADY EXISTS
A CONTROL option was requested which is already in effect. For example K S,DEL=R is entered when the console is in roll mode.
- NO DISPLAY ON SCREEN
A CONTROL option for a display, such as framing or erasing, was requested and there is no display on the screen.
- NO DISPLAY IN AREA
A CONTROL option, such as framing or erasing, was requested for a display in a particular area and there is no display in that area.

LAST FRAME DISPLAYED

K D,F or K D,F,id was issued but the last frame of the display is already on the screen.

FRAME NOT COMPLETE

A framing request was issued, but the frame of the display currently on the screen is not complete yet. The request must be reissued when the current frame is complete.

DISPLAY IS NOT DYNAMIC

"Hold" or "update" of a display was requested, but the display is not dynamic. These options apply only to a dynamic display, which is initiated by use of the MONITOR command.

System Action: The command is not executed.

Operator Response: In the first case, change the command and re-enter, or CANCEL the command since the condition already exists.

In the second case, CANCEL the command since the conditions required by the command do not exist.

In the third case, change the command to specify the correct area and re-enter, or CANCEL the command.

In the fourth case, CANCEL the command since no more frames can be displayed.

In the fifth case, enter the request again after the entire frame has been displayed.

In the sixth case, change the command to specify the correct display and re-enter, or CANCEL the command.

IEE159E MESSAGE WAITING

Explanation: All message lines are filled, but another message is waiting to be displayed. This message appears if automatic message deletion was not in effect (DEL=N) or if automatic message deletion was in effect (DEL=Y) but no messages in the message area contained vertical lines in position 3.

This message also appears if the screen is full of Intervention Required (INT REQ) messages, or WTORs.

System Action: No new messages are displayed until some messages are deleted either by the operator, by a system task, or by a problem program. (Messages are deleted by a problem program or system task only if automatic message deletion is in effect.)

Operator Response: Delete the messages by using either the CONTROL command, a light pen, or the cursor. (In conversational mode, it will be necessary to perform an ENTER action a second time without making any changes to signal verification of the deletion request.) If enough messages are removed so that all waiting messages are displayed, this message is removed.

If the screen is full of Intervention Required (INT REQ) messages, perform the actions where possible; then, if automatic message deletion is not in effect, delete those messages from the screen.

If the screen is full of WTORs, start replying to them; then, delete those messages from the screen.

IEE160I UNVIEWABLE MESSAGE

Explanation: A status display is temporarily replacing one or more messages.

System Action: If a system task or a problem program has issued a DOM macro instruction, and if DEL=Y is in effect, automatic message deletion occurs. Otherwise, the system continues queueing the new messages until the operator either removes the status display or removes some messages above the status display. (Message IEE159E replaces this message if there are more messages waiting than are currently being displaced by the status display.)

Operator Response: Respond in one of the following ways:

- Enter a CONTROL E,D command or position the light pen on *E* in the title line to remove the display, thereby freeing the bottom portion of the message area for displaying messages.
- Request message deletion by using the cursor or light pen or by entering a CONTROL command, thereby removing one or more messages above the display so that more messages can be displayed.

IEE161I WARNING - CON=N,DEL=Y

Explanation: One of the following occurred:

- Automatic message deletion was in effect (DEL=Y) when the operator entered a CONTROL S,CON=N command, requesting non-conversational mode.
- Conversational mode was not in effect (CON=N) when the operator entered a CONTROL S,DEL=Y command, requesting automatic message deletion.
- The operator entered a CONTROL S,CON=N,DEL=Y command, requesting non-conversational mode and automatic message deletion.

This message is a warning that, in response to an erase (E) request, some messages other than the requested messages may be lost.

System Action: None.

Operator Response: If automatic message deletion is in effect, it is strongly recommended that conversational mode be used so that messages can be verified before they are deleted. If conversational mode is not desired, delete the messages manually before the message area is filled.

IEE162I hh.mm.ss K COMMAND [id]

Explanation: This is the control line of the Status Display initiated by the DISPLAY C,K command.

[id]

A three-digit decimal identification number. It is used in conjunction with the CONTROL C,D command for canceling status displays being written on typewriter or printer consoles or being displayed in-line (not in a display area) on a display (CRT) console. This identification number does not appear when the display is presented in a display area on a display console.

Operator Response: None.

IEE163I MODE={R
RD}

Explanation: The operator entered a CONTROL S,DEL=R or CONTROL S,DEL=RD command, as indicated in the message text, requesting that roll mode be in effect. When the message area is filled, the number of messages specified by the RNUM parameter (of the CONTROL command) is removed at the interval specified by the RTME parameter (of the CONTROL command) or as long as there are messages waiting to be displayed.

System Action: None.

Operator Response: None.

IEE164I ILLEGAL LIGHT PEN - CURSOR DETECT

Explanation: An error occurred because the light pen or the cursor was not positioned in a valid location. The only valid locations for positioning the light pen or the cursor are:

- In any position on a nonaction message line.
- On the asterisk on an action message line.
- On a detectable CONTROL command option (such as *F or *E) in the control line of a status display.
- On *ENTER*, *CANCEL*, or *D C,K* in the instruction line.

System Action: The system does not act upon the invalid request; the screen remains the same.

Operator Response: Position the light pen or cursor properly to perform the desired operation.

IEE165I DEL UNCHANGED, NO TIMER

Explanation: The operator entered a CONTROL S,DEL=R or CONTROL S,DEL=RD command, requesting that roll mode be in effect. However, the timer was not enabled at initialization.

System Action: The system does not accept the option.

Operator Response: If it is desired to operate in roll mode, make sure a timer is enabled at system start.

IEE167E OUTPUT IN HOLD MODE

Explanation: No new messages will be written on the screen until the operator takes some action, such as confirming a command or canceling a request. This message appears only on 2260 console devices.

System Action: No more messages are displayed until the operator has responded to this message.

Operator Response: Enter data or perform a CANCEL action by repositioning the cursor next to the START MI symbol and pressing the ENTER key.

IEE170E RETRYABLE ERROR. RECENT ACTION MAY NEED TO BE REPEATED.

IEE170E PRESS THE CANCEL KEY TO RESTORE THE SCREEN.

Explanation: A hardware error occurred that was not caused by operator action. If the same error occurs again, the device is considered unusable and the error is logged. In addition, multiple console support will transfer the routing codes and the command input capability of this console to an active alternate console, and will issue message IEE143I. (Anything in the entry area at the time of the error will be lost.)

System Action: If the operator does not perform a CANCEL action, the system automatically rewrites the screen after approximately 30 seconds have elapsed (this results in the same effect as a CANCEL action). If the operator requests that the consoles be switched, the system writes all succeeding messages on the new console device.

Operator Response: Probable hardware error. To continue, perform a CANCEL action. The messages are rewritten on the screen. However, any status displays are lost. The request must be reentered.

Problem Determination: Table I, items 2, 30.

IEE171E CONDITIONAL ERROR. RECENT ACTION MAY NEED TO BE REPEATED.

IEE171E PRESS CANCEL TO CONTINUE, OR SWITCH CONSOLES.

Explanation: A hardware error occurred. However, the device may still be usable.

System Action: If the operator does not perform a CANCEL action, the system automatically rewrites the screen after approximately 30 seconds have elapsed (this results in the same effect as a CANCEL action). If the operator requests that the consoles be switched, the system writes all succeeding messages on the new console device.

Operator Response: Probable hardware error. If the device is still usable, perform a CANCEL action to continue operating. However, keyboard, cursor, or light pen actions may need to be repeated.

If it is desired not to continue, use the multiple console support option to remove this device as a console.

Problem Determination: Table I, itcms 2, 30.

IEE191I REQUIRED DD ENTRY MISSING FROM PROCEDURE

Explanation: The cataloged reader procedure invoked by a START RDR or START RDRA command does not contain a required DD statement. The name fields of the required DD statements are IEFRDER, IEFPSI, and IEFDATA.

System Action: The system did not execute the command.

Operator Response: Probable user error. Supply the missing DD statement, if possible, and enter the command again. Otherwise, report this message to the programmer responsible for the system at the installation.

Problem Determination: Table I, items 2, 4, 7ab, 26d, 29.

IEE192I INVALID PROCEDURE PARM FIELD FORMAT

Explanation: The reader procedure invoked by a START RDR or START RDRA command or the writer procedure invoked by a START WTR command contains an EXEC statement with an invalid PARM parameter.

System Action: The system did not execute the command.

Operator Response: Report this message to the system programmer at the installation.

IEE250I hh.mm.ss CONSOLES [id]
 CONSOLE/ALT COND AUTH ID AREA ROUTCD
 console/alt H auth1 nn x,a,-a₂ routcd
 SYSLOG routcd
 console/alt { M auth2
 { A[,P]
 { N[,P]

Explanation: In response to a DISPLAY CONSOLES command, this message provides a display of the system console configuration. The first format of the message always appears; the second format appears if a hard copy device is available; the third format appears for each console specified at system generation.

In the message text, the fields are:

[id]
 A three-digit decimal identification number. It is used in conjunction with the CONTROL C,D command for canceling status displays being written on typewriter or printer

consoles or being displayed in-line (not in a display area) on a display (CRT) console. This identification number does not appear when the display is presented in a display area on a display console.

CONSOLE
 console
 ddd
 device address of the primary console, which is either an output device or an input/output device.
 ddd,ddd
 device addresses of the composite primary console.
 SYSLOG
 the SYSLOG is the hard copy device.
 ALT
 alt
 ddd
 device address of the alternate console.
 ddd,ddd
 device addresses of the composite alternate console.
 COND
 H
 hard copy device.
 M
 master console.
 A
 active console.
 A,P
 in the process of becoming an active console.
 N
 non-active console.
 N,P
 in the process of becoming a non-active console.
 AUTH
 auth1
 CMDS
 operator and system commands and responses are to be written on the hard copy log.
 STCMDS
 Operator and system commands and status displays are to be written on the hard copy log.
 INCMDS
 Operator and system commands and inline responses are to be written on the hardcopy log.
 NOCMDS
 operator and system commands and responses are not to be written on the hard copy log.
 auth2
 SYS
 commands authorized for console are CANCEL, CENOUT, DEFINE, HALT, HOLD, MODE, MODIFY, QUIESCE, RELEASE, RESET, SET, START, STOP, USERID, and WRITELOG.

IO commands authorized for console are MOUNT, SWAP, UNLOAD, and VARY.

CONS command authorized for console is VARY.

INFO commands authorized for console are BRDCST, DISPLAY, LOG, MSG, and SHOW, CONTROL, MONITOR, MSGRT, STOPMN, REPLY.

ALL commands authorized for console are all the commands listed above under SYS, IO, CONS, and INFO.

NONE no command authority, which occurs with an output only device.

ID nn the system identification number for this console.

AREA x, a₁ - a₂ the range of area designators defined for this console, where x is the id of the message area, a₁ is the bottom area and a₂ is the top area.

ROUTCD
routcd
x,x,...
the routing codes assigned to the console or hard copy device; if a composite console, the routing codes assigned to the output device.

ALL all of the routing codes.

NONE none of the routing codes.

Operator Response: None.

Note: In an MCS system which has no CRT consoles sysgened, the AREA column will not be displayed.

IEE298I cm INVALID CHARACTER

Explanation: In the cm command, an invalid character (not enclosed in apostrophes) was found in the operation, operand, or comment field.

System Action: The command was not executed.

Operator Response: Probable user error. Enter the command again, correctly. (If the command was originally entered through the input stream, the command may be reissued through the console in response to this message.)

Problem Determination: Table I, items 2, 7b, 29. If unable to continue system operation see Table I, item 11.

IEE299I { SYSLOG } REQ'D FOR HARDCOPY
ddd

Explanation: The operator entered the VARY HARDCOPY, OFF command without first reassigning the hardcopy function to either the system log, a stand-alone console, or an operator's console. If more than one console is active, or if a single graphics console is active, the hardcopy function is required.

System Action: The command is not executed.

Operator Response: Enter the VARY HARDCOPY command specifying a new hardcopy device, or the system log. Then re-enter the previous command.

IEE300I ddd/aaa INVALID ALTCON

Explanation: In a VARY ddd, CONSOLE command, parameter ALTCON specified an invalid alternate console aaa:

- ddd and aaa are the same device.
- ddd has input/output capabilities and aaa has only output capabilities.

System Action: In the first case, the command is not processed for device ddd. In the second case, if device ddd was previously a console, the previous alternate console is maintained; otherwise, device ddd is made a console, and the alternate console specified at system generation is maintained.

Operator Response: In the first case, choose another alternate console and reenter the command. In the second case, choose an alternate console with input/output capabilities and reenter the command.

IEE301I jjj CANCEL COMMAND ACCEPTED

Explanation: Job jjj was canceled in response to a CANCEL command, by the remote job entry (RJE) procedure or the conversational remote job entry (CRJE) procedure, or by the system. If the job was canceled by the system, messages will follow explaining the reason for the cancellation.

System Action: All reference to the job are deleted from the system.

Operator Response: None.

IEE302I dddy ONLINE

Explanation: One of the following occurred:

- In response to a VARY device online command, the system has placed device ddd online.
- In response to a VARY PATH online command, the path to device ddd has been placed online. In the message text, central processing unit y appears only for multiprocessing systems.

Operator Response: None.

IEE303I dddy OFFLINE

Explanation: One of the following occurred:

- In response to a VARY device offline command, the system has placed device ddd offline.
- In response to a VARY PATH offline command, the path to device ddd has been placed offline. In the message text, central processing unit y appears only for multiprocessing systems.

Operator Response: None.

IEE304I jjj JOB RESET

Explanation: In response to a RESET command, the system has changed the priority of the job named jjj.

Operator Response: None.

IEE305I (cm) COMMAND INVALID
 (NO CORE)
 (blanks)
 (CSCB USE)
 (MODE)

Explanation: The command cm is invalid for one of the following reasons:

- The command is misspelled or punctuated incorrectly.
- A command valid only at Initial Program Load (IPL) was used after IPL.
- A command was issued without a prerequisite command.

NO CORE indicates that main storage was not available to process the central command.

If blanks appear, the operand of the central command was too long, or a framing quote was not found within 62 bytes.

CSCB USE indicates that the maximum number of central commands had been enqueued when another central command was submitted. Also, CSCB USE may indicate that the CRJE system has been started, but is not yet active or that the system has been stopped, but has not yet ended. MODE indicates that ECC was requested in record mode while HIR was in quiet mode.

System Action: The system did not execute the command.

Operator Response: Probable user error. When NO CORE or CSCB USE is printed, resubmit the command at a later time. For CSCB USE, if the condition persists, have the remote job entry program reassembled with a greater number of central command queuing buffers. If blanks or cm appear, enter the command again correctly. For MODE, if desired, enter the command to place HIR into record mode before resubmitting the command to place ECC into record mode.

Problem Determination: Table I, items 2, 29.

IEE306I cm INVALID NUMERICS

Explanation: In the cm command, a parameter value that is supposed to be numeric either contains one or more characters that are not numbers or has too large a value.

Example: D U,DASD,,,27B - where the last operand is supposed to be a decimal number between 0 and 999.

System Action: The system did not execute the command.

Operator Response: Probable user error. Enter the command again correctly.

Problem Determination: Table I, items 2, 29.

IEE307I cm DELIMITER ERROR

Explanation: In the cm command, either the punctuation for a parameter is incorrect, or the operand field is not followed by a blank.

Example: D Q=(A,B - where the list of queue classes should be delimited by a right parenthesis.

System Action: The system did not execute the command.

Operator Response: Probable user error. Issue the command again correctly.

Problem Determination: Table I, items 2, 29

IEE308I cm TERM LENGTH ERROR

Explanation: In the cm command, a parameter is too long or short. Either the parameter is not spelled correctly or a comma is not in the correct location.

Example: D Q=(A,B,C,D,E) - where the list cannot consist of more than four members.

System Action: The system did not execute the command.

Operator Response: Probable user error. Enter the command again correctly.

Problem Determination: Table I, items 2, 29.

IEE309I cm UNIDENTIFIABLE KEYWORD

Explanation: In the cm command, a keyword is misspelled.

System Action: The system did not execute the command.

Operator Response: Probable user error. Issue the command again correctly.

Problem Determination: Table I, items 2, 29.

IEE310I cm KEYWORD MISSING

Explanation: In the cm command, a required keyword parameter is missing.

System Action: The system did not execute the command.

Operator Response: Probable user error. Enter the command again correctly.

Problem Determination: Table I, items 2, 7a, 29.

IEE311I cm PARAMETER MISSING

Explanation: In the cm command, a required parameter is missing.

System Action: The system did not execute the command.

Operator Response: Probable user error. Enter the command again correctly.

Problem Determination: Table I, items 2, 29.

IEE312I cm PARAMETERS CONFLICT

Explanation: In the cm command, either a keyword parameter appears more than once or conflicts with another parameter.

System Action: The system did not execute the command.

Operator Response: Probable user error. Enter the command again correctly.

Problem Determination: Table I, items 2, 29.

IEE313I { utn } UNIT REF INVALID
{ HARDCOPY }

Explanation: In a command, the unit name utn is invalid or indicates a device type that cannot be used for the purpose intended by the command. In systems with Multiple Console Support, if a V, HARDCPY, OFF command is entered, and there is no currently recording hardcopy log, HARDCOPY will replace utn in the message text. In the case of an invalid composite specification, both the I-unit and the O-unit device addresses will appear.

Example: D U,,,3EQ - where Q is not a valid hexadecimal number.

System Action: The system did not execute the command.

Operator Response: Probable user error. Enter the command again, correcting the unit name.

Problem Determination: Table I, items 2, 7a, 29.

IEE314I cm UNIT NOT AVAILABLE

Explanation: In the cm command, one or more units specified are unavailable; that is, they are already in use. If an UNLOAD command was entered, cm specifies the unit name.

System Action: The system did not execute the command.

Operator Response: Probable user error. Enter the command again correctly.

Problem Determination: Table I, items 2, 7b, 29.

IEE315I cm UNIT NOT SUPPORTED

Explanation: In the cm command, one or more units specified are invalid; that is, they cannot be used for the purpose intended by the command.

System Action: The system did not execute the command.

Operator Response: Probable user error. Enter the command again correctly.

Problem Determination: Table I, items 2, 7a, 29.

IEE316I jjj JOB NOT FOUND

Explanation: A CANCEL, DISPLAY, HOLD, RELEASE, or RESET command specified job jjj; however, the job cannot be found. Possibly the job name in the command was misspelled.

- If the job was specified in the RESET command, this message is issued if an output queue entry for the job existed, but the job had been selected by a writer or the queue search had been limited to a specific queue.
- If the job was specified in the CANCEL command and no system output class was indicated, the job may be on an output queue.
- If the job was specified in the CANCEL command and a specific system input or system output class was indicated, the job is not on the indicated queue but may be on another queue.
- If jjj is a system task, either the task is starting or it is too late to cancel the task.
- If the job was specified in the DISPLAY command it is possible for the job to have been removed from the job queue and to be in initialization. A subsequent DISPLAY ACTIVE command should show the jobname as an active task.

System Action: The system did not execute the command.

Operator Response: Enter the command again correctly. If the job was specified in the CANCEL command, enter the command again specifying a system output class or specifying a different system input or system output class, as necessary. If jjj is a system task, enter a DISPLAY A

command to see if the task is starting. If the task is starting, enter a CANCEL STARTING command; otherwise, enter a STOP command.

Problem Determination: Table I, items 2, 7ab, 29. If unable to continue system operation, see Table I, items 8a, 11.

IEE317I jjj JOB SELECTED

Explanation: A DISPLAY, HOLD, RELEASE, or RESET command specified job jjj; the system found the job, but it is too late to execute the command.

If the job was specified on the CANCEL command, system input or system output classes were specified and the job is still running.

System Action: The system did not execute the command.

Operator Response: If the job was specified on the CANCEL command and it is desired to cancel the system output, reenter the command upon completion of the job. If it is desired to cancel the job while it is still running, enter the CANCEL jjj command.

IEE318I QUEUE EMPTY

Explanation: In response to a DISPLAY N or DISPLAY Q command, a search of the SYS1.SYSJOBQE data set indicated that there were no jobs on the queue.

System Action: No display was created.

Operator Response: None.

IEE319I INVALID LOG COMMAND - TEXT LENGTH EXCEEDS MAXIMUM

Explanation: The text portion of the LOG command was too long to be written into the system log. The maximum length for the text is 128 characters.

System Action: The command was not executed.

Operator Response: Reenter the LOG command; do not exceed 128 characters.

IEE320I jjj ALL SYSOUT CANCELLED

Explanation: In response to a CANCEL command, all system output for job jjj has been canceled.

Operator Response: None.

IEE321I jjj SYSOUT CLASS x CANCELED

Explanation: In response to a CANCEL command, all system output for class x of job jjj has been cancelled.

Operator Response: None.

IEE322I jjj JOB CANCELED

Explanation: Job jjj was cancelled in response to a CANCEL command entered by the operator.

System Action: All references to the job are deleted from the system.

Operator Response: None.

IEE323I cm CLASSNAME ERROR

Explanation: In the cm command, a classname subparameter in the CLASS parameter contains a nonalphanumeric character.

System Action: The system did not execute the command.

Operator Response: Reenter the command correctly.

Problem Determination: Table I, items 2, 29.

IEE324I xxxx NOT LOGGED ON

Explanation: The operator has entered a CANCEL U=xxxx, but the specified user, xxxx, is currently not running in the system.

System Action: The command was not executed.

Operator Response: None.

IEE325I xxxx REJECTED - TSO NOT ACTIVE

Explanation: The operator has entered a command that references the foreground (i.e., MN SESS, P SESS, or C U=jjj), but the Time Sharing Option is not active in the system. xxxx is the command verb entered (i.e., CANCEL, C, STOP, P, etc.)

System Action: The command was not executed.

Operator Response: None.

IEE326I { CRJE } NOT SUPPORTED
{ RJE/CRJE }

Explanation: RJE or CRJE was not in the system or had not completed initialization when an RJE or CRJE central command was submitted.

System Action: The command is rejected.

Operator Response: Probable user error. Resubmit the command after RJE or CRJE is started and has completed initialization.

Problem Determination: Table I, items 2, 7ab, 29. If unable to continue system operation, see Table I, items 11.

IEE327I USERS=nnnn id(regno) id(regno)

Explanation: As a result of the DISPLAY USER command the number of active users and the user identification of each will be given as shown above where:

nnnn is the number of active users on the system.

id is the identification of each active user on the system.

regno is the region number of each active user.

When USER=NMBR is specified, only the number of active users will be displayed.

Operator Response: None.

IEE328I cm COMMAND ABORTED

Explanation: Due to an insufficient amount of storage in the system queue space, the system was unable to schedule a DISPLAY ACTIVE command for execution.

System Action: The system did not execute the command.

Operator Response: Reenter the command at a later time.

IEE329I unitaddr UNDER TEST BY OLTEP

Explanation: The user issued a V unitaddr,ONLINE command or, in systems with Multiple Console Support, a V unitaddr,CONSOLE command. The Specified device is presently under test by OLTEP and cannot be made available to OS until completion of the online test.

System Action: The system does not process the request.

Operator Response: Re-issue the command when OLTEP has completed.

IEE330I jjj JOB HELD

Explanation: In response to a HOLD command, the system is temporarily preventing the job named jjj from being selected for processing. The job is in the hold queue in the SYS1.SYSJOBQE data set.

In response to a RELEASE command the job named jjj was found on the hold queue, but it has failed with a JCL error and will remain there until a CANCEL command is issued for it.

Operator Response: None.

IEE331I jjj JOB RELEASED

Explanation: In response to a RELEASE command, the system is again able to select the job named jjj for processing, unless the job is in a queue held by a HOLD Q command.

Operator Response: Check the HOLD command that was entered preceding this RELEASE command. If it was a HOLD command, job jjj has been released; no other action is needed. But, if it was a HOLD Q command, job jjj has not been released, despite

this message; enter a RELEASE Q command to release the input work queue, including job jjj.

IEE332I QUEUE HELD

Explanation: In response to a HOLD Q command, the system is temporarily preventing all jobs in the input work queue, which is in the SYS1.SYSJOBQE data set, from being selected for processing.
Operator Response: None.

IEE333I QUEUE RELEASED

Explanation: In response to a RELEASE Q command, the system is again able to select all jobs from the input work queue in the SYS1.SYSJOBQE for processing.

Operator Response: None.

IEE334I HALT EOD SUCCESSFUL

Explanation: In response to a HALT EOD command, the system has stored internal input/output device error counts in the SYS1.LOGREC data set.

Operator Response: The power can be turned off.

IEE335I VOL PARAMETER MISSING

Explanation: In a MOUNT command, the VOL parameter is missing.

System Action: The system did not execute the command.

Operator Response: Probable user error. Enter the command again correctly.

Problem Determination: Table I, items 2, 7ab, 29.

IEE338I ddd INACTIVE AS HARDCPY

Explanation: In response to a VARY HARDCPY,OFF command, the hard copy capabilities have been varied out of device ddd. Since hard copy is not required, the command has been accepted by the system.

Operator Response: None.

IEE339I ddd CHANGING STATUS

Explanation: A VARY command was issued for device ddd. However, the device is currently in the process of changing status. In the case of an invalid composite specification, both the I-unit and the O-unit device addresses will appear.

System Action: The system did not execute the command.

Operator Response: Use the DISPLAY CONSOLES command to determine the status of the device. After the device has completed its status change, reenter the command.

IEE341I ttt NOT ACTIVE

Explanation: A command was received which applies to the task named ttt; however, no task with this name is currently active.

System Action: The command was not executed.

Operator Response: Verify that the task has been started by issuing a 'DISPLAY A' command or make sure that the task name was specified correctly in the command.

Problem Determination: Table I, items 2, 7ab, 29. If unable to continue system operation, see Table I, item 11.

Note: After a swap from a started reader or writer, all console communication must be with the old device address until the reader or writer in the swap is closed. Then the new device address can be used.

IEE342I cm REJECTED - TASK BUSY.

Explanation: The command named cm was received; however, either the command applies to a task that has not finished processing a previous command or the command was entered for a job or task that is in a "must complete" mode.

Example: DA

System Action: The command was not executed.

Operator Response: Reenter the command after the previous commands have completed execution.

IEE343E ser, dsn, NOT MOUNTED

Explanation: In attempting to locate the SYS1.SYSJOBQE or SYS1.PROCLIB data set, indicated by dsn in the message text, the catalog was searched. The catalog indicated that the data set would be found on the volume whose serial number is ser. However, the indicated volume is not mounted.

System Action: The SET command was not executed.

Operator Response: Probable user error. If the volume containing the data set is mounted but is not the volume indicated in the message text, reenter the SET command using the Q= or PROC= parameter to specify the unit on which the data set can be found. If the indicated volume has to be mounted or if the device was offline, ready the volume or device and restart the system.

Problem Determination: Table I, items 2, 7ab, 25d, 29. If unable to continue system operation, see Table I, item 11.

IEE344E dsn, NOT FOUND ON ser, ddd

Explanation: In attempting to locate the SYS1.SYSJOBQE or SYS1.PROCLIB data set, indicated by dsn in the message text, the system considered device ddd on which was mounted the volume whose serial number is ser. This device and volume were considered for one of the following reasons:

- The device was specified in the SET command.
- The catalog indicated that the data set would be found on the volume whose serial number is ser.
- The device was specified at system generation.
- As a default, the IPL volume was considered.

However, the data set was not on the indicated volume.

System Action: The SET command was not executed.

Operator Response: Probable user error. If the volume containing the data set is mounted on a device other than that specified in the message text, reenter the SET command using Q= or PROC= parameter to specify the unit on which the data set can be found. If the indicated volume has to be mounted, mount the volume and restart the system. If the indicated device was offline, ready the device and restart the system.

Problem Determination: Table I, items 2, 7ab, 25bd, 29. If unable to continue system operation, see Table I, item 11.

IEE345I cm AUTHORITY INVALID

Explanation: Command cm was entered in an environment with multiple console support. However, the command was entered from a console without the proper command authority.

Example: K M,UTME=20 entered from any console other than the master console.

System Action: The system did not execute the command. However, if a VARY command was entered, the command will not be processed only for the device specified in the message text.

Operator Response: Probable user error. Reenter the command from a console with the proper command authority.

Problem Determination: Table I, items 2, 7ab, 17ab, 29. Issue a 'DISPLAY CONSOLES' command.

If unable to continue system operation, see Table I, item 11.

IEE346I INPUT RDR JOBNAME OVER 8 CHARS

Explanation: in a START RDR or START RDRA command, the jobname parameter value specified a name longer than 8 characters.

System Action: The system did not execute

Operator Response: Probable user error. Enter the command again, making sure that the jobname specified does not consist of more than 8 characters. If the problem recurs, do the following before calling

Problem Determination: Table I, items 2, 7ab, 29. If unable to continue system operation, do see Figure 1, item 11.

IEE348I ddd UNAVAILABLE CONSOLE.

Explanation: Device ddd, specified as the primary or master console at system generation, is not available for system use.

System Action: The system will use the alternate or secondary console. If no alternate or secondary console is available, the system enters a wait.

Operator Response: Continue system communication on the alternate or secondary console.

Problem Determination: Table I, items 2, 7ab, 29.

```
{IEE349I HARDCOPY CONSOLE }
{IEE349I CONSOLES }
  CONSOLE/ALT COND AUTH ID AREA ROUTCD
  {console/alt} H auth1 nn x,a,-a2 routed
  {SYSLOG } M auth2
  console/alt { A[,P]
                N[,P]
                N[,T]
```

Explanation: In response to a VARY command, this message provides a display of the console configuration. In response to a VARY HARDCOPY command, the first format of the title line and the data line appears with the label line. In response to a VARY CONSOLE command, the second format of the data line appears with the title and label lines.

In the message text, the fields are:

```
CONSOLE
  console
    ddd          device address of the
                  primary console, which is
                  either an output device or
                  an input/output device.
  ddd,ddd       device addresses of the
                  composite primary console.
SYSLOG
  the SYSLOG is the hard copy device.
ALT
  alt
    ddd          device address of the
                  alternate console.
  ddd,ddd       device addresses of the
                  composite alternate
                  console.
COND
  H             hard copy device.
  M             master console.
```

A active console.

A,P in the process of becoming an active console.

N non-active console.

N,P in the process of becoming a non-active console.

N[,T] cannot be made a console until the Online Test Executive Program (OLTEP) completes its online test program.

AUTH

auth1

CMDS Operator and system commands and all responses are to be written on the hard copy log.

STCMDS operator and system commands and status displays are to be written on the hard copy log.

INCMDS Operator and system commands and inline responses are to be written on the hardcopy log.

NOCMDS Operator and system commands and responses are not to be written on the hardcopy log.

auth2

SYS Commands authorized for the console are CANCEL, CENOUT, DEFINE, HALT, HOLD, MODE, MODIFY, QUIESCE, RELEASE, RESET, SET, START, STOP, USERID, and WRITELOG.

IO Commands authorized for the console are MOUNT, UNLOAD, and VARY.

CONS Command authorized for the console is VARY, plus use of the routing location operand.

INFO commands authorized for console are BRDCST, DISPLAY, LOG, MSG, and SHOW, CONTROL, MONITOR, MSGRT, STOPMN, REPLY.

ALL commands authorized for console are all the commands listed above under SYS, IO, CONS, and INFO.

NONE no command authority, which occurs with an output only device.

ID nn the system identification number for this console.

AREA x, a₁ - a₂ the range of area designators defined for this console, where x is the id of the message area, a₁ is the bottom area and a₂ is the top area.

IEE

ROUTCD

routcd

x,x,...

the routing codes assigned to the console or hard copy device; if a composite console, the routing codes assigned to the output device.

ALL

all of the routing codes.

NONE

none of the routing codes.

Operator Response: None.

Note: If the console specified is not a CRT console, the AREA column will not be displayed.

IEE350I SMF SYS1.MAN{X} NOT DEFINED {Y}

Explanation: The SYS1.MANX or SYS1.MANY data set, as indicated in the message text, is required but was not defined in the SMFDEFLT member or by the operator from the keyboard.

System Action: System operation continues, but no records are written in the SYS1.MAN data set.

Operator Response: Probable user error. Inform the programmer responsible for the system to define the SYS1.MAN data set in the SMFDEFLT member.

Problem Determination: Table I, items 2, 7ab, 29.

IEE351I SMF SYS1.MAN RECORDING NOT BEING USED

Explanation: During SMF initialization, one of the following occurred:

- Space was not allocated for the SYS1.MAN data set or SYS1.MAN data set could not be opened. In this case, message IEE350I, IEE358I, or IEE363I precedes this message, indicating the cause of the error.
• MAN=NONE was specified, indicating that no data records were to be written in the SMF data set.

System Action: System operation continues, but no records are written in the SYS1.MAN data set.

Operator Response: In the first case, inform the system programmer to properly define the SMFDEFLT member, as indicated in the response to the preceding message.

In the second case, none.

IEE352A SMF MEMBER MISSING - REPLY WITH SMF VALUES

Explanation: During SMF initialization, the SMFDEFLT member was not found in the SYS1.PARMLIB data set.

System Action: SMF initialization will not continue until the operator has responded to this message.

Operator Response: Probable user error. Enter REPLY xx,'keyword=value, keyword=value', listing all the required SMFDEFLT parameters as defined by the programmer responsible for the system at your installation. Inform the programmer responsible for the system to define the SMFDEFLT member in the SYS1.PARMLIB data set, thereby eliminating the need to redefine the SMFDEFLT parameters from the keyboard at every SMF initialization.

Problem Determination: Table I, items 2, 7ab, 29. Execute the IEHLIST utility program to list members of SYS1.PARMLIB and save the output.

IEE353A I/O ERROR ON SMFDEFLT READ - REPLY WITH SMF VALUES OR RE-IPL

Explanation: During SMF initialization, an uncorrectable input/output error occurred while reading or searching for the SMFDEFLT member in the SYS1.PARMLIB data set.

System Action: SMF initialization will not continue until the operator has responded to this message.

Operator Response: Restart the system. If the error persists, enter REPLY xx,'keyword=value,keyword=value', listing all the required SMFDEFLT parameters as defined by the system programmer at your installation.

Problem Determination: Table I, items 2,7ab, 29.

IEE354I SMF PARAMETERS

Explanation: This message is issued if OPI=YES was specified in the SMFDEFLT member. All the parameters of the SMFDEFLT member are listed, one parameter to a line, following this message; each parameter is listed in the format keyword=value. Message IEE357A follows, permitting changes to be made.

System Action: None.

Operator Response: None.

IEE355I SMF PARAMETER ERRORS

IEE355I xxxxx UNRECOGNIZABLE KEYWORD/FORMAT keyword=value INVALID VALUE SPECIFIED keyword - KEYWORD NOT SPECIFIED

Explanation: During SMF initialization, a parameter was specified incorrectly either in the SMFDEFLT member or in a reply from the console. The specific error is listed in the second line of the message:

xxxxx UNRECOGNIZABLE KEYWORD/FORMAT An unrecognizable keyword was detected; xxxxx specifies up to 25 characters of the keyword in error.

keyword=value INVALID VALUE SPECIFIED The keyword specified is valid, but the value specified is invalid.

IEE377I PATHddd TP - CANNOT BE VARIED

Explanation: A VARY PATH command requested that the path to telecommunications device ddd be varied. However, alternate path retry does not support teleprocessing.

In the message text, central processing unit y appears only for multiprocessing systems.

System Action: The command is not executed. The system continues operation.

Operator Response: If ddd does not indicate the desired path, enter the command again correctly.

Problem Determination: Table I, items 11, 29.

IEE378I PATHddd DOES NOT EXIST

Explanation: A VARY PATH command requested that a non-existent path to device ddd be varied online or offline. However, the path does not exist in the system.

In the message text, central processing unit y appears only for multiprocessing systems.

System Action: The command is not executed. The system continues operation.

Operator Response: Probable user error. If ddd does not indicate the desired path, enter the command again correctly.

Problem Determination: If ddd does indicate the desired path, or if the problem recurs, see Table I, items 11, 29.

IEE379I PATHddd NOT AVAILABLE

Explanation: A VARY PATH command requested that the path to shared direct access storage device ddd be varied offline. However, the path is temporarily reserved and cannot be varied.

In the message text, central processing unit y appears only for multiprocessing systems.

System Action: The command is not executed. The system continues operation.

Operator Response: Probable user error. If desired, enter the VARY PATH command again after the shared device has been released.

Problem Determination: Table I, items 11, 29.

IEE380I ddd DEVICE TYPE INVALID

Explanation: A SWAP command was entered; however, either device ddd is not supported by dynamic device reconfiguration or device ddd is not the

same device type as the other device specified in the command:

Note:

- Teleprocessing devices are not supported.
 - Emulator 7-track "native mode" tapes are not supported.
 - The system residence volume cannot be swapped unless the operator enters a SWAP SYSRES command specifying the current sysres address as the "from" device.
ex: SWAP SYSRES "from" TO "to"
 - The following unit record swaps are supported:
 - 1403/1404 to 1403/1404.
 - 1442 to 1442.
 - 1443 to 1443.
 - 2501 to 2501.
 - 2520 to 2520.
 - 2540 to 2540.
- Unit record devices must be out of the ready state when a swap is performed.

Note: When swapping printers, both printers must either have or not have the UCS option; that is, one printer cannot have the option when the other does not.

- The system will not initiate requests for DDR on readers, punches and printers but the operator may request DDR for these devices during "intervention required" conditions only.
- Shared direct access storage devices can only be removed from and remounted on themselves.
- The following tape swaps are supported:
 - 7-track to 7-track.
 - 9-track 800 bpi to 9-track 800 bpi, and 9-track 800 dual density to 9-track 800 bpi or dual density.
 - 9-track 1600 bpi to 9-track 1600 bpi, and 9-track 1600 dual density to 9-track 1600 bpi or dual density.
- An allocated tape device may not be specified as the yyy device in a SWAP command.

System Action: The command is not executed. The system continues operation.

Operator Response: Probable user error. If a swap is still desired, enter the command again correctly.

Problem Determination: Table I, items 11, 29.

IEE381I ddd DEVICE UNALLOCATED

Explanation: A SWAP command was entered for device ddd that has not been allocated to a job. Therefore, a swap cannot be performed.

System Action: The command is not executed. The system continues operation.

Operator Response: Probable user error. If movement of the volume on device ddd is not desired, none.

If movement of the volume on device ddd is desired, issue a VARY DEVICE offline command for the device and move the volume. If the VARY DEVICE command is not executed successfully, then the device has since been allocated and the SWAP command can be reentered.

Problem Determination: Table I, items 11, 29.

IEE382I DDR CURRENTLY ACTIVE

Explanation: A SWAP command was entered; however, a dynamic device reconfiguration request is outstanding.

System Action: The command was not executed.

Operator Response: Wait for the outstanding dynamic device reconfiguration request to complete. Then, if desired, reenter the SWAP command.

NOTE: Canceling the affected job will purge the outstanding request.

CAUTION: If you decide to cancel the job that was running when DDR got control or if that job ABENDS, you must reply to any outstanding DDR messages that require replies.

Problem Determination: Table I, items 11, 29.

IEE390I NO ALTERNATE CONSOLE

Explanation: No device has been designated as an alternate console.

System Action: The system continues processing.

Operator Response: If an alternate console is desired, ready the device and restart the system. Otherwise, ignore the message.

IEE391I ALTERNATE CONSOLE IS adr

Explanation: A device has been designated as an alternate console. In the message text, adr is either the address of the console device (adr) or in the case of a composite console, the addresses of both devices (adr,adr).

System Action: The system continues processing.

Operator Response: None.

IEE395W MASTER SCHEDULER INITIALIZATION FAILED - RE-IPL

Explanation: During master scheduler initialization, abnormal termination occurred.

System Action: The master scheduler task goes into a permanent wait state.

Operator Response: Restart the system.

Problem Determination: Table I, items 2, 7ab, 11, 29.

IEE400I THESE MESSAGES CANCELLED- xx,xx,xx

Explanation: The program that issued the messages whose message identifiers, xx, are listed above has abnormally terminated. Therefore, the replies previously asked for by these messages are no longer needed.

System Action: The system continues processing.

Operator Response: None.

IEE403I cm COMMAND ABORTED

Explanation: The cm command was unable to complete its execution because of a system failure. Message IEE404I, which usually precedes this message, indicates the probably cause of the failure.

System Action: The system did not execute the command.

Operator Response: Enter the command again.

Problem Determination: Have both the console sheet containing this message and the master console sheet available. Provide the storage dump if message IEE404I indicates that one has been taken.

IEE404I {M}dd xx yyy z
{S}

Explanation: While the Master Scheduler (indicated by M in the message text) or the Command Scheduler (indicated by S) was processing a command, a system task abnormally terminated with the system completion code yyy. The system entered processing recovery routines to perform corrective action as indicated by xx. In the message text, dd is the dump identification used to correlate this message with a system produced storage dump, and z represents the program status word at the time of the failure.

If z consists of zeroes, insufficient core was available to the ABEND/STAE routines at the time of failure to save the psw at the time of the failure.

System Action: The system takes one of the following corrective actions, as indicated by xx in the message text:

- 00 - All control block chains were found to be valid and no corrective action was taken.
- 02 - A LOGON Communication Element (LCE) chain pointer was not within System Queue Space (SQS). The invalid pointer was zeroed, truncating the LCE chain.
- 03 - An LCE pointer was not on a doubleword boundary. The invalid pointer was zeroed, truncating the LCE chain.

- 04 - A Command Scheduler Control Block (CSCB) chain pointer was not on a doubleword boundary. The invalid pointer was zeroed, truncating the CSCB.
- 06 - A CSCB chain pointer was not within SQS. The invalid pointer was zeroed, truncating the chain.
- 08 - An abnormal termination occurred when this task was enqueued on the Group Control Block (GCB) chain. A DEQ macro instruction was issued to free the GCB resource.
- 10 - A GCB chain pointer was not on a doubleword boundary. The invalid pointer was zeroed, truncating the GCB chain.
- 12 - A GCB chain pointer was not within SQS. The invalid pointer was zeroed, truncating the GCB chain.
- 14 - A Command Input Buffer (CIB) chain pointer was not on a doubleword boundary. This CIB chain was pointed to by a CSCB. The invalid pointer was zeroed, truncating the CIB chain.
- 16 - A CIB chain pointer was not within SQS. This CIB chain was pointed to by a CSCB. The invalid pointer was zeroed, truncating this CIB chain.
- 18 - A CIB chain pointer was not on a doubleword boundary. This CIB chain was pointed to by a GCB. The invalid pointer was zeroed, truncating th CIB chain.
- 20 - A CIB chain is not within SQS. This CIB chain was pointed to by a GCB. The invalid pointer was zeroed, truncating the CIB chain.
- 22 - The Master Scheduler task or Display Active task terminated abnormally. The system freed main storage that had been obtained by these tasks.
- 24 - A Reply Element chain pointer was not on a doubleword boundary. The invalid pointer was zeroed, truncating the Reply Queue Element chain.
- 25 - A Reply Queue Element chain pointer was not within SQS. The invalid pointer was zeroed, truncating the Reply Queue Element chain.
- 29 - The Display Acive task terminated abnormally. The Master Region Busy (also known as the Display Active) bit in the Master Resident Area was turned off (set to 0).
- 30 - A storage dump of all main storage was provided as an aid in isolating the problem that caused the failure. If this code is absent, no dump is provided.
- 31 - The Master Scheduler task or Display Active task terminated abnormally. Some storage obtained by these tasks was not freed.

After these corrective actions have been taken, the system will continue processing, but at a reduced capability. Performance may be affected in the following ways:

- If xx is 04 or 06, some MODIFY, STOP, CANCEL, and DISPLAY commands may result in other error messages.
- If xx is 10, 12, 14, 16, 18, or 20, some previously entered MODIFY or STOP commands will not be executed.
- If xx is 24 or 25, some outstanding replies may not be valid.
- If xx is 31 and message IEE403 indicates that the Display Active task was aborted, future Display Active tasks may not execute.

Operator Response: Respond as follows:

- If xx is 00, 02, 03, 08, 10, 12, 14, 16, 18, 20, 22, or 29, no action is required.
- If xx is 04 or 06, quiesce and restart the system.
- If xx is 24 or 25, determine which outstanding replies are required by entering a DISPLAY R command. Because the Reply Queue Element chain has been truncated, the system may no longer be aware of tasks waiting for outstanding replies. Therefore, some problem programs may terminate abnormally and some system tasks may wait indefinitely. If system tasks appear to be waiting for this reason, quiesce and restart the system.
- If xx is 30, use the IMDPRDMP Service Aid program to print the dump data set.
- If xx is 31 and message IEE403I indicates that the Display Active task was aborted, quiesce and restart the system. system.

Problem Determination: Table I, items 2, 29. If the xx field in the message text is 30, indicating that a storage dump has been taken, have the dump available.

IEE

IEE415I INVALID PROCEDURE ON START cm

Explanation: The procedure specified in a START command contained more than one step, at least one of which was a system task.

System Action: The command was not executed.

Operator Response: Probable user error. Report the message to the programmer responsible for the system at the installation.

Problem Determination: Table I, items 2, 7ab, 26d, 29.

IEE450I hh.mm.ss UNIT STATUS [id]

Explanation: In response to a DISPLAY U command, this message provides a display of the requested information. The message may appear in either of two formats:

- If OFFLINE is not specified in the DISPLAY U command, the following headings will appear on the second line of this message -- UNIT, TYPE, STATUS, VOLSER, and VOLSTATE. If two or more units are being described, the headings will appear twice on the second line. The third line, and each succeeding

line, will contain information as described by the headings.

- If OFFLINE is specified in the DISPLAY U command, the following headings appear on the second line -- UNIT and TYPE. Up to seven units may be described on the third line and each succeeding line of the display.

[id]

A three-digit decimal identification number. It is used in conjunction with the CONTROL C,D command for canceling status displays being written on typewriter or printer consoles or being displayed in-line (not in a display area) on a display (CRT) console. This identification number does not appear when the display is presented in a display area on a display console.

System Action: None.

Operator Response: None.

IEE452I UNIT STATUS NUMBER OF UNITS REQUESTED EXCEEDS NUMBER AVAILABLE

Explanation: In the DISPLAY U command, the number of devices specified for which information was to be supplied exceeded the number of devices in the system with the requested attributes. This message appears as the last line of the display.

System Action: The command was executed.

Operator Response: None.

IEE453I UNIT STATUS, INVALID OPERAND. RE-ENTER

Explanation: In the DISPLAY U command, invalid parameters were specified.

System Action: No display was created.

Operator Response: Enter the command correctly, specifying valid parameters.

IEE454I UNIT STATUS, DEVICE DOES NOT EXIST

Explanation: In the DISPLAY U command, the single device specified did not correspond to any device in the system.

System Action: No display was created.

Operator Response: Enter the command correctly, specifying a valid device description.

IEE455I UNIT STATUS, NO DEVICES WITH REQUESTED ATTRIBUTES

Explanation: In the DISPLAY U command, attributes were specified that did not correspond to any devices in the system.

System Action: No display was created.

Operator Response: Enter the command correctly, specifying valid device descriptions.

IEE475I TASK jjj sss ABENDED. COMPLETION CODE hhh

Explanation: A system task being performed for the step named sss of the job named jjj abnormally terminated with a completion code of hhh, in hexadecimal.

System Action: The task was terminated.

Operator Response: Examine the conditions causing completion code hhh to be produced and, if possible, correct the error and start the task again. At some convenient time, either start or restart the system, whichever is necessary, to ensure against a possible loss of system resources.

Problem Determination: Table I, items 2, 7ab, 29. If unable to continue system operation, see Table I, item 11. If hhh is associated with the job queue see Table I, item 8a.

IEE500E CHANNEL xy NOT OPERATIONAL

Explanation: A test of channel x of central processing unit y indicated that the channel was not operational.

System Action: The VARY channel online command was not executed.

Operator Response: Probable user error. Set the channel on and reenter the VARY command.

Problem Determination: Table I, items 2, 29.

IEE502I CH xy ONLINE

Explanation: In response to a VARY channel online command, channel x of central processing unit y has been placed online or was already online.

System Action: The system continues processing.

Operator Response: None.

IEE503I CH xy OFFLINE

Explanation: In response to a VARY channel offline command, channel x of central processing unit y has been marked offline in the channel table or was already offline.

System Action: The system continues processing.

Operator Response: None.

IEE504I CPU y ONLINE [:CHANNELS OFFLINE ARE x]

Explanation: In response to a VARY CPU online command, central processing unit (CPU) y has been placed online. In the message text, channels x are offline.

System Action: The system continues processing.

Operator Response: None.

IEE505I CPU y OFFLINE

Explanation: In response to a VARY CPU offline command, central processing unit (CPU) y has been placed offline.

System Action: The system continues processing.

Operator Response: None.

IEE506E 2ND CPU DID NOT RESPOND TO EXTERNAL START

Explanation: A VARY CPU online command was entered for the second central processing unit in the Model 65 Multiprocessing System. However, the central processing unit already online was unable to start the second central processing unit electronically.

System Action: The system continues processing.

Operator Response: Probable user error. Enter the QUIESCE command, check to see if power is up on the central processing unit to be varied online, and check the configuration panel to insure that the switches are set correctly.

Problem Determination: Table I, items 11, 29.

IEE507E TIMER ON SECOND CPU NOT WORKING. VARY COMMANDS MAY BE AFFECTED

Explanation: In response to a VARY CPU online command, the timer for the externally started central processing unit (CPU) was not enabled. Therefore, VARY channel, VARY CPU, and QUIESCE commands may give unpredictable results.

System Action: The system continues processing.

Operator Response: Probable user error. Vary the second CPU offline, enable the timer, then vary the second CPU back online.

Problem Determination: Table I, items 2, 11, 29.

IEE508E BOTH PREFIX SWITCHES SET THE SAME

Explanation: In response to a VARY CPU online command, it was discovered that the prefix switches, located on the configuration control panel, for both central processing units were set in the same position (ENABLE or DISABLE). This causes both central processing units to use the same prefixed storage area.

System Action: The command was not executed. The system continues processing.

Operator Response: Probable user error. Change the prefix switch for the central processing unit that is being brought online to a setting (ENABLE or DISABLE) that is opposite to the setting of the

switch for the central processing unit that is running. Then reenter the command.

Problem Determination: Table I, items 2, 11, 29.

IEE509I VARY REJECTED, CHANNEL ERROR

Explanation: During execution of a VARY channel online command, a channel error was encountered.

System Action: The command was not executed. The system continues processing.

Operator Response: Probable hardware error. Enter the VARY command again.

Problem Determination: Table I, items 2, 11, 29. Table II, Format 1: trace option - TRACE=IO.

IEE510I STORAGE LOCATIONS xxxxxx TO yyyyyy OFFLINE

Explanation: In response to a VARY storage offline command, storage has been placed offline. In the message text, xxxxxx is the starting address and yyyyyy is the ending address, in hexadecimal, of the storage placed offline.

This message is also issued in response to a DISPLAY configuration matrix command requesting the status of storage.

System Action: The system continues processing.

Operator Response: None.

IEE511E QUIESCE IS NOT POSSIBLE. BUSY DEVICES ARE: ddd

Explanation: A QUIESCE command was entered, but the input/output activity has not completed. In the message text, devices ddd are busy.

System Action: The command was not executed. The system continues processing.

Operator Response: Reply in one of the following ways:

- Allow the input/output activity to complete and reenter the command.
- Make the busy device not ready, and reenter the command.
- Cancel the jobs whose input/output is making the devices busy.

Problem Determination: Table I, items 2, 5a, 29. Table II, Format 1: trace option - TRACE=IO.

IEE512E ddd BUSY. COMMAND IGNORED

Explanation: A VARY CPU offline command was entered, but the input/output activity on device ddd did not complete within three minutes.



System Action: The command was not executed. The system continues processing.

Operator Response: Probable user error. Reply in one of the following ways:

- Allow the input/output activity to complete, and reenter the VARY command.
- Make the busy devices not ready, and reenter the VARY command.
- If necessary, cancel the jobs whose input/output is making the channel busy.

Problem Determination: Table I, items 2, 11, 29. Record the system configuration at the time of failure and have it available.

IEE514I taskname ABENDING COMPLETION CODE xxx

Explanation: The system task control failed with a completion code of xxx while processing a START or MOUNT command for the indicated task, or terminating the indicated task.

System Action: Processing for the indicated task terminates, and all resources of that task are returned to the system.

Operator Response: Inform the system programmer that this message has been issued.

Programmer Response: Examine the conditions causing the termination of the indicated task, and if possible, correct the error. Then request that the operator restart the task.

Problem Determination: Table I, items 2, 7a, 29.

IEE515E STORAGE PHYSICALLY REMOVED FROM SYSTEM

Explanation: A VARY storage online command was issued, but the storage unit specified has been dialed out of the system and cannot be addressed.

System Action: The command was not executed. The system continues processing.

Operator Response: Probable user error. If a VARY online command was entered, dial the storage box back into the system and reenter the VARY command. Otherwise, no response is necessary.

Problem Determination: Table I, items 2, 11, 29.

Record the system configuration at the time of failure and have it available.

IEE517I INVALID ADDRESS SPECIFIED IN VARY STORAGE

Explanation: In a VARY storage online or offline command, one of the following errors was made:

- The number of the storage unit was not 1 through 8.
- The storage address contained a non-hexadecimal digit.
- The address range was above the highest range selected at IPL time.
- The address range was specified in the wrong order.

System Action: The command was not executed. The system continues processing.

Operator Response: Probable user error. Enter the command again correctly.

Problem Determination: Table I, items 2, 11, 29.

IEE518I VARY STORAGE OFFLINE OVERLAPS SUPERVISOR

Explanation: The storage address range specified in a VARY storage offline command overlaps the supervisor storage area.

System Action: The command was not executed. The system continues processing.

Operator Response: Probable user error. Enter the command again correctly.

Problem Determination: Table I, items 2, 11, 29.

IEE519E STORAGE ONLINE HAS IMPERFECT OVERLAP

Explanation: In a VARY online command, the storage addresses overlap but do not exactly match the addresses specified in a previous VARY offline command which has not yet completed.

System Action: The command is ignored. The system continues processing.

Operator Response: Probable user error. If the intention is to cancel the previous VARY offline command, then reenter the VARY online command specifying the same addresses as in the VARY offline command. Otherwise, wait until the VARY offline command completes and reenter the VARY online command specifying addresses that do not overlap the addresses of the VARY offline command.

Problem Determination: Table I, items 2, 11, 29.

IEE520I VARY STORAGE OFFLINE CANCELLED DUE TO SUBSEQUENT ONLINE

Explanation: A VARY offline command had previously been issued, but had not completed. In response to a VARY online command for the same space, the VARY offline command was canceled.

System Action: The system continues processing.

Operator Response: None.

IEE521I CH xy INVALID

Explanation: In a VARY command, channel x of central processing unit y was specified incorrectly and was not recognized by the system.

System Action: The command was not executed. The system continues processing.

Operator Response: Probable user error. Enter the command again correctly.
Problem Determination: Table I, items 2, 11, 29.

IEE522I CPU y INVALID

Explanation: In a VARY command, central processing unit (CPU) y was not recognized by the system. Either an invalid character was specified for the CPU ID, or the CPU is not active.

System Action: The command was not executed. The system continues processing.

Operator Response: Probable user error. Enter the command again correctly.

Problem Determination: Table I, items 2, 11, 29.

IEE523I INVALID COMMAND IN ONE CPU SYSTEM

Explanation: The command cannot be executed in a partitioned system. The message is also issued if an attempt is made to remove the only central processing unit in multisystem mode.

System Action: The command was not executed. The system continues processing.

Operator Response: Probable user error. Enter only commands valid for systems with one central processing unit.

Problem Determination: Table I, items 2, 11, 29.

IEE524I STORAGE LOCATIONS xxxxxx TO yyyyyy ONLINE

Explanation: In response to a VARY storage online command, storage has been placed online. In the message text, xxxxxx is the starting address and yyyyyy is the ending address, in hexadecimal, of the storage placed online.

System Action: The system continues processing.

Operator Response: None.

IEE525I LOGICAL STORAGE UNIT z IS NOW OFFLINE

Explanation: In response to a VARY command, storage has been placed offline. In the message text, z is the number (1,2,3,4,5,6,7, or 8) of the logical storage unit.

System Action: The system continues processing.

Operator Response: None.

IEE526I LOGICAL STORAGE UNIT z IS NOW ONLINE

Explanation: In response to a VARY command, storage has been placed online. In the message text, z is the number (1,2,3,4,5,6,7 or 8) of the logical

System Action: The system continues processing.

Operator Response: None.

IEE527E VARY REJECTED, WOULD REMOVE ACCESS TO CONSOLE

Explanation: In response to a VARY CPU offline or VARY channel offline command, access to the system console would be lost.

System Action: The command was not executed. The system continues processing.

Operator Response: Probable user error. Do not enter a VARY command that eliminates access to the system console.

Problem Determination: Table I, items 2, 11, 29.

IEE528I COMMAND PROCESSING ABEND xxx HAS OCCURRED

Explanation: An abnormal termination occurred during execution of a queue manipulation command. The system completion code is indicated by xxx.

System Action: Processing of the queue command terminates, and the subpools and the region allocated to the queue-alter routine are freed.

Operator Response: Inform the system programmer or installation manager that this message has been issued.

Programmer Response: Examine the conditions causing the system completion code xxx. If possible, correct the error and re-enter the command.

Problem Determination: Table I, items 2, 7ab, 29.

IEE541E VARY REJECTED, VARYING OUT LAST PATH TO DEVICE ddd

Explanation: In response to a VARY CPU offline or VARY channel offline command, the last path to device ddd or an element of the reserved path to shared direct access device ddd would be removed from the system.

Note: A VARY command that removes the last path to a resident data set, an unallocated device, or a tape drive, will always be rejected.

System Action: The command was not executed. The system continues processing.

Operator Response: Probable user error. Do not enter a VARY command that eliminates access to a device.

Problem Determination: Table I, items 2, 11, 29.

IEE549I ONLINE: ddd[,...ddd]

Explanation: In response to a VARY channel offline command in a system with multiple console support (MCS) online consoles ddd would be placed offline by executing the command.

System Action: The command was not executed and the system continues processing.

Operator Response: None. Message IEE527E follows.

IEE550I ONLINE: ddd[,...ddd]

Explanation: In response to a VARY CPU offline command in a system with multiple console support (MCS), online consoles ddd would be placed offline by executing the command.

System Action: The command was not executed and the system continues processing.

Operator Response: None. Message IEE527E follows.

IEE600I REPLY TO xx IS text

Explanation: This message notifies all console operators that received a message request with identification xx that a reply has been accepted to the message. The first thirty characters of the accepted reply appear as 'text'. The text may or may not be enclosed in quotes depending on whether or not the reply was enclosed in quotes.

System Action: The system continues processing.

Operator Response: None.

IEE699I REPLY xx IGNORED; NON-DECIMAL ID

Explanation: A REPLY xx command was entered specifying a non-decimal id. The reply id must be entered as decimal digits with or without a leading zero in ids 01 through 09.

System Action: The REPLY xx command is ignored. The system continues processing.

Operator Response: Probable user error. Enter the REPLY command again correctly.

Problem Determination: Table I, items 2, 29.

IEE700I REPLY xx IGNORED; REPLY TOO LONG FOR REQUESTOR

Explanation: A REPLY xx command was entered and the reply text was too long for the user's buffer.

System Action: The REPLY xx command is ignored. The system continues processing.

Operator Response: Probable user error. Enter the REPLY command again correctly.

Problem Determination: Table I, items 2, 29.

IEE701I REPLY xx IGNORED; NO REPLIES OUTSTANDING

Explanation: REPLY xx was entered when a reply was not being requested.

System Action: The unexpected REPLY xx was ignored. The system continues processing.

Operator Response: None.

IEE702I REPLY xx IGNORED; IMPROPER USE OF DELIMITERS

Explanation: REPLY xx was invalid for one of the following reasons:

- A closing apostrophe did not follow the text when the text was preceded by an apostrophe.
- An invalid character (a character other than a comma, space, or EOB) followed the id.

System Action: The REPLY xx was ignored. The system continues processing.

Operator Response: Probable user error. Enter the REPLY command again correctly.

Problem Determination: Table I, items 2, 29.

IEE703I REPLY xx NOT REQUESTED FROM THIS CONSOLE

Explanation: In systems with multiple console support (MCS), a REPLY xx command was entered by a secondary console in response to a message that the console did not receive.

System Action: The REPLY xx command is ignored. The system continue processing.

Operator Response: Probable user error. Enter the command again from the master console or from a console that received the message.

Problem Determination: Table I, items 2, 29.

IEE704I REPLY xx NOT OUTSTANDING

Explanation: A REPLY xx command was entered; however, there is no outstanding reply request with the identification xx. Either the message request has already been answered or the message reply identification xx is incorrect.

System Action: The REPLY xx command is ignored. The system continues processing.

Operator Response: Probable user error. If the reply identification was incorrect, enter the command again correctly.

Problem Determination: Table I, items 2, 29.

IEE706I {SWITCH} NOT SUCCESSFUL
{HALT}

Explanation: One of the following occurred:

- The SWITCH SMF command was entered in a system not supporting SMF.
- The SWITCH SMF or the HALT EOD command was entered while the SMF recording data sets were being switched or while there was no SMF data set available.

System Action: The command was not executed.

Operator Response: Reenter the command as soon as the data set switch has completed.

Problem Determination: Table I, items 2, 7ab, 29.

IEE720I NO PFK ALLOCATION

Explanation: The operator has entered the CONTROL command with either the N, PFK, D, PFK, or E, PFK operand with PFK support has not been included within the system.

System Action: The command is not executed.

Operator Response: Check with the system analyst to insure PFK support has been included in the system during system generation. If so, prior to calling for IBM support, do the following:

- Execute the IMASPZAP service aid program to dump load module IEEPFKEY from DCMLIB.
- Save the output.

IEE721I PFK nn NOT SUPPORTED

Explanation: The operator depressed PFK nn for which support had not been requested at system generation.

System Action: None.

Operator Response: Retry the operation. Check the PFK specification for correctness. If the problem recurs, do the following before calling for IBM support:

- Issue D PFK command from the console.
- Have the hardcopy printout available.

IEE722I PFK nn NOT DEFINED

Explanation: This message indicates that the operator has pressed PFK key nn or positioned the light pen over PFK key number nn, and either of the following conditions occurred:

- The selected key has no commands defined for it.
- A zero length command is contained within the key definition.

System Action: None.

Operator Response: Use the DISPLAY PFK command to request a display of the commands associated with the PFK keys. If the selected key is undefined, select another key or use the CONTROL N, PFK command to define commands for the key. If the selected key is defined, check the command syntax. A semi-colon incorrectly located immediately behind the first quote or immediately in front of the last quote, or two semi-colons together within the command, can cause a zero length indication.

Problem Determination: Table I, items 2, 29.

IEE724I hh.mm.ss PFK DEFINITIONS [id]
KEY# CON DEFINITIONS
nn ccc tttt...

Explanation: This message is displayed on a CRT console in response to a DISPLAY PFK command. It provides a display of the operator commands associated with each PFK key.

In the heading, KEY # refers to the number of the PFK key (or displayed PFK key number), CON refers to conversational mode, and DEFINITION refers to the current definition of the key.

In the message text the fields are:

hh.mm.ss
the time of day, where hh specifies the hour (00-24), mm specifies the minute (00-59), and ss specifies the second (00-59).

[id]
A three-digit decimal identification number. It is used in conjunction with the CONTROL C,D command for canceling status displays being written on typewriter or printer consoles or being displayed in-line (not in a display area) on a display (CRT) console. This identification number does not appear when the display is presented in a display area on a display console.

nn
the number of the key whose definition is displayed on this line.

ccc
the status of the conversational mode: YES, if conversational mode is in effect; NO, if conversational mode is not in effect; and blank, if the key is not defined.

tttt...
the current definition for the key. This field can contain up to 108 characters or 52 key numbers separated by commas; this field will be continued on a second line, if necessary. If the key is not

IEE

defined, this field contains NOT DEFINED.

Operator Response: None.

IEE801D CHANGE PARTITIONS - REPLY YES/NO (,LIST)

Explanation: The nucleus initialization program (NIP) has finished processing. This message asks if partitions are to be redefined and if a listing of partition definitions, job classes being serviced, and time slicing is desired.

Operator Response: In response to this message, enter REPLY xx, 'parameters' where the parameters are:

- YES if partitions are to be redefined, or NO if partitions are not to be redefined.
- LIST if a listing of partition definitions, job classes being serviced, and time slicing is desired. If LIST is specified but neither YES nor NO is specified, NO is assumed as the default parameter.

If more than one parameter is specified, the parameters must be separated by commas. If LIST is specified in the reply, then messages IEE804I, IEE816I, and IEE817I follow, listing the desired information.

IEE802A ENTER DEFINITION

Explanation: In response to this message, the operator can specify redefinitions with respect to partition sizes, job classes, and time slicing.

Operator Response: In response to this message, enter REPLY xx, 'parameters' where the parameters are:

- Pn=jclass to redefine the job class(es). The n is the partition number and the jclass is the job class or classes of the partition. The job class(es) can be expressed as:
RDR A resident reader partition.
WTR A resident writer partition.
xxx One, two, or three alphabetic characters from A through O.

If jclass is xxx, each character identifies a job class that the partition is to service. The first character identifies the primary job class, the second the secondary job class, and the third the tertiary job class. Jobs will be selected for the partition from the primary job class as long as there are entries in that job class queue. If there are no entries in the primary job class queue, the scheduler attempts to select a job from the secondary class assignment. If there are no entries in the secondary class queue, the tertiary queue is checked. If there are no entries in any of the job class queues serviced by the partition, the partition remains dormant until a job is enqueued for one of its classes. If the partition being defined

was inactive and is being made active, at least one job class (jclass) must be assigned.

- Pn=(,psize) to redefine the partition size, in systems without main storage hierarchy support for IBM 2361 models 1 and 2. The n is the partition number, the leading comma indicates the absence of the jclass subparameter, and the psize is the new size of partition n. The partition size can be expressed either as an absolute decimal value (such as 40960) or as a multiple of 1024 followed by the letter K (such as 40K). The minimum acceptable partition size is 8192, or 8K. If the system has storage protection, partition sizes that are not expressed as multiples of 2K will be increased to the next multiple of 2K. If a partition size is specified as zero, the partition will remain inactive. When a partition size is increased or decreased, another partition size should correspondingly be decreased or increased.
- Pn=(,psize,H1=psize) or Pn=(,psize) or Pn=H1=psize to redefine the partition size, in systems with main storage hierarchy support for IBM 2361 Models 1 and 2. The n is the partition number, the leading comma indicates the absence of the jclass subparameter, the psize is the new partition size in hierarchy 0 (processor storage), and the H1=psize is the new partition size in hierarchy 1 (IBM 2361 core storage). The first format of the parameter is used to redefine both hierarchies; the second format is used to redefine hierarchy 0; the third format is used to redefine hierarchy 1. The restrictions for psize are as describes under the parameter Pn=(,psize). When a partition size is increased or decreased, another partition size within the same hierarchy should correspondingly be decreased or increased.
- Pn=LAST to specify the last partition which is to be active. The n is the partition number. All partitions with partition numbers higher than n will be considered inactive. If LAST is entered in error, a new partition definition may be reentered, omitting LAST. LAST may not be specified for more than one partition. If 'Pn=LAST' refers to a partition that was previously inactive, a size must be specified in the definition; otherwise, the partition will remain inactive.
- LIST to request a listing of all current partition definitions. At system initialization, all job classes being serviced by active partitions are also listed.
- CLASS to request a listing of all job classes being serviced by active partitions. At system initialization, it is unnecessary to specify this parameter if LIST is specified.

- END to indicate that no further redefinition is desired. When END is specified at the end of a reply, the system will implement all the replies entered since the last occurrence of this message. If more than one partition definition is entered for a partition, the system will implement the most recent definition entered for that partition.
- CANCEL to indicate that all definitions entered since the last occurrence of this message are to be canceled. When CANCEL is entered at the end of a reply, the partition definitions will remain as they were before the last occurrence of this message.
- TMSL to request a listing of time slicing.
- TMSL=CANCEL to indicate that the time slicing, as specified, is to be canceled.
- TMSL=(Px-Py) to respecify the time-slicing group from partition x through partition y (where x is less than y).
- TMSL=nnnn to respecify the length, in milliseconds, of the time slice. The nnnn is expressed as a one to four digit value and is greater than 19.
- TMSL=(Px-Py,nnnn) to respecify the time-slicing group from partition x through partition y (where x is less than y) and the length, in milliseconds, of the time slice. The nnnn is expressed as a one to four digit value and is greater than 19.

More than one parameter can be specified in a reply:

- The psize, jclass, H1=psize, and LAST subparameters of the Pn parameter can be used in any combination. However, the jclass subparameter must appear first and the LAST subparameter must appear last. If the jclass subparameter is omitted, a leading comma must be specified. If the subparameters are used in combination, they must be separated by commas and enclosed in parentheses.
- The keyword parameters LIST, TMSL, CLASS, END, and CANCEL can be used in any combination and in any order. However, the parameters must be separated by commas.
- A partition belonging to the TMSL group cannot be defined as being inactive by specifying a prior partition as LAST.

For example:

```
You may specify:
P1=(A,30K),P2=0K,P3=LAST,
TMSL=(P1-P3),END
```

You may not specify:

```
P1=(A,30K),P2=LAST,TMSL=(P1-P3),END
```

- A reply cannot occupy more than one line (126 characters).

Two examples follow:

```
REPLY xx,'PO=(AB,58K,H1=240K),
P1=(RDR,30K),P4=(WTR,H1=12K),
P2=(,0,H1=0),P3=(,20K,H1=80K),
P5=(DEC,LAST),
TMSL=(P3-P5,200),END'
```

In this example, P0 is redefined as a problem program partition having a primary job class A, a secondary job class B, 58K bytes in hierarchy 0, and 240K bytes in hierarchy 1. P1 is redefined as a 30K reader partition in hierarchy 0. P4 is redefined as a 12K writer partition in hierarchy 1. P2 is to be inactive. P3 is redefined having 20K bytes in hierarchy 0 and 80K bytes in hierarchy 1. P5 is redefined as a problem program partition having a primary job class D, a secondary job class E, and a tertiary job class C. All partitions numbered higher than 5 are to be inactive. The time-slicing group will contain partitions 3, 4, and 5, and the time slice will be 200 milliseconds. No further redefinition is desired and the replies entered since the last occurrence of this message can now be implemented by the system.

```
REPLY xx,'P2=(JFE,10K,H1=40K),
P3=(MO,10K,H1=40K),END'
```

This example reactivates P2, which was made inactive in the previous example. P2 is redefined as a problem program partition having a primary job class J, a secondary job class F, a tertiary job class E, 10K bytes in hierarchy 0, and 40K bytes in hierarchy 1. P3 is assigned primary job class M and secondary job class O, and is decreased from 20K to 10K bytes in hierarchy 0 and from 80K to 40K bytes in hierarchy 1. Note that for each hierarchy, P3 was decreased to allow for the increase in P1.

IEE803A CONTINUE DEFINITION

Explanation: If message IEE802A precedes this message, the redefinitions have been accepted by the system and the redefinitions may now continue. Otherwise, corrections to the previous redefinitions are to be made as indicated by preceding messages IEE806I and IEE809I.

Operator Response: Respond as indicated for message IEE802A:

- If message IEE802A precedes this message, continue the redefinitions.
- Otherwise, enter the reply again correctly.

```
IEE804I Pn={ (jclass,psize)
              { (jclass,psize0 H0,psize1 H1) }
              (INACTIVE) }
```

Explanation: In redefining the partitions, a listing was requested of all current partition definitions.

In the message text, two partition definitions are listed per line. The fields in the message text are:

n The partition number.
psize The size of the partition, in decimal.
psize0 The size of the partition in hierarchy 0, in decimal, for systems with main storage hierarchy support for IBM 2361 models 1 and 2.
psize1 The size of the partition in hierarchy 1, in decimal, for systems with main storage hierarchy support for IBM 2361 models 1 and 2.
jclass The job class or classes of the partition. The job class(es) may be expressed as:

RDR A resident reader partition.
WTR A resident writer partition.
xxx One, two, or three alphabetic characters from A through O.
INACTIVE The partition size was defined as zero.

If the jclass field is followed by the parameter LAST, then all partitions with higher partition numbers are considered inactive.

Operator Response: None.

IEE805I DEFINITION COMPLETED

Explanation: In redefining the partitions, the parameter END was specified at the end of a reply. When this message occurs, the redefinitions have already been implemented by the system.

Operator Response: Enter a START INIT command for each of the redefined partitions or, if desired, enter a START INIT.ALL command.

IEE806I TOTAL SIZE OF PARTITIONS IS x BYTES TOO LARGE FOR STORAGE

Explanation: In redefining the partition, the total bytes needed for all partitions exceeds the amount of main storage available by the amount indicated by x. Message IEE803A follows, permitting corrections to be made.

Operator Response: Respond as indicated for message IEE803A.

IEE807A DEFINITION PARAMETER ERROR, REPLY AGAIN

Explanation: In redefining the partitions, either a partition size or job class was specified incorrectly, no job class was specified for a previously inactive partition being made active, RDR was specified for a small partition, LAST was specified more than once in the same reply, or another syntax error was specified.

Note: A small partition is one that is less than scheduler size. Scheduler size can be determined at system generation time with the 'MINPART' parameter or at IPL time with the 'MIN=' parameter. That is, if 'MIN=100' is specified at IPL time, a RDR partition cannot be defined with less than 100K bytes of main storage.

Operator Response: Probable user error. Enter the reply again correctly.

Problem Determination: Table I, items 2, 7ab, 29.

IEE808A P n NOT DEFINABLE - REPLY AGAIN

Explanation: In redefining the partitions, one of the following conditions was detected:

- Partition n was not defined at system generation.
- Partition n was previously defined as a resident reader partition and is being redefined as a small partition.
- The command specified a value for partition n which was less than the minimum acceptable size.
- Partition n contains an active program which, because of continuous requests for its services by programs running in other partitions, could take an indefinite amount of time to stop processing and allow redefinition.

Operator Response: Probable user error. In the first case, enter the reply again correctly, omitting the undefined partition.

In the second case, either enter the reply again specifying a large partition size, or enter another reply to redefine the job class(es) for the small partition.

In the third case, enter the reply again specifying the minimum acceptable partition size.

In the fourth case, do the following:

- Terminate this definition; then, if possible, redefine the partitions omitting n from the redefinition.
- If partition n must be defined:
 1. Terminate this definition.
 2. Enter a STOP Pn command to terminate the program running in partition n.
 3. When the program processing in partition n has stopped, enter another DEFINE command specifying the desired definition for partition n.

Problem Determination: Table I, items 2, 7ab, 17ab, 29. If unable to continue system operation, see Table I, item 11.

IEE809I SIZE DEFINITION OF Pxx OR LOWER EXCEEDS AVAILABLE SPACE

Explanation: In redefining the partitions, the total bytes specified for the adjacent partitions exceeded the original amount of space. Pxx, as an individual partition, has requested more

bytes than the total amount of main storage available for partition definition.

In the message text, Pxx is the lowest priority partition that is to remain active.

System Action: The system issues message IEE803A.

Operator Response: Respond as indicated for message IEE803A.

IEE810A PROBLEM PROGRAM PARTITIONS EXCEED 15, RESPECIFY

Explanation: In redefining the partitions, more than 15 problem program partitions were specified.

Operator Response: Probable user error. Enter the reply again correctly, specifying no more than 15 problem program partitions.

Problem Determination: Table I, items 2, 29.

IEE811A CHANGED PARTITIONS NOT ADJACENT, RESPECIFY

Explanation: In redefining the partitions, an attempt was made to redefine non-adjacent partitions.

Operator Response: Probable user error. Enter the reply again correctly, specifying adjacent partitions.

Problem Determination: Table I, items 2, 29.

IEE812I P n HAS xxxx EXCESS BYTES ADDED IN Hy

Explanation: In redefining the partitions, the total bytes specified for all the defined partitions is less than the amount of main storage available.

In the message text, n is the partition number, xxxx is the number of excess bytes available, and y is the hierarchy number (0 or 1).

System Action: The excess bytes available in the specified hierarchy are added to the lowest priority problem program partition redefined in the series of replies just entered.

Operator Response: None.

IEE813I cm yyy - FAILED

Explanation: Command cm could not be performed by the system for one of the following reasons:

- The partition specified in a START command does not exist or was being redefined when the command was entered.
- The partition specified in a START INIT command is not a problem program partition.

- A START command for a system-assigned reader has been entered, but no problem program partition of sufficient size to contain the scheduler program exists.
- The command START INIT.ALL was entered, but no problem program partition exists.
- A START command was entered for a system-assigned procedure when a system-assigned procedure was already active.

In the message text, yyy represents up to 14 characters of the PARM parameter of command cm.

System Action: The system did not execute the command.

Operator Response: Probable user error. Enter the command again correctly if the command was in error.

Problem Determination: Table I, items 2, 29.

IEE814I DEFINITION CANCELLED

Explanation: In redefining the partitions, a request was issued that all definitions entered since the last occurrence of message IEE802A be canceled.

System Action: All partition definitions are canceled.

Operator Response: None.

IEE815A DEFINITION DELIMITER ERROR, REPLY AGAIN

Explanation: In redefining the partitions, a partition definition contained an incorrect parenthesis, comma, blank space, or other delimiter.

Operator Response: Probable user error. Enter the reply again correctly.

Problem Determination: Table I, items 2, 29.

IEE816I CLASSES=jclass

Explanation: In redefining the partitions, a listing was requested of all job classes being serviced by active partitions. In the message text, jclass is the listing of the job classes.

Operator Response: None.

IEE817I TMSL=xxxx

Explanation: The operator requested a listing of time slicing that has previously been specified.

In the message text, xxxx is one of the following:

- NONE if there is no time-slicing group.
- (Px-Py,nnnn) if the time-slicing group from partition x through partition y has previously been specified; the nnnn is the length, in milliseconds, of the time slice.

Operator Response: None.

IEE818A TMSL SPECIFICATION NOT ACCEPTABLE,
RESPECIFY

Explanation: One of the following occurred:

- In redefining time slicing, the parameter TMSL (Px-Py,nnnn) was specified incorrectly. For example: the value of x (in Px) is less than y (in Py).
- A partition belonging to a TMSL group was defined as being inactive by specifying a prior partition was LAST.

For example:

You may specify:

P1=(A,30K),P2=OK,P3=LAST,TMSL=(P1-P3),END

You may not specify:

P1=(A,30K),P2=LAST,TMSL=(P1-P3),END

Operator Response: Probable user error. Enter the reply again correctly.

Problem Determination: Table I, items 2, 29.

IEE819I TIME SLICING IS NOT SUPPORTED IN THIS SYSTEM

Explanation: During DEFINE processing, the TMSL parameter was specified for a listing of the time-slicing partitions; however, time slicing is not supported in this system.

System Action: The time-slicing specification is ignored, and processing continues.

Operator Response: None.

IEE820I TMSL VALUE LESS THAN MINIMUM; 20 MILLISEC DEFAULT USED.

Explanation: The time-slice value specified by the operator is less than 20, the minimum value permitted.

System Action: The system assumes a time-slice value of 20 milliseconds.

Operator Response: None.

IEE821I hh.mm.ss ACTIVE DISPLAY [id]
PNO JOBNAME STEPNAME SUBT PNO JOBNAME
xxx xxxxxxxx xxxxxxxx xx xxx xxxxxxxx
STEPNAME SUBT
xxxxxxx xx

Explanation: This is the control line of the Status Display initiated by the DISPLAY A or MONITOR A command entered to an MFT system. The label line describes the fields of data.

[id]

A three-digit decimal identification number. It is used in conjunction with the CONTROL C,D command for canceling status displays being written on typewriter or printer consoles or being displayed in-line (not in a display area) on a display

(CRT) console. This identification number does not appear when the display is presented in a display area on a display console.

PNO

Partition number

JOBNAME

This field is one of the following:

- Name of currently active job
- Procedure name of STARTed task

STEPNAME

This field is one of the following:

- Name of current step for active job
- Identifier of procedure of STARTed task

SUBT

Number, in decimal, of subtasks created in the step if subtasking is included.

Note: If there are no active tasks in the system, the fields of data in the third line of the message will be replaced with NO ACTIVE TASKS.

Operator Response: None.

IEE822A NO PARTITION SPECIFIED FOR EXCESS BYTES,
RESPECIFY

Explanation: In redefining the partitions, the total bytes specified for the defined partitions is less than the amount of storage available in either hierarchy 0, hierarchy 1, or both hierarchies. No partition active in the affected hierarchy was redefined to receive the excess bytes.

Operator Response: Probable user error. Redefine the next lowest priority problem program partition that is active in the affected region.

Problem Determination: Table I, items 2, 7ab, 17ab, 29. If unable to continue system operation, see Table I, item 11.

IEE823A xxxx IS NOT SUPPORTED - REPLY AGAIN

Explanation: In redefining partitions, one of the following occurred:

- If xxxx is TIME SLICING, time slicing was specified by the operator, but time slicing is not supported in this system.
- If xxxx is MAIN STORAGE HIERARCHY, a partition was redefined specifying a size in hierarchy 1, but main storage hierarchy support is not supported in this system.

Operator Response: Probable user error. Enter the reply again correctly, omitting the specification in error.

Problem Determination: Table I, items 2, 7ab, 17ab, 29. If unable to continue system operation, see Table I, item 11.

IEE866I DEFINE COMMAND BEING PROCESSED

Explanation: In response to a DEFINE command or in response to a reply to message IEE801D, the DEFINE command is now being processed.

System Action: All task-creating commands issued to the system will be ignored until message IEE805I (or message IEE814I) has been issued, at which time normal command processing will continue.

Operator Response: None.

IEE870I hh.mm.ss NAME DISPLAY [id]
QUEUE JOBNAME STAT JOBNAME STAT
xxxx x xxxxxxxx xxxxxxxx x-xxx
JOBNAME STAT JOBNAME STAT
xxxxxxx x-xxx xxxxxxxx x-xxx

Explanation: This is the control line of the Status Display initiated by the DISPLAY N or DISPLAY N,(list) command.

[id]
A three-digit decimal identification number. It is used in conjunction with the CONTROL C,D command for canceling status displays being written on typewriter or printer consoles or being displayed in-line (not in a display area) on a display (CRT) console. This identification number does not appear when the display is presented in a display area on a display console.

The label line describes the fields of data.

JOBNAME
The name of a job placed on one of the system queues.

QUEUE
This field is one of the following:
• JOB x, where x is the class identifier of an input queue.
• HOLD, which contains all jobs assigned to the HOLD queue by the HOLD command, or by the TYPRUN=HOLD parameter of the JOB statement.
• SOUT x, where x is the class identifier of an output queue.

STAT
HELD if queue is held. Originating queue identifier if job is on HOLD queue.

Operator Response: None.

IEE901I xxx NOT VERIFIED

Explanation: In a command, xxx was not recognized by the system; xxx could be the operation field or a parameter or keyword in the operand field. For example, xxx could be the name of a device that is not in the system, or it could be the name of

This message also appears if a device that is not ready is specified by the PROC or Q parameter of the initial SET command issued immediately after system start.

System Action: The system did not execute the command.

Operator Response: Probable user error. If a command was entered to a device that was not ready, either ready the device and restart the system or enter a command specifying another device. Otherwise, enter the command again correctly.

Problem Determination: Table I, items 2, 7ab, 29. If unable to continue system operation, see Table I, item 11.

IEE902I ddd ONLINE

Explanation: In response to a VARY command, device ddd has been placed on-line.

Operator Response: None.

IEE903I ddd OFFLINE

Explanation: In response to a VARY command, device ddd has been placed off-line.

Operator Response: None.

IEE904I ddd LOADED. NO MOUNT.

Explanation: A MOUNT command specified a device, ddd, that had a volume on it and was in ready status; the system had not issued a message containing K (keep), R (retain), or D (demount) for the volume on that device.

Normally a MOUNT command should specify only devices that do not have volumes on them or, if they have volumes on them, are not ready. However, a MOUNT command can be entered to a device that has a volume on it and is ready if the system had previously issued a K, R, or D message for the volume.

System Action: The system did not execute the command.

Operator Response: Probable user error. Enter an UNLOAD command specifying the device; the system will unload the volume from the device; then enter the MOUNT command again.

Problem Determination: Table I, items 2, 7ab, 29. If unable to continue system operation, see Table I, item 11.

IEE905I ddd REFERENCE ILLEGAL

Explanation: In a command, device specification ddd is invalid. For example, an UNLOAD command might have specified a system residence volume, which cannot be unloaded, or a START WTR or RDR command might have been entered for an offline device.

System Action: The system did not execute the command.

Operator Response: Probable user error. Enter the command again correctly, checking the unit name parameter.

Problem Determination: Table I, items 2, 7ab, 29. If unable to continue system operation, see Table I, item 11.

IEE906I jjj CANCEL IGNORED

Explanation: The last CANCEL command entered for job jjj was ignored for one of the following reasons:

- A CANCEL command was previously entered for the job.
- The scheduler was in control when the command was entered.
- The job was in the process of being either normally or abnormally terminated.

System Action: The command was not executed.

Operator Response: None.

IEE907I xxx ABEND-{SEND}CMD ABORTED
{ D }

Explanation: The system has encountered an error while processing the SEND or DISPLAY USER command, as indicated in the message text; the command processing routine has terminated abnormally. In the message text, xxx is the system completion code for the failing task.

System Action: The task is terminated. System processing continues.

Operator Response: Reenter the command. For an explanation of system completion code xxx, refer to the System Completion Codes section of this publication.

IEE908I cm CMD LENGTH EXCEEDS MAX

Explanation: In the cm command, the length of the operand field exceeds the maximum number of characters.

System Action: The system did not execute the command.

Operand Response: Probable user error. Enter the command again with a shorter operand field.

Problem Determination: Have available the master console sheet or the listing from a terminal in operator mode.

IEE920I NO MN A UPDATE AT hh.mm.ss

Explanation: A time interval has elapsed at hh.mm.ss signaling that an Active display be created on behalf of the MONITOR command while an Active display was being built on behalf of the DISPLAY command.

System Action: No display was created on behalf of the MONITOR command. A new time interval was established.

Operator Response: None. However, if this condition occurs frequently, it is suggested that the time interval be increased by entering K M,UTME=nn from the master console.

IEE921I cm op REJECTED { NO TIMER
DISPLAY ALREADY EXISTS }
{ NO DISPLAY AREA AVAILABLE }
{ NO CRT CONSOLES }

Explanation: The MONITOR A (or MN A) command was entered and one of the following error conditions occurred:

- NO TIMER - A request for a dynamically updated status display of the active tasks was entered into a system which has no interval timer, or one in which the interval timer was not operational at IPL.
- DISPLAY ALREADY EXISTS - A MN A command requested a dynamically updated status display at a console already displaying a dynamic display.
- NO DISPLAY AREA AVAILABLE - A dynamically updated status display was requested for a CRT console which has no display areas defined, or was routed to a non-CRT console.
- NO CRT CONSOLES - A dynamic display time specification or a DISPLAY PFK command was entered to a system that has no CRT consoles.

System Action: The command was not executed.

Operator Response:

- NO TIMER - Turn on the interval timer, if one is available, before the next IPL. The interval timer must be in operation before the system is IPLed if the MONITOR A is to be used.
- DISPLAY ALREADY EXISTS - If the operator wishes to place the display in a different display area from the one it is now in, he must first stop and erase the existing display with the STOPMN-A command and then enter MN A. If the operator does not wish to do this he need make no response.
- NO DISPLAY AREA AVAILABLE - The CONTROL (K) command may be used to define a display area on a CRT console and then enter the MN A command. If the receiving console is a non-CRT console, the DISPLAY A command may be used to request a static display of the active jobs. If this message appears when display areas exist, a core dump of the nucleus may be taken.
- NO CRT CONSOLES - None.

Problem Determination: Table I, items 2, 29.

IEE922I K M,UTME=nnn

Explanation: This message is issued in response to a K M,REF command issued on a non-CRT console. The value specified by nnn is the number of seconds in the time interval for updating of dynamic displays. It represents the CONTROL (K) command that set the time interval.

System Action: None.

Operator Response: Change the time interval, if desired.

IEE924I INVALID AREA DEFINITION
{ SCREEN SIZE EXCEEDED
 DISPLAY IN OR ABOVE AREA }
{ AREA TOO SMALL }

Explanation: One of the following things was wrong with the display area definition requested.

SCREEN SIZE EXCEEDED

The sum of the lengths of the areas defined exceeded the size of the message area on the console for which the definition was requested.

DISPLAY IN OR ABOVE AREA

Redefinition was requested which affects an area with a display in or above it. Any area definition requested while a display is on the screen may differ from the previous definition only above the display.

AREA TOO SMALL

An attempt was made to define a display area of less than four lines.

System Action: The command is not executed.

Operator Response: Correct the command and reissue it if desired. If the problem recurs, have the hardcopy log available before calling IBM for support.

IEE925I K COMMAND OPERAND xxxxxx FOR CRT CONSOLES ONLY

Explanation: K command operand xxxxxx applies only to CRT consoles. If entered from a non-CRT, it must be routed to a CRT console.

System Action: The command is not executed.

Operator Response: Correct the command and reissue it if desired. D C,K may be entered for an explanation of the CONTROL command.

Problem Determination: Table I, items 2, 29.

IEE926I L=cca OPERAND INVALID
{ cca NOT AN AREA
 cc NOT A CONSOLE
 cc FULL CAPACITY }
{ DYNAMIC DISPLAY IN AREA }

Explanation: One of the following error conditions occurred as a result of the location operand, L=cca (cca in the message text will be replaced with the invalid operands).

- cca NOT AN AREA - The area specified by the L=cca operand does not exist.
- cc NOT A CONSOLE - The console ID specified by the L=cca operand is not an existing console.

- cc FULL CAPACITY - The console ID specified is not the requestor's own console, a message stream console, or status display console. No routing is allowed from one full capacity console to another.
- DYNAMIC DISPLAY IN AREA - The area specified by the L=cca operand contains a dynamic display.

System Action: The command is not executed.

Operator Response:

In the first case, change the area specification and re-enter the command. If the problem recurs, a console switch may have taken place. If one has, re-enter the command specifying the valid area for the alternate console.

In the second case, change the console id specification and re-enter the command. If the problem recurs, a console switch may have taken place. If one has, re-enter the command specifying the alternate console's id.

In the third case, specify your own console or a message stream or status display console and re-enter the command.

In the fourth case, specify another area and re-enter the command.

Problem Determination: Table I, items 2, 29.

IEE927I CONTROL REQUEST AMBIGUOUS
{ SPECIFY DISPLAY ID }
{ SPECIFY L OPERAND }

Explanation: The Control (K) command cannot be executed without further information.

- SPECIFY DISPLAY ID - A CONTROL C,D (or K C,D) was entered without the id operand. To cancel a display (K C,D, id), the id of the display to be terminated must always be specified.
- SPECIFY L OPERAND - A CONTROL command for an out of line display, such as a frame or erase command, was issued without the routing location parameter (L=cca), and more than one display exists on the screen. The area id of the display area to be controlled must be specified by using the L operand.

System Action: The command is not executed.

Operator Response: Reissue the command specifying the missing operand.

Problem Determination: Table I, items 2, 11, 29.

IEE928I DISPLAY AREA ID'S FOR CONSOLE cc ARE id, id,...

Explanation: This message is written in response to the operator defining areas for console cc. The display area

identifiers are listed in the order in which the areas were defined, from the bottom of the screen to the top.

System Action: None.

Operator Response: The operator may route displays to the areas defined by using the display area id.

IEE929I K A, {NONE
length,... ,L=cc }

Explanation: This message is issued, on non-CRT consoles only, in response to the operator issuing a K A,RER command. It represents the CONTROL (K) command which defined the display areas for the console whose address is specified.

System Action: None.

Operator Response: Change the display area definition, if desired.

IEE930I RT (D=(D operand [,D
operand],...),L=cca),...

Explanation: This message is issued, on non-CRT consoles only, in response to the operator issuing a RT REF command. It represents the MSGRT (MR) command which specified the routing defaults currently in effect.

System Action: None.

Operator Response: Change the routing defaults, if desired.

IEE931I INSUFFICIENT STORAGE FOR cm op

Explanation: While attempting to fulfill the request specified by the cm, op command, a GETMAIN was issued requesting main storage from system queue area to build a control block and/or work area. The requested main storage was not available. This condition may occur during definition of display areas or when routing to a console other than the requesting console.

System Action: The command cm op was not executed.

Operator Response: Re-enter the command at a later time.

Problem Determination: Table I, items 2, 29.

IEE932I nnn

Explanation: A multiple time WTO macro instruction was issued with descriptor code 9 and no control line text was supplied. The number, nnn is used with the CONTROL (K) command to cancel the display.

System Action: SVC 35 has supplied this message as a control line. The number, nnn, is the display identification number.

Operator Response: None.

IEE933I DCMLIB OPEN FAILED

Explanation: When attempting to open the display control module library (SYS1.DCMLIB) in secondary storage, the system was either unable to locate the library, unable to open the library, or the volume containing the library was off-line during IPL.

System Action: The transient DCM facility is inoperative. The DCM of the first console in the transient group is made resident, and the other consoles in the transient group are inactivated.

Operator Response: Note the status of the system consoles. Use only the consoles that the system activates. Report the problem to the programmer responsible for the system.

Note: Since PFK definitions are maintained in SYS1.DCMLIB, this situation also causes a PFK update error indication for the affected console. See message IEE934I.

IEE934I PFK UPDATE ERROR

Explanation: An I/O error occurred: (1) when the system attempted to read the permanent PFK definition from secondary storage during IPL, or (2) when the system attempted to write a new PFK definition in secondary storage after the operator issued a CONTROL N,PFK command.

System Action: If an error occurs on a read during IPL, the permanent PFK definitions will be unavailable for the system operation following the current IPL. If an error occurs for a PFK update, the permanent copies of the PFK definitions will not be altered, and the PFK updates will not carry over to subsequent IPLs.

Operator Response: If an error occurs on a read during IPL, the operator will have to define each PFK key for the current IPL. If an error occurs during a PFK update, the new definition will be effective only for the current IPL. Report this problem to the programmer responsible for the system.

IEE935I DCM I/O ERROR FOR CONSOLE xxx

Explanation: An I/O error occurred when processing the transient display control module (DCM) for the console whose address is xxx.

System Action: A console switch is initiated, and control is passed to console xxx's alternate.

Operator Response: Use the alternate console for system operation. Report this problem to the programmer responsible for the system.

Note: The affected console's address may not appear in the message. This occurs when the system fails to obtain sufficient main storage to format the message; it does not affect the meaning of the message or the indicated action in any way.

Job Scheduler Messages (IEF)

Component Name	IEF
Program Producing Message	Job scheduler.
Audience and Where Produced	For programmer: listing of job control statements in SYSOUT data set. For operator: console.
Message Format	IEFnnnI text (in SYSOUT) xx IEFnnns text [Pnn] (on console) nnn Message serial number. text Message text. xx Message reply identification (absent, if operator reply not required). s Type code: A Action; operator must perform a specific action. D Decision; operator must choose an alternative. E Eventual action; operator must perform action when he has time. I Information; no operator action is required. W Wait; processing stopped until action is determined and performed. Pnn Partition which issued the message (systems with MFT only).
Comments	None.
Problem Determination	Refer to the fold-out in part VI of this publication for problem determination instructions.

IEF110I Q MGR I/O ERR FOR jjj RETURN CODE

Explanation: An unusual condition occurred while the system was trying to access the SYS1.SYSJOBQE data set. The Queue Manager returned the return code indicated by x.

In systems with MVT and MFT, jobname is the applicable jobname as found on the JOB statement.

The return codes are as follows:

- 4 - No job queue space was available in the SYS1.SYSJOBQE data set.
- 12 - An uncorrectable input/output error or unusual condition occurred. (Message IEF440I will normally have also been issued.)

System Action: The access of the SYS1.SYSJOBQE data set was not performed. System completion code 030 is issued following the message for the task which received the return code.

Operator Response: Report the message to the programmer or the installation manager. The message indicates a potential problem with the SYS1.SYSJOBQE data set. If the message is repeated, reformat the SYS1.SYSJOBQE data set at the first convenient opportunity.

Problem Determination: Table I, items 1, 2, 4, 7ab, 29.

IEF125I jjj LOGGED ON [TIME=hh.mm.ss]

Explanation: In response to a DISPLAY or MONITOR command with JOBNAME or SESS in its operand, this message indicates that a user has logged on to the system under time sharing and his session name is jjj.

If T is also specified in the operand of the command, then the time of day appears, where hh specifies the hour (00-23), mm specifies the minute (00-59), and ss specifies the second (00-59).

System Response: Session jjj is entering allocation.

IEF

Operator Response: No response required. However, if the user should not be logged on at this time, issue CANCEL U=jjj command and the session will be terminated.

IEF126I jjj LOGGED OFF [TIME=hh.mm.ss]

Explanation: In response to a DISPLAY or MONITOR command with JOBNAMES or SESS in its operand, this message indicates that the session jjj has terminated (been logged off of the system). This message is not issued if session jjj has terminated abnormally.

If T is also specified in the operand of the command, then the time of day appears, where hh specifies the hour (00-23), mm specifies the minute (00-59), and sss specifies the second (00-59).

System Response: Session jjj has completed termination.

Operator Response: None.

IEF127I NO SPACE PARAMETER GIVEN FOR A NEW DATA SET OR ZERO SPACE REQUEST AT ABSTR ZERO

Explanation: No SPACE parameter appears in a DD statement defining a new data set on a direct access device or an absolute track request was made for no space (zero space) beginning at absolute track zero.

System Action: The job is terminated.

Programmer Response: Probable user error. If the data set is not new, correct the DISP parameter by specifying OLD, SHR, or MOD. If the data set is new, make sure that a SPACE parameter appears. Then rerun the job.

Problem Determination: Table I, items 2, 7a, 25a, 29.

IEF128I INVALID REQUEST FOR ISAM INDEX

Explanation: For one of the following reasons, the control program is unable to allocate space for the index of a new indexed sequential data set:

- An embedded index was requested for the index or overflow area by a DD statement specifying the index quantity subparameter in its SPACE request.
- An embedded index was requested for multivolume prime area. The request was made by a DD statement specifying an index quantity in the SPACE parameter, DSNAME=name(PRIME), and a device number greater than 1 in the UNIT parameter.

System Action: The job is terminated.

Programmer Response: Probable user error. Correct the faulty DD statement, and rerun the job. In the first case, delete the index quantity subparameter. In the second case, delete the index quantity subparameter or change the device number subparameter to 1.

Problem Determination: Table I, items 2, 7a, 29.

IEF129I MULTIVOLUME INDEX NOT ALLOWED

Explanation: The control program is unable to allocate a multivolume index for a new indexed sequential data set. The request was made by a device number greater than 1 in the UNIT parameter of a DD statement specifying DSNAME=name(INDEX).

System Action: The job is terminated.

Programmer Response: Delete the device number subparameter, or reduce it to 1. Then rerun the job.

Problem Determination: Table I, items 2, 7a, 29.

IEF130I DSNAME ELEMENT WRONG - MUST BE INDEX, OVFLOW, OR PRIME

Explanation: In one of the DD statements defining an indexed sequential data set, the element part of the DSNAME parameter is other than PRIME, INDEX, or OVFLOW.

System Action: The job is terminated.

Programmer Response: Probable user error. Correct the element subparameter. List the volume table of contents (VTOC) of each volume that will contain the data set using the IEHLIST utility program. If the name of this data set appears in any VTOC, remove it using the IEHPROGM utility. Then rerun the job.

Problem Determination: Table I, items 1, 2, 3, 7a, 14, 29.

IEF131I MULTIVOLUME OVFLOW REQUEST NOT ALLOWED

Explanation: A DD statement is requesting a multivolume overflow area for a new indexed sequential data set by specifying a device number greater than 1 in the UNIT parameter and DSNAME=name(OVFLOW). This is not allowed.

System Action: The job is terminated.

Programmer Response: Probable user error. Change the device number subparameter to 1. List the volume table of contents (VTOC) of each volume that will contain the data set using the IEHLIST utility program. If the name of the data set appears in any VTOC, remove it using the IEHPROGM utility. (If the name of the data set appears in any VTOC, a system error probably occurred.) Rerun the job.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF132I SPACE PARAMETER WRONG - ABSTR AND CYL CONFLICT

Explanation: The SPACE parameter in one of the DD statements defining an indexed sequential data set is incorrect. One of

two DD statements defining this data set specified ABSTR and the other specified CYL. Space for one area of an indexed sequential data set cannot be allocated using the CYL subparameter while the space for another area is allocated using the ABSTR subparameter.

System Action: The job is terminated.

Programmer Response: Probable user error. Correct the SPACE parameter. List the volume table of contents (VTOC) of each volume that will contain the data set using the IEHLIST utility program. If the name of this data set appears in any VTOC, remove it using the IEHPROGM utility. Then rerun the job.

Problem Determination: Table I, items 2, 7a, 14, 29.

IEF133I SPACE PARAMETER WRONG - CYL AND CONTIG CONFLICT

Explanation: The SPACE parameter in one of the DD statements defining an indexed sequential data set is incorrect. The CONTIG subparameter appears for a CYL request in one of the DD statements, while not in another. Space for one area of an indexed sequential data set cannot be allocated contiguously if space for another area is not.

System Action: The job is terminated.

Programmer Response: Probable user error. Correct the SPACE parameter. List the volume table of contents (VTOC) of each volume that will contain the data set using the IEHLIST utility program. If the data set name appears in any VTOC, remove it using the IEHPROGM utility. (If the name of the data set appears in any VTOC, a system error probably occurred.) Rerun the job.

Problem Determination: Table I, items 2, 7a, 14, 29.

IEF134I SUBPARAMETER WRONG IN SPACE PARAMETER - MUST BE CYL OR ABSTR

Explanation: The SPACE parameter in a DD statement defining a new indexed sequential data set is incorrect. A subparameter other than CYL or ABSTR is present in the statement.

System Action: The job is terminated.

Programmer Response: Probable user error. Correct the invalid subparameter. List the volume table of contents (VTOC) of each volume that will contain the data set using the IEHLIST utility program. If the name of the data set appears in any VTOC, remove it using the IEHPROGM utility. Then rerun the job.

Problem Determination: Table I, items 2, 7a, 14, 29.

IEF135I PRIMARY SPACE REQUEST CANNOT BE ZERO

Explanation: In a DD statement defining an indexed sequential data set, the primary space subparameter is zero. This is not a valid space request.

System Action: The job is terminated.

Programmer Response: Probable user error. Change the primary space request to a non-zero positive value, and rerun the job.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF136I DUPLICATION IN ALLOCATION - INDEX AREA REQUESTED TWICE

Explanation: Two DD statements defining the same indexed sequential data set are requesting space for the index area. Following the allocation of an index area requested by a DD statement containing DSNAME=name(INDEX), either a DD statement containing DSNAME=name(PRIME) requested an embedded index through an index quantity in its SPACE parameter, or another DD statement was found specifying DSNAME=name(INDEX).

System Action: The job is terminated.

Programmer Response: Probable user error. Either eliminate the DD statement that specifies DSNAME=name(INDEX) or eliminate the index quantity subparameter in the DD statement specifying DSNAME=name(PRIME). List the volume table of contents (VTOC) of each volume that will contain the data set using the IEHLIST utility program. If the name of the data set appears in any VTOC, remove it using the IEHPROGM utility. (If the name of the data set appears in any VTOC, a probable system error has occurred.) Rerun the job.

Problem Determination: Table I, items 2, 7a, 14, 29.

IEF137I SUBALLOC DATA SET NOT FOUND

Explanation: In a DD statement, space allocation is requested by a SUBALLOC parameter. The control program can not find the data set referred to by the SUBALLOC parameter on the specified volume.

System Action: The job is terminated.

Programmer Response: Probable user error. Replace the SUBALLOC parameter with a SPACE parameter, or recreate the data set allowing for suballocation. Then rerun the job.

Problem Determination: Table I, items 2, 7a, 29.

IEF138I SUBALLOC DATA SET HAS MORE THAN 1 EXTENT - NOT ALLOWED

Explanation: In a DD statement, space allocation is requested by a SUBALLOC parameter. The data set specified in the SUBALLOC parameter has more than one extent.

System Action: The job is terminated.

Programmer Response: Probable user error. Replace the SUBALLOC parameter with a SPACE parameter or recreate the data set allowing for suballocation. Then rerun the job.

Problem Determination: Table I, items 2, 7a, 29.

IEF139I SUBALLOC DATA SET IS PASSWORD PROTECTED

Explanation: In a DD statement, space allocation was requested by a SUBALLOC parameter. The data set specified in the SUBALLOC parameter had security protection.

System Action: The job is terminated.

Programmer Response: Probable user error. Replace the SUBALLOC parameter with a SPACE parameter or recreate the data set allowing for suballocation. Then rerun the job.

Problem Determination: Table I, items 2, 7a, 29.

IEF140I DIRECTORY SPACE REQUEST IS LARGER THAN THE AMOUNT AVAILABLE ON THIS VOLUME

Explanation: The directory for a new partitioned data set was not allocated because the space requested for the directory by the SPACE parameter of the associated DD statement exceeded the space available on the specified volume.

System Action: The job is terminated.

Programmer Response: Probable user error. Reduce the directory quantity subparameter or request a different volume. Then rerun the job.

Problem Determination: Table I, items 2, 7a, 25a, 29.

IEF141I INDEX REQUEST MUST PRECEDE PRIME FOR ISAM DATA SET

Explanation: In the DD statement defining an indexed sequential data set, a statement containing DSNAME=name(PRIME) was found to precede a statement containing DSNAME=name(INDEX).

System Action: The job is terminated.

Programmer Response: Reorder the DD statements for the data set, making sure that INDEX is placed before PRIME. List the volume table of contents (VTOC) of each volume that will contain the data set

using the IEHLIST utility program. If the name of the data set appears in any VTOC, remove it using the IEHPRGM utility. Then rerun the job.

Problem Determination: Table I, items 1, 4, 7a, 14, 29.

IEF142I STEP WAS EXECUTED - COND CODE xxxx

Explanation: The step for which this message appears was executed, and the condition code for the step is xxxx.

Note: This condition code originates from the contents of general purpose register 15 at the end of the step. If the last task of the step did not set a completion code in register 15, the xxxx field of the message is meaningless.

System Action: The system will continue to process further steps of the associated job if so allowed by the COND= parameter of subsequent EXEC statements.

Programmer Response: None.

IEF143I LAST CONCATENATED DD CARD UNNECESSARY OR INVALID FOR THIS DATA SET

Explanation: In processing the DD statement defining an indexed sequential data set, two or three DD cards were processed successfully and INDEX, PRIME, and OVFLOW areas were allocated. It was then found that at least one more concatenated DD statement was present for the data set. Since all three areas had already been requested, the DD card is unnecessary.

System Action: The job is terminated, and the extra DD statements were not processed.

Programmer Response: Remove the extra DD statements. List the volume table of contents (VTOC) of each volume that will contain the data set using the IEHLIST utility program. If the name of the data set appears in any VTOC, remove it using the IEHPRGM utility. Then rerun the job.

Problem Determination: Table I, items 1, 4, 7a, 14, 29.

IEF144I CANNOT SUBALLOCATE FROM A SPLIT CYLINDER DATA SET

Explanation: In a DD statement, suballocation is requested by the SUBALLOC parameter, and the data set from which the space is to be allocated is a split cylinder data set. Suballocation from a split cylinder data set is not allowed.

System Action: The job is terminated.

Programmer Response: Probable user error. Either replace the SUBALLOC parameter with a SPACE parameter or define another data set from which to suballocate. To insure that the error does not recur, use the SPACE parameter when defining a data set

from which suballocation is desired. Then rerun the job.

Problem Determination: Table I, items 1, 4, 7a, 25a, 29.

IEF145I SPACE REQUEST MUST BE ABSTR FOR BOS VOLUME

Explanation: In a DD statement, a SPACE or SPLIT parameter requested space allocation by cylinders (CYL subparameter), records (average record length subparameter), or tracks (TRK subparameter). The space was requested on a volume that already contained a data set created by the System/360 Basic Operating System (BOS). After a data set has been placed on a volume by BOS, all subsequent space requests must be specified by coding ABSTR in the SPACE parameter or by using the SUBALLOC parameter.

System Action: The job is terminated.

Programmer Response: Probable user error. Request space by coding ABSTR for the SPACE parameter or by coding the SUBALLOC parameter, or request a different volume. Then rerun the job.

Problem Determination: Table I, items 1, 4, 7a, 25a, 29.

IEF146I DUPLICATE DATA SET NAMES WITHIN SPLIT CYLINDER REQUEST

Explanation: The data sets of a split cylinder request have the same name. Data sets on the same volume cannot have the same name.

System Action: The job is terminated.

Programmer Response: Specify unique names for the data sets involved. List the volume table of contents (VTOC) of the associated volume to insure that the names selected do not already exist on that volume. If either of the selected names already exists on the volume, either remove the existing data set from the volume using the SCRATCH function of IEHPRGM or select an alternate name for the new data set whose name is a duplicate.

Problem Determination: Table I, items 1, 3, 4, 7a, 14, 29.

IEF161I ddd - READER CLOSED

Explanation: The SYSIN reader closed its input data set on device ddd and stopped itself for one of the following reasons:

- End of file occurred on ddd.
- A STOP RDR or STOP RDRA command was entered.

Operator Response: Unload device ddd.

IEF165I cm

Explanation: Command cm was entered through the input stream. If the operator is requested to authorize execution of commands entered through the input stream,

message IEF166D follows to permit the operator to respond.

Operator Response: None.

IEF166D REPLY Y/N TO EXECUTE/SUPPRESS COMMAND COMMAND

Explanation: This message permits the operator to authorize execution of the command displayed in message IEF165I, which precedes this message.

Operator Response: If the command displayed in preceding message IEF165I is to be executed, enter REPLY xx,'Y'.

If the command displayed in preceding message IEF165I is not to be executed, enter REPLY xx,'N'.

IEF182I jjj WILL RESTART IN Pn

Explanation: In systems with MFT, a checkpoint restart for job jjj will be executed in problem program partition n. At this time, no redefinition of the partition is pending.

System Action: The system places the job on the hold queue. The job will automatically be scheduled into the partition (that is, the operator will not have to enter a RELEASE command), subject to the following conditions:

- Any job already executing in the partition must first terminate.
- If a START command for a transient reader (user-assigned) or transient writer is pending in the partition, the command will first be executed.
- If the partition contains a transient reader (system-assigned or user-assigned) or transient writer, the reader or writer must first be removed from the partition. For a writer, the operator must enter a STOP command.
- The operator must start an initiator in the partition if one has not already been started.

Operator Response: If the partition contains a transient writer, stop the writer. To hasten the restart when the partition contains a job or a transient reader, cancel the job or stop the reader, as desired. (The DISPLAY A command may be used to determine if there are jobs, transient readers, or transient writers in the partition.)

If the partition is redefined, the redefinition will not occur until the restart job has been executed. To immediately redefine the partition, the restart job should be canceled.

IEF183E PY=(aaaK,bbbK,x) AFTER (cccK,dddK) NEEDED TO RESTART jjj

Explanation: In systems with MFT, a checkpoint restart for job jjj must be executed in the main storage areas designated in the message text. Either a partition containing the required areas

IEF

has not been defined or has been defined but has a redefinition pending.

In the message text, aaaK is the number of bytes of required processor storage (hierarchy 0), and bbbbK is the number of bytes of required IBM 2361 core storage (hierarchy 1). These areas must be located cccK bytes and ddddK bytes, respectively, from the beginning of the dynamic areas of hierarchy 0 and hierarchy 1. The x is the job class of the restart job.

System Action: The system places the job on the hold queue.

Operator Response: If the job is to be restarted, a partition must be defined that contains the required areas and that can process jobs of the indicated job class:

- Enter a DEFINE LIST command to get a listing of all current partition definitions.
- Add the sizes of partitions 0, 1, 2, and so on until a total of cccK bytes (for hierarchy 0) and ddddK bytes (for hierarchy 1) is reached.
- For hierarchy 0, the required partition must be no more than cccK bytes from the beginning of the dynamic area of hierarchy 0. To do this, decrease the size of the last partition encountered so that the total size of that partition and the preceding partitions is at most cccK bytes. Then increase the size of the next partition by the size decreased from the last partition. (The same procedure should also be followed for hierarchy 1.)
- For hierarchy 0, the required partition, which is now no more than cccK bytes from the beginning of the dynamic area of hierarchy 0, must be at least aaaK bytes in size. If the partition is not at least aaaK bytes in size, increase the size of the partition so it is at least the required size, and correspondingly decrease the size of the following partition. (The same procedure should also be followed for hierarchy 1.)
- Enter a DEFINE command to redefine the partitions as described above, making sure that the required partition can process jobs of job class x.
- Then start an initiator in the required partition and enter a RELEASE command to release the job from the hold queue.

If the job is not to be restarted, cancel the job.

Note that the response to this message can be delayed until redefinition is convenient.

IEF184E JOBCLASS x NEEDED IN Pn TO RESTART jjj

Explanation: In systems with MFT, a checkpoint restart for job jjj must be executed in a main storage area contained in partition n. However, partition n is a resident reader or writer partition. And,

at this time, no redefinition of the partition is pending.

In the message text, x is the job class needed to process the job.

System Action: The system places the job on the hold queue.

Operator Response: If the job is to be restarted, stop any reader or writer active in the partition and redefine the partition so that it will process jobs of the indicated job class. Then start an initiator in the partition and enter a RELEASE command to release the job from the hold queue.

If the job is not to be restarted, cancel the job.

Note that the response to this message can be delayed until redefinition is convenient.

IEF185I COMMAND CANCELLED BY RESTART READER:
START xxx

Explanation: In systems with MFT, the operator authorized an automatic restart. In starting the restart reader (IEFREINT), the system found that a START command was pending. In the message text, xxx represents up to 19 characters of the operand of the pending START command.

System Action: The command was not executed. The restart reader was started.

Operator Response: If desired, reenter the command.

IEF189E REDEFINE Pn WITHOUT HIERARCHY ZERO TO
RESTART jjj

Explanation: During execution of a checkpoint restart for job jjj, it was found that partition n was defined to contain both hierarchy 0 and hierarchy 1 storage. However, hierarchy 0 storage should not be specified -- that is, during the initial execution of the job when checkpoints were taken, only hierarchy 1 storage was specified.

System Action: The system places the job on the hold queue.

Operator Response: If the job is to be restarted, redefine the partition to eliminate the hierarchy 0 storage. Then start an initiator in the partition and enter a RELEASE command to release the job from the hold queue.

If the job is not to be restarted, cancel the job.

IEF190I COMD REJECTED FOR INITIATOR 'ident' -
LIMIT MORE THAN 15

Explanation: In a START or MODIFY command for an initiator, the limit value associated with the initiator was greater than 15.

In the message text, 'ident' specifies the identifier assigned to the task when it was started.

Operator Response: Probable user error. Issue the START or MODIFY command again, specifying a limit value of 15 or less.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF191I COMD REJECTED FOR INITIATOR 'ident' - FORCE MORE THAN 15

Explanation: In a START or MODIFY command for an initiator, a force value associated with a class was greater than 15.

In the message text, 'ident' specifies the identifier assigned to the task when it was started.

Operator Response: Probable user error. Enter the START or MODIFY command again, specifying a force value of 15 or less.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF201I JOB TERMINATED BECAUSE OF CONDITION CODES

Explanation: A problem program terminated either normally or abnormally by issuing a RETURN or ABEND macro instruction that specified a completion code. This completion code satisfied a condition test specified by a code and operator subparameter in the COND parameter of the JOB statement. (Note: This message does not appear if the condition code from the last step of the job satisfied a condition test).

System Action: The job was terminated, so the remaining steps in the job were not executed.

Programmer Response: If termination was intentional, no action is needed.

If termination was not intentional, do the following:

- Correct the error that caused the completion code to be issued by the problem program.
- Change the condition test specified in the COND parameter of the JOB statement, if the problem program contained no errors.
- Submit for execution the remainder of the job, including the problem program if it contained an error.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF202I STEP - 'sss,' WAS NOT RUN BECAUSE OF xxx

Explanation: If xxx is CONDITION CODES, a problem program terminated by issuing a RETURN macro instruction that specified a completion code. This completion code satisfied a condition test (specified by a code, operator, and job step name

subparameter) in the COND parameter of an EXEC statement.

If xxx is COND=ONLY, the COND parameter of an EXEC statement specified ONLY, but no previous job steps had abnormally terminated.

In the message text, sss is the job step name of the EXEC statement containing the COND parameter.

System Action: The job step specified by the succeeding EXEC statement was not executed. The remainder of the job was or was not executed, depending on the condition tests specified in the EXEC statement for each step.

Programmer Response: If termination was intentional, no action is needed.

If termination was not intentional, do the following:

- Correct the error that caused the completion code to be issued by the problem program.
- Change the condition test specified in the COND parameter of the succeeding EXEC statement, if the problem program contained no errors. Then execute the problem program, if it contained an error, and the job step that was not executed.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF203I COMD REJECTED FOR INITIATOR 'ident' - TOO MANY OPERANDS

Explanation: In a START or MODIFY command, parameters were specified which do not pertain to classes.

In the message text, 'ident' specifies the identifier assigned to the task when it was started.

Operator Response: Probable user error. Enter the command again correctly, specifying only those parameters which pertain to classes.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF204I COMD REJECTED FOR INITIATOR 'ident' - TOO MANY CLASSES

Explanation: More than eight job classes were specified in a START or MODIFY command. However, a maximum of eight job classes is permitted.

In the message text, 'ident' specifies the identifier assigned to the task when it was started.

Operator Response: Probable user error. Enter the START or MODIFY command again correctly, specifying no more than eight job classes.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF209I MAIN STORAGE UNAVAILABLE FOR jjj.sss.ppp

Explanation: During execution of a checkpoint restart for procedure step ppp of step sss of job jjj, it was found that all or part of the main storage for the restart job was not available for one of the following reasons:

IEF205I CMD REJECTED FOR INITIATOR 'ident' - INVALID OPERAND

Explanation: An error occurred for one of the following reasons:

- An invalid class was specified in a START or MODIFY command.
- The CLASS keyword of a MODIFY command was not specified correctly.

In the message text, 'ident' specifies the identifier assigned to the task when it was started.

Operator Response: Probable user error. Enter the command again correctly.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF206I CMD REJECTED FOR INITIATOR 'ident' - NO CLASSES SPECIFIED

Explanation: An error occurred for one of the following reasons:

- No job classes were specified either in the START command or in the cataloged procedure.
- No job classes were specified in the MODIFY command.

In the message text, 'ident' specifies the identifier assigned to the task when it was started.

Operator Response: Probable user error. Enter the command again correctly, specifying the proper job classes.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF207I CMD REJECTED FOR INITIATOR 'ident' - STORAGE KEY UNAVAILABLE

Explanation: When a START command was entered, fifteen initiators were already operating. Therefore, no more storage protection keys are available.

In the message text, 'ident' specifies the identifier assigned to the task when it was started.

Operator Response: None.

IEF208I INVALID REGION PARAMETER

Explanation: In a JOB or EXEC statement, the REGION parameter specified a value larger than dynamic main storage.

System Action: The job was terminated.

Programmer Response: Probable user error. Correct the REGION parameter and resubmit the job.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

- In systems with MFT, the nucleus expanded into the required main storage area.
- In systems with MFT, or MVT, a deferred restart was being performed on an alternate system that did not have the required main storage area.
- In systems with MVT, the system queue space expanded into the required main storage area.
- In systems with MVT, a deferred restart was being performed, but the requested main storage area was larger than the area used originally. Since the original area was adjacent to the link pack area, the main storage area could not be increased.
- In systems with MVT, a deferred restart was being performed, but after IPL the link pack area had expanded into the required main storage area.
- In a Model 65 Multiprocessing System, the requested storage was already offline or, because of a storage error, was reconfigured out of the system.

System Action: Restart for job jjj is terminated.

Programmer Response: Probable user error. Request the use of a system known to be adequate for the restart.

Operator Response: Rerun the job when the system is started again. At that time, specify the same options as those used when the checkpoint was taken. If such a rerun fails or is not feasible, report the message to the programmer.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF210I ddn - UNIT FIELD SPECIFIES INCORRECT DEVICE NAME

Explanation: In a DD statement, the unit name subparameter in the UNIT parameter was invalid:

- The unit was not defined when the system was generated.
- In systems with MFT or MVT, the SYSOUT and UNIT parameters were specified, but the unit was not a direct access device.
- If a cataloged data set was being referenced, the unit field in the catalog entry is incorrect.

In the message text, ddn is the data definition name in the name field of the DD statement.

System Action: The job was terminated.

Programmer Response: Probable user error. Correct the unit name subparameter, and submit the job again.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF211I ddn - REQUIRED CONTROL VOLUME NOT MOUNTED

Explanation: A required control volume for a cataloged data set was not mounted for one of the following reasons:

- No device type information for the control volume was contained in the SYSCTLG data set.
- No SYSCTLG data set was contained on the required volume.

Therefore, it was impossible to locate the cataloged data set.

In the message text, ddn is the data definition name in the name field of the DD statement that specified the cataloged data set.

System Action: The job was terminated.

Programmer Response: Probable user error. In the first case, make sure the device type information for the control volume is included in the SYSCTLG data set. (This can be done by using the IEHPRGM utility program to first release and then reconnect the control volume.)

In the second case, make sure the SYSCTLG data set exists on the volume.

Problem Determination: Table I, items 1, 2, 4, 7a, 25d, 29.

IEF212I ddn - DATA SET NOT FOUND

Explanation: In processing a DD statement, the job scheduler found one of the following:

- The data set name in the DSNNAME parameter did not contain all the levels of qualification, making it impossible to locate the cataloged data set.
- The data set had been deleted from the volume table of contents (VTOC) of the volume on which it had been placed when cataloged.
- The DCB parameter or the REF subparameter of the VOLUME parameter contained invalid information.
- The data set was not cataloged.
- A level of index was either missing or incorrect in a generation data group.
- In a step, an attempt was made to receive a passed data set. However, a data set with the same name was previously received in this step.

In the message text, ddn is the data definition name in the name field of the DD statement.

System Action: The job was terminated.

Programmer Response: Probable user error. If the data set name was specified incorrectly, correct it. If the DCB or VOLUME parameters were incorrect, correct them. If the data set was not cataloged, either catalog it or, on the DD statement, specify the volume serial number of the

volume on which the data set resides. But, if the DD statement was correct, recatalog the data set. Then submit the job again.

Problem Determination: Table I, items 1, 2, 4, 7a, 25d, 29.

IEF213I ddn - DSNNAME FIELD SPECIFIES INDEX BLOCK, NOT DATA SET

Explanation: In a DD statement, the data set name in the DSNNAME parameter did not contain the lowest level of qualification, making it impossible to locate the cataloged data set. The lowest level specified in the data set name was an index block, instead of a data set. In the message text, ddn is the data definition name in the name field of the DD statement.

System Action: The job was terminated.

Programmer Response: Probable user error. Correct the data set name, and submit the job again.

Problem Determination: Table I, items 1, 2, 4, 7a, 25d, 29.

IEF214I ddn - DSNNAME FIELD SPECIFIES DATA SET PRIOR TO LOWEST LEVEL

Explanation: In a DD statement, the data set name in the DSNNAME parameter contained the name of a cataloged data set in other than the lowest level of qualification. Either the data set name was incorrect or a level of the index had been destroyed.

In the message text, ddn is the data definition name in the name field of the DD statement.

System Action: The job was terminated.

Programmer Response: Probable user error. Correct the data set name or the indexes. Then submit the job again. If the problem

Problem Determination: Table I, items 1, 2, 4, 7a, 25d, 29.

IEF215I ddn - DSNNAME FIELD CONTAINS SYNTAX ERROR

Explanation: In a DD statement, the data set name in the DSNNAME parameter contained a syntax error, making it impossible to locate the cataloged data set. Examples of syntax errors are a data set name qualifier of 9 characters (8 characters is the maximum length permitted) or a double delimiter.

In the message text, ddn is the data definition name in the name field of the DD statement.

System Action: The job was terminated.

Programmer Response: Probable user error. Correct the data set name, and submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF216I ddn - DATA SET MUST BE RECREATED IN THE CATALOG

Explanation: The control program could not retrieve a cataloged data set specified by the data set name in the DSNAMES parameter of a DD statement. One of the following caused this failure:

- An index had been modified, so that it contained an incorrect pointer.
- An uncorrectable input/output error occurred in reading part of the index.

In the message text, ddn is the data definition name in the name field of the DD statement.

System Action: The job was terminated.

Programmer Response: Check the catalog. If it is in error, use a utility program to recatalog the data set or to recreate the entire catalog or those parts that were destroyed. If the catalog does not contain errors, an uncorrectable input/output error occurred. Rerun the job.

Problem Determination: Table I, items 1, 4, 7a, 25d, 29.

IEF217I ddn - VOLUME CONTAINING PATTERN DSCB NOT MOUNTED

Explanation: In a DD statement, the data set name in the DCB parameter specified a data set on a volume that was not mounted when the job was to be executed.

In the message text, ddn is the data definition name in the name field of the DD statement.

System Action: The job was terminated.

Programmer Response: Probable user error. Submit the job again, making sure that the volume containing the data set is mounted before the job step is to be executed.

Problem Determination: Table I, items 1, 4, 7a, 25b, 29.

IEF218I ddn - PATTERN DSCB RECORD NOT FOUND IN VTOC

Explanation: In a DD statement, the data set name in the DCB parameter specified a data set that did not exist in the volume(s) specified.

In the message text, ddn is the data definition name in the name field of the DD statement.

System Action: The job was terminated.

Programmer Response: Probable user error. Check the data set name in the DCB parameter for an error. On the volume pointed to by the catalog, check the volume table of contents (VTOC) for the data set control block (DSCB) specified in

the DCB parameter. Correct the error, and rerun the job.

Problem Determination: Table I, items 1, 4, 7a, 25b, 29.

IEF219I ddn - GDG GROUP NAME EXCEEDS 35 CHARACTERS

Explanation: In a DD statement, the data set name in the DSNAMES parameter was a generation data group (GDG) name longer than the maximum length of 35 characters. The extra length made it impossible to obtain the data set name's final qualifications from the catalog.

In the message text, ddn is the data definition name in the name field of the DD statement.

System Action: The job was terminated.

Programmer Response: Probable user error. Change the generation data group name so that it does not exceed 35 characters, and rerun the job.

Problem Determination: Table I, items 1, 4, 7a, 25b, 29.

IEF220I ddn - GDG ALL CAUSES TOTAL DD STATEMENTS TO EXCEED 255

Explanation: In a DD statement, the data set name in the DSNAMES parameter was a generation data group (GDG) name that specified all of the data sets in the group. All the data sets in the generation data group plus all the other data sets specified in other DD statements for the job step totaled more than 254, which is the maximum number of data sets allowed per job step, including the DD statements for the job library.

In the message text, ddn is the data definition name in the name field of the DD statement that specified the generation data group.

System Action: The job was terminated.

Programmer Response: Probable user error. Reduce the total number of data sets specified for the job step, so as not to exceed the limit, and rerun the job.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF221I PGM=*.DD - BACKWARD REFERENCED STEP WAS NOT EXECUTED CAUSES JOB TO BE CANCELED

Explanation: In an EXEC statement, the name of the program to be executed was specified by a reference to the data definition name of a DD statement in a previous step of the job. However, the previous step, which contained the DD statement, was not executed because a condition test specified in the COND parameter of the step's EXEC statement was satisfied.

System Action: The job was terminated.

Programmer Response: Probable user error. In the EXEC statement that refers to the DD statement in the previous step, include the condition tests specified in the previous step's EXEC statement. Then rerun the job.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF222I COMD REJECTED FOR INITIATOR 'ident' -
UNIQUE IDENT REQUIRED

Explanation: A START command was entered; however, 'ident', the identifier assigned to the task when it was started, has already been used with another procedure name.

Operator Response: Probable user error. Enter the command again correctly, specifying another identifier.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF225D SHOULD jjj.sss.ppp [checkid] RESTART

Explanation: Automatic restart was requested by procedure step ppp of step sss of job jjj and one of the following occurred:

- The step was abnormally terminated with a completion code that makes the step eligible to be restarted.
- The system failed.

If the checkpoint identification, checkid, is omitted in the message text, step restart was requested; if the checkpoint identification is present, checkpoint restart was requested.

Operator Response: If the checkpoint identification is the same as in a previous request for a restart by the same job, and if the job was previously terminated with the same completion code, it may be desirable to prevent another restart at the same checkpoint. Enter one of the following replies:

- REPLY xx,'YES' if automatic restart is to be authorized.
- REPLY xx,'NO' if automatic restart is to be denied, thus causing the system to dispose of data sets as if restart had not been requested.
- REPLY xx,'HOLD' if the job is to be held until the operator issues a RELEASE command, at which time automatic restart will be performed. (If it is desired to terminate the job, the CANCEL command should not be issued until after the RELEASE command has been issued.) This reply can only be entered in systems with MFT or MVT.

IEF228I jjj RESTART CANCELLED - I/O ERROR
SCHEDULER WORK AREA

Explanation: An uncorrectable input/output error occurred while the queue manager was reading the

SYS1.SYSJOBQE data set for processing of an automatic step restart for job jjj.

System Action: Restart for job jjj was terminated.

Operator Response: Either reenter job jjj through the input stream or perform a deferred restart.

Problem Determination: Table I, items 1, 2, 4, 7a, 8a, 29.

IEF229I LRECL EXCEEDS 32K

Explanation: The variable record extension (VRE) input or output logical record length exceeds 32,760 bytes. The output data set records were defined as variable spanned with machine code control characters, but the input records did not contain machine code control characters.

System Action: The SYSOUT writer closes its SYSOUT data set and ceases processing.

Programmer Response: If it is necessary to process records with a length of greater than 32K bytes, do not request control characters for the SYSOUT writer's output data set unless control characters have been included in the input records.

Problem Determination: Table I, items 1, 2, 3, 13, 15, 29.

IEF230I TOO MANY SEPARATIONS AGAINST ddn

Explanation: A data set was specified in the SEP subparameter of the UNIT parameter and/or in the SEP parameter of more than 8 DD statements. In the message text, ddn is the data definition name in the name field of the DD statement that contained the ninth separation specification for the data set.

System Action: The control program attempted to assign the data set so that the first 8 separation specifications were met. The other separation specifications were not necessarily honored.

Programmer Response: Probable user error. If the job step is to be executed again, correct the DD statements so that only 8 separations are specified.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF231I jjj - QUEUE MGR I/O DEVICE ERROR DURING
ALLOCATION

Explanation: An uncorrectable input/output error occurred while reading or writing in the SYS1.SYSJOBQE data set; the error occurred during allocation for job jjj.

System Action: Job jjj was removed from the input work queue and was terminated.

Programmer Response: Submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 8a, 29.

IEF232I jjj - NO SPACE ON JOB QUEUE FOR ALLOCATION

Explanation: No space remained in the SYS1.SYSJOBQE data set for allocation for job jjj.

System Action: Job jjj was removed from the input work queue and was terminated.

Programmer Response: Submit the job again.

IEF233A M ddd,ser,[labtyp],
 { jjj
 { jjj,sss
 { jjj,sss,dsn
IEF233A ddd,dsn { jjj,,dsn

Explanation: M indicates that a volume is to be mounted on device ddd. The volume was required by job jjj or, if applicable, step sss of job jjj. (If this message is issued for a system task, sss will appear as a system task identifier.)

If a DISPLAY DSNAME command is active, the first nontemporary data set name, dsn, is also specified in the message text. If the data set name causes the message to exceed 72 characters, the data set name will appear as specified on the second line of the message text.

- If ser is a 6-digit serial number, the volume with that serial number is to be mounted on the device.
- If ser is SCRATCH, a scratch volume is to be mounted. The scratch tape volume must have the type of label specified by labtyp: SL for standard label or standard user label, NSL for non-standard label, or NL for no label or by-pass label.
- If ser is PRIVAT, the volume that is mounted will be demounted at the end of job jjj.
- If ser begins with a slash or L, the volume to be mounted is unlabeled; the number after the slash or L is an internal serial number assigned by the system to an unlabeled volume. If ser begins with L, the number after the L is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number for the data set.

System Action: The task waits for the volume to be mounted. No jobs may be allocated or terminated until the operator responds to this message.

Operator Response: For tape, if ser is SCRATCH, make sure that the file protect ring has been inserted in the volume. If device ddd is direct access, this mount request should be honored first if it appears in conjunction with an IEF533A mount message.

Mount volume ser on the device; then ready device ddd. If a mount is requested for a device with non-removable volumes, ready the device in order to indicate that the

volume is mounted. If the volume cannot be mounted, enter a CANCEL command to terminate job jjj. Separate commands are necessary to cancel all jobs requiring volume ser.

IEF234E {R} ddd,ser [,SPACE=prml[,jjj]
 {D}

Explanation: R indicates that the volume on device ddd is to be demounted and retained near the computer for use in the near future; D indicates that the volume is to be demounted and used subsequently as a scratch volume:

- If ser is a 6-digit number, it is the serial number of the volume, which contains labels.
- If ser begins with a slash or L, the volume to be demounted is unlabeled; the number after the slash or L is an internal serial number assigned by the system to an unlabeled volume. If ser begins with L, the number after the L is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number for the data set.
- If ser is absent from the message text, the volume is unlabeled and is not being passed between job steps.

If a DISPLAY SPACE command is active, the field SPACE=cccc,tttt,aaaa/yyyy,zzzz is specified:

cccc Total number of free cylinders on the volume.
tttt Total number of tracks in addition to the free cylinders.
aaaa Areas or extents dividing the cylinders and tracks.
YYYY Maximum number of contiguous free cylinders of the largest extent within the total remaining space.
zzzz Number of tracks in addition to the free cylinders of the largest extent within the total remaining space.

If an error occurred during the listing of the parameters in the SPACE field, one of the following messages is specified:

- LSPACE-PERMANENT I/O ERROR
- LSPACE-NON-STANDARD OS VOLUME
- LSPACE-NOT A DIRECT ACCESS VOL
- LSPACE-INVALID PARAMETER

In the message text, jobname jjj appears only if R appears; jjj is the job for which the volume is to be retained.

The demount message can occur if the volume does not have enough available space to meet an allocation request or if a data set already on the volume has the same name as the data set for which space is to be allocated.

Operator Response: Demount the volume. If D appeared in the message text, use the volume later when a scratch volume is requested.

If R appeared, retain the volume near the computer. If it is not externally marked with its serial number, mark the 6-digit or internally assigned serial number on it. (The internally assigned number should appear externally on the volume in case a subsequent step needs the volume; for the subsequent mounting, the system will specify the volume by the internally assigned number.) Also, mark the jobname on the volume. If the job ends without requesting a remount of the volume, the volume need no longer be retained.

Problem Determination:

If an error occurs again during the listing of the parameters in the SPACE field see Table I, items 2, 7a, 29.

IEF235I jjj.sss.ddn WAITING FOR VOLUMES

Explanation: The system was unable to satisfy the volume requests for a data set in step sss of job jjj.

In the message text, ddn is the data definition name in the name field of the DD statement that specified the data set.

System Action: The initiator for step sss will enter a wait state until the requested volumes have been unallocated by terminating tasks and are available for use. Other jobs cannot go through allocation until this wait has terminated and current allocation processing has completed.

Operator Response: If desired, enter a CANCEL command to terminate job jjj.

In systems with MFT, a reply of CANCEL must be entered if no other scheduler size partiiton is available for termination services.

IEF236I ALLOC. FOR jjj sss [ppp]

Explanation: This message identifies the job step and, if applicable, the cataloged procedure for which devices were being allocated. The IEF237I messages, which follow this message, describe the device allocations.

The devices were allocated for step sss of job jjj or for cataloged procedure ppp, which was executed by step sss of job jjj.

In response to a DISPLAY JOBNAMEs command, this message will appear on the console only for the unit record devices being allocated.

In systems with MFT or MVT, this message appears twice for a step or procedure if the step or procedure was being executed or terminated when system restart was required. The second IEF236I message is

followed by duplicate allocation messages (IEF237I) for the SYSIN and SYSOUT data sets specified by the step or procedure. The first series of allocation messages reflect the actual device assignments. The second series should be ignored; they are produced when the system is completing the output queue entries for step sss.

Programmer Response: None.

Operator Response: None.

IEF237I ddd ALLOCATED TO ddn

Explanation: Device ddd is allocated to the data set defined in the DD statement whose name field contains ddn.

This message is written for each device allocated to a data set, except for data sets defined in DD statements containing the SYSOUT parameter. However, if message IEF242I precedes this message, all data sets will be listed for the step which caused message IEF242I to be issued.

In response to a DISPLAY JOBNAMEs command, this message will appear on the console only for the unit record devices allocated to data sets, except for data sets defined in DD * or DD DATA statements or in DD statements containing the SYSOUT parameter.

Programmer Response: None.

Operator Response: Check the unit record device to make sure it is ready and has the proper input decks, cards, or forms.

IEF238A REPLY [DEVICE NAME] [, 'WAIT'] [, 'NOSEP'] OR 'CANCEL'

Explanation: The system cannot allocate either a device or space requested by a DD statement for one of the following reasons:

- The DD statement requested more devices than were currently available.
- The DD statement specified channel or unit separation.
- The DD statement was named in another DD statement's separation request.

This message permits the operator to respond to preceding message IEF239I, IEF247I, or IEF248I.

Operator Response: If message IEF239I precedes this message, refer to the installation procedures and enter one of the following:

- REPLY xx, 'NOSEP'. The job step needing the space must be executed immediately and the separation requests can be ignored. The system will ignore the step's separation requests and will attempt allocation again.
- REPLY xx, 'WAIT'. The job step needing the space should be executed with its separation request, if possible. The job will wait. When direct access space is freed on appropriate devices, the system will attempt allocation again.

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Other jobs cannot go through allocation until this wait has terminated and current allocation processing has completed.

- REPLY xx,'CANCEL'. The job will be terminated.
- REPLY xx,'ddd'. If device ddd fulfills the requirements of the DD statement, allocation will be attempted again; however, device ddd may be allocated to a different DD statement than the one specified in message IEF239I.
- In systems with MFT, a reply of CANCEL or NOSEP must be entered if there is no scheduler size partition available for termination services.

If message IEF247I precedes this message, enter one of the following after checking with installation procedures:

- REPLY xx,'ddd' where ddd appeared in an OFFLINE line of the message. The system places the device online and attempts allocation again; however, device ddd may be allocated to a different DD statement than the one specified in message IEF247I.
- REPLY xx,'WAIT' if the OFFLINE devices in the message cannot be changed for allocation recovery, and either the job step did not request channel or unit separation or the step's separation requests cannot be ignored. The job waits until enough devices are released to satisfy its device requirements and separation requests, if any. Other jobs and system tasks can neither start or go through allocation until this wait has terminated and current allocation processing is complete.
- REPLY xx,'NOSEP' if the OFFLINE devices in the message cannot be changed for allocation recovery, the job step requested channel and/or unit separation, and the separation requests can be ignored. The system ignores the step's separation requests and attempts allocation again.
- REPLY xx,'CANCEL' if the needed devices are always used, perhaps for a background job step. The system terminates the job.

Note: One of the replies to message IEF238A must be entered before the initiator will process the job. Although a CANCEL command may be entered, the command will not take effect until a valid reply has been entered to this message. (All replies must be specified in upper-case letters.)

If message IEF248I precedes this message:

If one of the reserved volumes can be demounted, enter REPLY xx,'ddd'. The system will issue message IEF234A to demount the volume and then message IEF233A to request mounting of a scratch volume to be allocated to the data set named on DD statement ddn.

If none of the reserved volumes can be demounted, enter REPLY xx,'CANCEL'. The system will terminate the job.

IEF239I jjj sss ddn WAITING FOR ALLOCATION

Explanation: The DD statement whose name field is ddn has requested direct access space that cannot be allocated.

System Action: The system placed the step named sss of the job named jjj in wait state. When direct access space is freed on appropriate devices, the system will attempt allocation again. However, if message IEF238A immediately follows on the console, the operator can take the job out of wait state. Other jobs cannot go through allocation until this wait has terminated and current allocation processing has completed.

Operator Response: If desired, enter a CANCEL command to terminate the job named jjj.

In systems with MFT, a reply of CANCEL or NOSEP must be entered if there is no scheduler size partition available for termination services.

IEF240I TOO MANY DD CARDS

Explanation: The job step contained too many DD statements for the main storage available for internal tables in the system being used.

System Action: The job was terminated.

Programmer Response: Probable user error. Reduce the number of data sets, and thus the number of DD statements, for the job step, and submit the job again.

In systems with MFT, submit the job again, instructing the operator to increase the size of the partition by a specified amount.

In systems with MVT, submit the job again, instructing the operator to start the system again and, during nucleus initialization, to increase the size of the MIN parameter by a specified amount, if this option was chosen at system generation.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF241I REQUEST FOR PENDING OFFLINE RESERVED DEVICE

Explanation: In a DD statement, the UNIT parameter specifies a device which is reserved and pending offline. The device was reserved by PRESRES or by a MOUNT command.

System Action: If the volume on the device contains SYSIN data sets, recovery is attempted by issuing message IEF238I, allowing the operator to bring the device back online. If the volume does not contain SYSIN, the job is terminated.

Programmer Response: If possible, request another device and rerun the job.

Otherwise, rerun the job when the required device is back online.

IEF242I ALLOC. FOR jjj sss [ppp] AT ABEND

Explanation: In the JOB statement, the allocation MSGLEVEL=0 was specified. Since the problem program failed during execution, the system has overridden the previous specification and has assumed MSGLEVEL=1. Unit allocation messages IEF237I will follow this message.

Programmer Response: None.

IEF243E UNIT xxx UNLOADED. VOLUME HAS ANS LABEL.

Explanation: In systems with MFT, a tape volume which has an American National Standard (ANS) label was mounted on a device in a system which does not support ASCII tape processing. The xxx field contains the unit address.

System Action: The tape volume is unloaded.

Operator Response: Set aside jobs which need this tape until a system which supports ASCII processing is available. If no jobs need this specific tape, mount another tape with a different label type.

IEF244I jjj sss ddn UNABLE TO ALLOCATE

Explanation: The system was unable to allocate a device to the data set named on DD statement ddn for step sss of job jjj:

- In a DD statement, the UNIT parameter specified a device collection and specified more than the number of devices available within the collection. Either the collection did not contain the requested number of devices or too many devices in the collection were already assigned or offline.
- The DD statement requested allocation of device(s) currently allocated to another task, and the device(s) could not be shared.

System Action: The system might have terminated the job; in this case, no further termination message is issued for the job. If the job was not terminated, the system issues message IEF247I to attempt allocation recovery.

Operator Response: None.

Programmer Response: Probable user error. If the job was terminated, check the UNIT parameter to ensure that the device collection can supply the number of devices needed. If necessary, change the UNIT parameter. Then submit the job again.

Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF245I INCONSISTENT UNIT NAME AND VOLUME SERIAL

Explanation: In a DD statement, the UNIT parameter specified a device collection; the SER subparameter of the VOLUME parameter specified the volume serial number of a resident device that did not belong to that device collection. A resident device is a device that does not have mountable volumes.

System Action: The job was terminated.

Programmer Response: Probable user error. Correct the erroneous parameter, and submit the job again.

Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF246I INSUFFICIENT SPACE ON STORAGE VOLUMES

Explanation: In a DD statement that requested a storage volume the SPACE parameter requested a greater quantity of tracks than was available on the direct access device.

System Action: The job was terminated.

Programmer Response: Probable user error. Check the track quantity of the SPACE parameter for validity. If it was incorrect, change it. If it was correct, change the request to a different volume. Then submit the job again.

Problem Determination: Table I, items 1, 3, 4, 7a, 25b, 29.

IEF247I {jjj ALLOCATION RECOVERY}
{jjj ddd-list OFFLINE, }

Explanation: The system was unable to allocate a device to a data set, as required for job jjj, and is attempting allocation recovery. In the message text, ddd-list is a listing of the devices.

In any system, device ddd could be allocated if the operator could vary its status from offline to online.

In the message text, the first line always appears. The second line appears for eligible devices that are currently offline or that are pending offline (that is, devices which a VARY offline command has recognized but has not completely processed, in which case ddd is preceded by an asterisk (*); this line may appear more than once.

System Action: The system action depends on the operator response to message IEF238A, which follows this message.

Programmer Response: If the job was terminated, make any changes indicated by other messages, and submit the job again.

Operator Response: Respond as indicated for message IEF238A, which follows this message.

IEF248I jjj sss ddn ERROR ALLOCATING RESERVED
VOLUME
IEF248I ddd HAS RESERVED VOLUME ser

Explanation: The system was unable to allocate space on a device to the data set named on DD statement ddn for step sss of job jjj. Device ddd is eligible for allocation, but the reserved volume with serial number ser is mounted on the device.

The second line in the message text may be written once or several times, depending on the number of eligible reserved volumes available.

Operator Response: Respond as indicated for message IEF238A, which follows this message.

IEF249I FOLLOWING P/R & RSV VOLUMES ARE MOUNTED
ser ON ddd ccc-ccc

Explanation: During system start, this message describes the volumes mounted for PRESRES (permanently resident and reserved), which is a member of the SYS1.PARMLIB data set.

ser ON ddd ccc-ccc is written once for each mounted volume. ser is the serial number of a mounted volume, ddd is the device address, and ccc-ccc specifies the characteristics of the volume:

P/R-PUB	Permanently resident, public
P/R-PRV	Permanently resident, private
P/R-STR	Permanently resident, storage
RSV-PUB	Reserved, public
RSV-PRV	Reserved, private
RSV-STR	Reserved, storage

Operator Response: None.

IEF250I FOLLOWING MAY BE MOUNTED
ser ON dddtyp
IEF250D REPLY DEVICE ADDRESSES OR GO

Explanation: If PRESRES (permanently resident and reserved), a member of the SYS1.PARMLIB data set, exists in the system and if all volumes described in entries in the PRESRES data set are not mounted during system start, this message is produced to request mounting of the unmounted PRESRES volumes.

ser ON dddtyp is written once for each unmounted volume. ser is the serial number of a volume to be mounted and dddtyp is the type of device, such as 2311, 2314, 2319, or 2321, that the volume is to be mounted on. dddtyp does not specify any special features, such as track overflow, that may be required; it is the user's responsibility to select the device that has any required special features.

Operator Response: If any of the listed volumes is to be mounted, enter REPLY

xx,'ddd,ddd,ddd,...' where each ddd is a device address. Any valid direct access devices can be used, including those that already have volumes mounted on them. After replying, mount the required volumes on the devices replied.

If no volumes are to be mounted, enter REPLY xx,'GO'.

IEF251I JOB CANCELED (in SYSOUT)
IEF251I jjj JOB CANCELED (on console)

Explanation: In response to a CANCEL command or a CANCEL response to message IEF238A, the system terminated job jjj.

Programmer Response: Correct any errors indicated by any other messages, and submit the job again.

Operator Response: None.

IEF252I DIRECT ACCESS - SPACE UNAVAILABLE FOR
ASSIGN

Explanation: On the direct access device used to hold the SYS1.SYSJOBQE data set, the space for processing a job was exceeded.

System Action: The job was terminated.

Programmer Response: Probable user error. Create a larger SYS1.SYSJOBQE data set so that it can hold larger jobs. Then submit the job again.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF253I DIRECT ACCESS - DUPLICATE NAME ON VOLUME

Explanation: In a DD statement that requested space on a direct access device, the data set name in the DSNAMES parameter was the same as a data set name already in the volume table of contents (VTOC) for the requested volume.

System Action: The job was terminated.

Programmer Response: Probable user error. If the data set being specified is a new data set, select a unique name for it. If the DD statement intended to specify the data set that is already on the direct access device, specify the OLD subparameter in the DISP parameter. Then submit the job again.

Problem Determination: Table I, items 1, 3, 4, 7a, 25b, 29.

IEF254I DIRECT ACCESS - NO SPACE IN VTOC

Explanation: A DD statement requested space on a direct access volume for a new data set. The volume table of contents (VTOC) for the requested volume did not have the minimum number of format 0 data set control blocks (DSCB) required to allocate the data set.

System Action: The job was terminated.

Programmer Response: Probable user error. Submit the job again, requesting space on a different volume.

Problem Determination: Table I, items 1, 3, 4, 7a, 25b, 29.

IEF255I DIRECT ACCESS - PERMANENT I/O ERROR

Explanation: An uncorrectable input/output error occurred in using a direct access device during program initiation.

System Action: The job was terminated.

Programmer Response: Rerun the job.

Operator Response: None.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF256I DIRECT ACCESS - ABSOLUTE TRACK NOT AVAILABLE

Explanation: In a DD statement defining a data set on a direct access device, the ABSTR subparameter of the SPACE request is asking that the data set be allocated in absolute tracks. The requested tracks are not available.

System Action: The job is terminated.

Programmer Response: Probable user error. Check the beginning track address and quantity subparameters for validity. If they are correct, request different tracks or a different volume. Then resubmit the job.

Problem Determination: Table I, items 2, 7a, 25a, 29.

IEF257I DIRECT ACCESS - SPACE REQUESTED NOT AVAILABLE

Explanation: In a DD statement, the SPACE parameter requested a greater quantity of tracks than was available on the direct access device. Either the system terminated the job because space would not become available or the operator cancelled the job while it was waiting for space to become available.

System Action: The job was terminated.

Programmer Response: Probable user error. Check the track quantity of the SPACE parameter for validity. If it was incorrect, change it. If it was correct, change the request to a different volume. Then submit the job again.

Problem Determination: Table I, items 1, 3, 4, 7a, 25b, 29.

IEF258I DIRECT ACCESS - INVALID REC LENGTH

Explanation: In a DD statement, the average record length subparameter in the

SPACE parameter specified a length greater than the capacity of a track on the requested direct access device.

System Action: The job was terminated.

Programmer Response: Probable user error. Reduce the lengths of the records to make the average length no greater than the track capacity of the device or specify a device with a greater track capacity. Then submit the job again.

Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF260I WRONG DSORG OR DISP

Explanation: Two DD statements defining an indexed sequential data set were found to have conflicting values for either their DSORG parameters or for their DISP parameters. All DD statements defining the same indexed sequential data set should specify DSORG=IS or DSORG=ISU and should agree on the disposition of the data set.

System Action: The job is terminated.

Programmer Response: Probable user error. Specify IS or ISU in the DSORG subparameter, or specify the correct disposition.

Problem Determination: Table I, items 2, 7a, 29.

IEF261I NO PRIME AREA REQUEST FOR ISAM DATA SET

Explanation: None of the DD statements defining an indexed sequential data set specify DSNAME=name(PRIME).

System Action: The job is terminated.

Programmer Response: Supply a DD statement that specifies DSNAME=name(PRIME). List the volume table of contents (VTOC) of each volume involved using the IEHLIST utility program. If the name of the data set appears in any VTOC, remove it using the IEHPRGM utility. Then rerun the job.

Problem Determination: Table I, items 1, 4, 7a, 14, 29.

IEF262I PRIME AREA MUST BE REQUESTED BEFORE OVFLOW

Explanation: The control program is unable to allocate the overflow area of a new indexed sequential data set because the overflow area request appears before the prime area request. That is, the control program read the DD statement specifying DSNAME=name(OVFLOW) before the DD statement specifying DSNAME=name(PRIME).

System Action: The job is terminated.

Programmer Response: Probable user error. Insert the DD statement specifying DSNAME=name(PRIME) before the DD statement

specifying DSNAME=name(OVFLOW). List the volume table of contents (VTOC) of each volume that will contain the data set using the IEHLIST utility program. If the name of this data set appears in any VTOC, remove it using the IEHPROGM utility. Then rerun the job.

Problem Determination: Table I, items 1, 2, 4, 7a, 14, 29.

IEF263I SPACE REQUEST WRONG - MUST BE ON CYLINDER BOUNDRY

Explanation: The SPACE parameter of a DD statement defining an indexed sequential data set is incorrect. In the absolute track request (ABSTR), the beginning address subparameter does not specify a cylinder boundary, or it does not specify, in tracks, an integral number of cylinders.

System Action: The job is terminated.

Programmer Response: Probable user error. Correct the absolute track subparameter. List the volume table of contents (VTOC) of each volume that will contain the data set, using the IEHLIST utility program. If the name of this data set appears in any VTOC, remove it using the IEHPROGM utility. Then rerun the job.

Problem Determination: Table I, items 2, 7a, 14, 29.

IEF264I DUPLICATION OF THE DSNAME ELEMENT NOT ALLOWED - SAME AREA REQUESTED TWICE

Explanation: Two DD statements defining the same indexed sequential data set are requesting space for the same area. Both DD statements specify the same element in the DSNAME parameter.

System Action: The job is terminated.

Programmer Response: Probable user error. Eliminate one of the duplicating DD statements. List the volume table of contents (VTOC) of each volume that will contain the data set using the IEHLIST utility program. If the name of the data set appears in any VTOC, remove it using the IEHPROGM utility. Then rerun the job.

Problem Determination: Table I, items 2, 7a, 14, 29.

IEF265I NUMBER OF TRACKS REQUESTED TOO LARGE FOR SPLIT REQUEST

Explanation: In a DD statement, space allocation was requested by a SPLIT parameter. The number of tracks specified in the first subparameter was greater than the number of tracks per cylinder on the device being used.

System Action: The job is terminated.

Programmer Response: Probable user error. Reduce the number of tracks specified in

the first subparameter of the SPLIT request. If you are using a 2314 or 2319 disk, the maximum number of tracks is 20, and for a 2311, the maximum is 10. Rerun the job.

Problem Determination: Table I, items 2, 7a, 29.

IEF266I INVALID JFCB OR MODEL DSCB POINTER

Explanation: During allocation, a JFCB or model DSCB pointer was found to have been zeroed.

System Action: The job is terminated.

Programmer Response: Probable system error. Rerun the job.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF267I INVALID DIRECTORY REQUEST

Explanation: In a DD statement that defined a new partitioned data set, the space requested for the directory was not allocated by the control program for one of the following reasons:

- The directory quantity subparameter of the SPACE or SUBALLOC parameter requested more space than the primary quantity subparameter.
- The space requested by the directory quantity subparameter exceeded the largest space available on the volume
- The SPACE parameter was omitted on the DD statement.

System Action: The job was terminated.

Programmer Response: Probable user error. Reduce the directory quantity subparameter, change the request to specify a different volume, or specify a SPACE parameter. Then submit the job again.

Problem Determination: Table I, items 1, 3, 4, 7a, 25b, 29.

IEF268I ddd FOR ser ccc-ccc

Explanation: This message verifies that volumes have been mounted on the devices named in the reply to message IEF250I and that the devices are ready. ser is the serial number of the volume mounted on device ddd. ccc-ccc are the characteristics of the volume:

P/R-PUB	Permanently resident, public
P/R-PRV	Permanently resident, private
P/R-STR	Permanently resident, storage
RSV-PUB	Reserved, public
RSV-PRV	Reserved, private
RSV-STR	Reserved, storage
NO ATRB	No attribute, meaning that an unrequested volume was mounted on a device specified in response to message IEF250I

Operator Response: None.

IEF269A ddd ADDRESS INVALID OR OFFLINE. REPEAT
REPLY

Explanation: The reply to message IEF250I is invalid. Possible errors are:

- Device address unknown to system.
- Device unable to satisfy required mounts.
- Device offline.
- Device other than 2311, 2314, 2319, or 2321.
- Device holds system residence data set.
- Duplicate device addresses.
- Comma missing between device addresses.
- Comma present at end of reply.
- 2321 cell number non-numeric or greater than 9.
- Too few volumes needed by PRESRES for type of device specified.

Operator Response: Probable user error. Enter the reply again correctly or enter REPLY xx, 'GO'.

Problem Determination: Table I, items 2, 7a, 29. Make sure that the device is defined to the system correctly.

IEF270D I/O ERROR IN PRESRES READ. REPLY GO OR
RE-IPL

Explanation: While reading to determine if PRESRES (permanently resident and reserved), a member of the SYS1.PARMLIB data set, is present, the system detected an uncorrectable input/output error.

Operator Response: If the system can continue without PRESRES, enter REPLY xx, 'GO'. Otherwise, start the system again.

Problem Determination: Table I, items 2, 7a, 11, 29.

IEF271I VOLUME NOT CONSIDERED IN SYSTEM

Explanation: Because an uncorrectable input/output error occurred in using the device identified in the preceding IEA000I message, the job scheduler was unable to read the volume label on the device.

System Action: The job scheduler ignores the volume and continues processing without it.

Operator Response: None.

Problem Determination: Table I, items 2, 7a, 29.

IEF272I - STEP WAS NOT EXECUTED

Explanation: The control program did not execute a job step for one of the following reasons:

- An error appeared in a job control statement.
- A previous step abnormally terminated, but the current step did not specify EVEN or ONLY in the COND parameter of the EXEC statement.

- In systems MFT, a job control statement for a preceding or succeeding step contained an error. An error in a job control statement stops execution of (1) the step containing the error; (2) all preceding steps beginning with the last JOB statement or the step following the last DD * or DD DATA statement; and (3) all succeeding steps until the next JOB statement.
- In systems with MVT, the step was being executed or terminated when system restart was required. To confirm this reason, look for message IEF236I (ALLOCATION FOR jjj sss [pppl]) in the system output listing following SYSOUT data set information or following duplicate allocation messages for the step. (See message IEF421I for more details.)
- In systems with MVT, the job step required input/output devices, volumes, or space that could not be allocated.
- In systems with MVT, the job containing the job step was canceled by the operator before it was selected by the initiator.
- The job required too much queue space in the SYS1.SYSJOBQE data set for initiation. To confirm this, look for messages IEE301I, IEF425I, and IEF450I (with ABEND S422) on the console listing.

System Action: When a job control statement contained an error or where allocation could not be made, the job was terminated.

Where system restart was required, the remainder of the steps in the job were not executed.

Programmer Response: Probable user error. Correct any errors, and submit the job or job step again.

Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF273I INVALID USER LABEL REQUEST

Explanation: In a DD statement, a user label track was requested for a data set. However, the control program was unable to allocate space for the data set for one of the following reasons:

- The DSORG subparameter of the DCB parameter specified PO or IS.
- The SPACE parameter included a directory quantity subparameter.

System Action: The job was terminated.

Programmer Response: Probable user error. In the first case, specify PS or DA in the DSORG subparameter of the DCB parameter. In the second case, delete the directory quantity subparameter of the SPACE parameter. Then resubmit the job.

Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF277I jjj- $\left\{ \begin{array}{l} \text{sss} \\ \text{ppp} \end{array} \right\}$.ddn ALLOC. FOR CONTROL VOLUME

Explanation: A control volume for a cataloged data set was not mounted, making it impossible to locate the data set.

The control volume was required for job jjj and, if applicable, step sss of job jjj or step ppp, which is part of a cataloged procedure called by job jjj. In the message text, ddn is the data definition name in the name field of the DD statement.

Note that any allocation messages following this message but preceding the next mount request will apply only to allocation for this control volume.

Programmer Response: None.

Operator Response: None.

IEF278I ddd NOT MOUNTED, I/O ERROR

Explanation: In response to a MOUNT command, the system attempted to allocate a volume on device ddd. During the allocation attempt, an uncorrectable input/output error occurred when the system was reading the label on the volume.

System Action: The system did not execute the command.

Operator Response: Check that the correct volume was mounted on device ddd and that the label on the volume is a standard label. Correct any errors found in this check. Then enter the MOUNT command again.

Problem Determination: Table I, items 2, 7a, 29.

IEF279I ddd NOW MOUNTED $\left\{ \begin{array}{l} [,SL] \\ [,AL] \end{array} \right\}$

Explanation: In response to a MOUNT command the system allocated device ddd and has finished mount processing.

For tape devices, SL (standard label) or AL (American National standard label) appears in the message text.

Operator Response: None.

IEF280E K ddd,ser,jjj[,sss][,SPACE=prm][,dsn]
IEF280I ddd,dsn

Explanation: K indicates that the volume on device ddd is to be demounted and returned to the library:

- If ser is a 6-digit number, it is the serial number of the volume, which contains labels.
- If ser begins with a slash or L, the volume to be demounted is unlabeled; the number after the slash or L is an internal serial number assigned by the system to an unlabeled volume. If ser begins with L, the number after the L is

of the form xxxyy, where xxx is the data set number and yy is the volume sequence number for the data set.

Job jjj (or step sss of job jjj) has finished using the volume. (In the message text, omission of the step field -- that is, two consecutive commas -- indicates that no stepname was specified on the EXEC statement.)

If a DISPLAY SPACE command is active, the field SPACE=cccc,tttt,aaaa/yyyy,zzzz is specified:

cccc Total number of free cylinders on the volume.

tttt Total number of tracks in addition to the free cylinders.

aaaa Areas or extents dividing the cylinders and tracks.

YYYY Maximum number of contiguous free cylinders of the largest extent within the total remaining space.

zzzz Number of tracks in addition to the free cylinders of the largest extent within the total remaining space.

If an error occurred during the listing of the parameters in the SPACE field, one of the following messages is specified:

- LSPACE-PERMANENT I/O ERROR
- LSPACE-NON-STANDARD OS VOLUME
- LSPACE-NOT A DIRECT ACCESS VOL
- LSPACE-INVALID PARAMETER

If a MONITOR DSNNAME command is active, the first nontemporary data set, dsn, is also specified in the message text. If the data set name causes the message to exceed 72 characters, the data set name will appear as specified on the second line of the message text. Job termination will include the data set name only for non-temporary, tape data sets which are passed but not received.

System Action: The volume is unloaded.

Operator Response: Demount the volume. If it is not externally marked with its serial number, mark the serial number on it. Then return it to the library. If an error message is specified, make sure that the volume is a standard OS direct access volume.

Problem Determination: If an error occurs again during the listing of the parameters in the SPACE field, see Table I, items 2, 7a, 29.

IEF281I ddd NOW OFF-LINE

Explanation: In response to a VARY command, device ddd has been placed offline.

Operator Response: None.

IEF282I ddd NOW UNLOADED

Explanation: In response to an UNLOAD command, the system has unloaded a volume from device ddd.

Operator Response: None.

IEF283I dsn NOT DELETED x
VOL SER NOS= ser [z],ser [z],ser [z],ser [z],ser [z]
VOL SER NOS= ser [z],ser [z],ser [z].

Explanation: A DD statement specified DELETE as the disposition of data set dsn, but the data set was not deleted from the volumes whose serial numbers, ser, are listed in the message text.

If the data set was not deleted from any of its volumes, the volumes listed are all of the volumes on which the data set resides. If the data set was partially deleted, message IEF285I precedes this message in the SYSOUT data set and lists the volumes from which the data set was deleted.

- If ser is a 6-digit number, it is the serial number of the volume, which contains labels.
- If ser begins with a slash or L, the volume is unlabeled; the number after the slash or L is an internal serial number assigned by the system to an unlabeled volume. If ser begins with L, the number after the L is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number for the data set.

Five volume serial numbers are listed per line until all the volumes involved are listed. The last volume serial number is followed by a period.

The 1-digit code, x, explains why the data set was not deleted.

x Explanation

- 1 The expiration date had not occurred. When the data set was created, the expiration date was specified by the EXPDT or RETPD subparameter in the LABEL parameter of the DD statement.
- 4 No device was available for mounting during deletion.
- 5 Too many volumes were specified for deletion. Deletion can be accomplished in several job steps by specifying some of the volume serial numbers in each step.
- 6 Either no volumes were mounted or the mounted volumes could not be demounted to permit the remaining volumes to be mounted.
- 8 The SCRATCH routine returned a code, z, following each volume serial number explaining why the data set was not deleted from that volume. The values of z and their meanings are as follows:
 - 1 - The data set was not found on the volume.
 - 2 - The data set is security protected and the correct password was not given.

- 3 - The expiration date had not occurred. When the data set was created, the expiration date was specified by the EXPDT or RETPD subparameter in the LABEL parameter of the DD statement.
- 4 - An uncorrectable input/output error occurred in deleting the data set from the volume.
- 5 - The system was unable to have the volume mounted for deletion.
- 6 - The system requested that the operator mount the volume, but the operator did not mount it.

- 9 A job was cancelled and was deleted from any of the following queues:
 - Input queues
 - Background Reader Queue
 - Hold Queue
 - Automatic SYSIN Batching (ASB) Queue
 - Output Queues

The data set named dsn was deleted from the volumes whose serial number(s), ser, are listed in the message text.

Programmer Response: Corrective action depends on the value of x and z.

If x is 1, do not attempt to delete the data set.

If x is 4, ensure that the correct volumes can be mounted.

If x is 5, delete the data set in several job steps.

If x is 6, ensure that the correct volumes can be mounted.

If x is 8, and

z is 1, ensure that the correct volumes can be mounted.

z is 2, supply the correct password.

z is 3, do not attempt to delete the data set.

z is 4, resubmit the job.

z is 5, ensure that the correct volumes can be mounted.

z is 6, ensure that the correct volumes can be mounted.

If x is 9, execute the IEHPRGM utility to delete the data set.

Operator Response: If x was 9, report this message to the programmer whose job was cancelled. If x was other than 9, no action is necessary.

Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF284I NO TIOT ENTRY FOUND FOR dname

Explanation: The system cannot process the disposition for the data set described by dname because it could find no entry for dname in the task input/output table (TIOT). Possible the user-specified dname has lost its identity during processing.

System Action: The data set described by dname is bypassed and disposition processing continues with the next data set, if one exists. This message is issued in place of the normal disposition messages for the data set in the SYSOUT listing.

Programmer Response: If the user specified a disposition of KEEP, PASS, or RETAIN, no action is necessary. If the specified disposition was DELETE, CATLG, or UNCATLG, do the following:

If the ddname that appears in the message text is not meaningful, you can determine which DD statement describes the data set that has received incomplete disposition processing by comparing the disposition message with the allocation messages and the job control statements; the position of this message (IEF284I) within the set of disposition messages corresponds to the position of the ddname in the allocation messages and the job control statements. By examining the relationships of these statements you can determine the data set name, the unit type, and the serial number of the volume on which the data set exists. If the data set has a temporary data set name and you know the volume serial number, execute the IEHLIST utility to list the contents of the volume; from that you can determine the data set name. If you cannot determine the volume serial number, call IBM for programming support.

To give the data set the disposition of DELETE, CATLG, or UNCATLG, execute the IEHPROGM utility to perform these functions.

Problem Determination: If you cannot determine enough information about the data set to permit execution of IEHPROGM, see Table I, items 3, 4, 29.

IEF285I dsn dsp
VOL SER NOS= ser,ser,ser,ser,ser
VOL SER NOS= ser,ser,ser.

Explanation: The disposition, dsp, specified for the data set named dsn was accomplished for the volumes whose serial numbers, ser, are listed in the message text.

- If ser is blank, the volume is an unlabeled magnetic tape whose disposition is PASSED. The dsp is one of the following:
PASSED
KEPT
DELETED
CATALOGED
UNCATALOGED
RECATALOGED
SYSOUT
SYSIN
- If ser is a 6-digit number, it is the serial number of the volume, which contains labels.
- If ser begins with a slash or L, the volume is unlabeled; the number after the slash or L is an internal serial number assigned by the system to an unlabeled volume. If ser begins with L, the number after the L is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number for the data set.

Five volume serial numbers are listed per line until all the volumes are listed. The last volume serial number is followed by a period.

Programmer Response: None.

IEF286I ddn - DISP FIELD INCOMPATIBLE WITH DSNAME

Explanation: The disposition specified in the DD statement does not agree with the status of the data set. In the message text, ddn is the data definition name in the name field of the DD statement.

System Action: The job was terminated.

Programmer Response: Probable user error. Correct the disposition parameter on the DD statement. Rerun the job.

Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF287I dsn dsp w
VOL SER NOS= ser,ser,ser,ser,ser
VOL SER NOS= ser,ser,ser.

Explanation: The DISP parameter of a DD statement was CATLG or UNCATLG, but the system could not catalog or uncatalog the data set.

In the message text, dsn is the data set name and dsp is the disposition of the data set. If CATLG was specified in the DD statement, then dsp appears in the message text as NOT CATLGD (not cataloged) or NOT RECTLGD (not recataloged). If UNCATLG was specified in the DD statement, dsp appears in the message text as NOT UNCTLGD (not uncataloged).

- If ser is a 6-digit number, it is the serial number of the volume, which contains labels.
- If ser begins with a slash or L, the volume is unlabeled; the number after the slash or L is an internal serial number assigned by the system to an unlabeled volume. If ser begins with L, the number after the L is of the form xxxyy, where xxx is the data set number and yy is the volume sequence number for the data set.

Five volume serial numbers are listed per line until all volumes are listed. The last volume serial number is followed by a period.

The w explains why the data set was not cataloged or uncataloged:

- w Explanation
- 1 A control volume was required and a utility program must be used to catalog the data set.
 - 2 The data set to be cataloged had previously been cataloged or the data set to be uncataloged could not be located, or no change was made to the volume serial list of a data set with a disposition of CATLG.

- 3 A specified index did not exist.
- 4 The data set could not be cataloged because space was not available on the specified volume.
- 5 Too many volumes were specified for the data set; because of this, not enough main storage was available to perform the specified cataloging.
- 6 The data set to be cataloged in a generation index is improperly named.
- 7 The data set to be cataloged was not opened and no density information was provided on the DD statement (for dual density tape requests only).
- 9 An uncorrectable input/output error occurred in reading or writing the catalog.

Programmer Response: If w is 9, resubmit the job.

If w is not 9, probable user error.

If w is 1, execute the required utility program, making sure the required control volume is mounted.

If w is 2, 3, or 6, correct the DSNNAME parameter of the DD statement, and submit the job step again.

If w is 4, change the volume(s) specified for the data set in the SER subparameter of the VOLUME parameter of the DD statement. Then submit the job step again.

If w is 5, reorganize the data set into several smaller data sets and catalog each one. When using these smaller data sets, concatenate them into one large data set. If this procedure is not practical, try to change the format of the data set so that it occupies fewer volumes and then catalog it.

If w is 7, correct any program errors and submit the job step again. If the data set is to be cataloged, make sure the density information is provided in the DCB subparameter of the DD statement.

Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF288I UNABLE TO OPEN TAPE UNIT

Explanation: The IEFPR (SPRINTER) program was unable to open the input tape data set. This was probably due to an improper or missing data definition name in the name field of the DD statement describing the tape. The data definition name should be PRINTAP.

System Action: The program was terminated. (The return code is 8.)

Programmer Response: Probable user error. Correct the data definition name, and

Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF289I jjj ACCT/SYSTEM ERROR

Explanation: An invalid parameter was detected while building a system message block for job jjj. For example, the address of the system message block was zero, the message length was zero, or the address of the message exceeded the maximum main storage address.

System Action: No message is placed into a system message block. Processing continues.

Operator Response: Report this message to the programmer. If an accounting routine exists in the system, he should check it for errors. Otherwise, he should resubmit the job.

Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF292I RETAINED VOLUMES RELEASED FOR JOB jjj

Explanation: Job jjj has ended, but one or more volumes retained (via message IEF234E) for that job were not reused and need no longer be retained near the computer.

Operator Response: Return to the appropriate library or pool any volumes being retained for job jjj.

IEF294I OUTPUT CLASSES REQ EXCEEDS EIGHT. JOB CANCELED

Explanation: More than eight system output classes were specified in the SYSOUT parameters of the DD statements. However, only eight system output classes can be active in a system at any one time.

System Action: The job was terminated.

Programmer Response: Probable user error. Correct the DD statements so that no more than eight system output classes are specified. Then submit the job again.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF296I MAXIMUM NUMBER OF DEVICES FOR DD EXCEEDED

Explanation: The number of units requested for the job step was insufficient to permit all the required volumes to be mounted. The scheduler attempted to increase the unit count but exceeded the maximum of 59 units per DD statement.

System Action: The job was terminated.

Programmer Response: Probable user error. If possible, change the program so that fewer volumes are required to be mounted at the same time.

Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF

IEF297I LRECL EXCEEDS 32K

Explanation: The IEFPRD (SPRINTER) program determined that the DCB parameter of the input data set specified a logical record length (LRECL) of more than 32,756 bytes. The DCB parameter of the data set also specified a record format (RECFM) of VS or VBS.

System Action: The job was terminated.

Programmer Response: Probable user error. Change the LRECL subparameter to specify less than 32,756 bytes. Then execute the job step again.

Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF298I jjj SYSOUT=sclass

Explanation: The system is displaying the classnames of the system output classes, other than the message class, which contain data for job jjj. In the message text, sclass is the listing of the classnames.

Note, however, that if the system restart occurs and the job is not scheduled for step restart or checkpoint restart, then the system output classes indicated in the message text may not be relied on to contain data.

Operator Response: Follow installation procedures in obtaining data from the system output classes indicated in the message text.

Note: This message appears as the first line of the system output for the message class of job jjj unless the message class is being written directly to the output device; in that case, this message may appear as the last line of the system output.

IEF300I ddd WTR CLOSED -- QMGR I/O ERROR

Explanation: An uncorrectable input/output error occurred while the queue manager was using the SYS1.SYSJOBQE data set, either to update an output queue or to read records for a SYSOUT writer. The error makes the contents of the output queue unpredictable. Because the SYSOUT writer receives its data from the output queue, the writer closed its output data set on device ddd and stopped itself.

Operator Response: Enter another START WTR command.

Problem Determination: Table I, items 1, 3, 4, 7a, 8c, 29.

IEF301I ddd WTR CLOSED

Explanation: In response to a STOP command, the SYSOUT writer closed its output data set on device ddd and stopped itself.

Operator Response: None.

IEF302I SYSOUT WRITER ddd, FAILED ON JOB jjj CLASS x CONTINUATION FOLLOWS.

Explanation: In response to a START WTR command, the system started the SYSOUT writer for class name x. The writer opened the SYSOUT data set in which this message appears.

The data written in this data set was being written in a SYSOUT data set that was closed because of an uncorrectable input/output error associated with its device, ddd. When the former data set was closed, message IEF303I was written on the console. Some of the data written before the error may be duplicated in this new data set.

In the message text, jjj is the name of the job that produced the SYSOUT data set.

Programmer Response: None.

IEF303I ddd WTR CLOSED -- OUTPUT ERROR

Explanation: The SYSOUT writer closed its SYSOUT data set on device ddd and stopped itself, because of an uncorrectable input/output error while writing the data set. The data that was being written will be written on the device specified in the next START WTR command that also specifies the data's class name.

Operator Response: Enter another START WTR command, specifying the class name of the data that was being written.

Problem Determination: Table I, items 2, 13, 29.

IEF304I jjj, DSNAME=dsn,
IEF304I DDNAME=ddn, VOLUME=SER=ser

Explanation: One or more of the specified volumes on which the data set named dsn resides was not available when an attempt was made to write the data set. In the message text, jjj is the name of the job being executed, ddn is the name of the DD statement specifying the data set, and ser is the serial number(s) of the volume(s) on which the data set resides.

Programmer Response: None

Problem Determination: Table I, items 25b, 29.

IEF307I ddd WTR CLOSED-OUTPUT DCB FAILED TO OPEN

Explanation: While processing a START WTR command, the system was unsuccessful in opening the system output data set. In the message text, ddd is the unit address of the device assigned to the writer.

System Action: The SYSOUT Writer will terminate itself.

Operator Response: Restart the writer.

Problem Determination: Table I, items 2, 7a, 29.

IEF308I jjj - NOT ENOUGH CORE FOR PROCESSING

Explanation: When trying to initiate job jjj, the scheduler could not obtain enough main storage for its work area.

System Action: The job was terminated.

Operator Response: Redefine the partition or region size to increase the amount of main storage available to the scheduler.

IEF309I jjj - QUEUE MGR. READ ERROR ON SIOT

Explanation: An error was detected by the queue manager while reading a step input/output table (SIOT) from the SYS1.SYSJOBQE data set for job jjj.

System Action: The job was terminated.

Problem Determination: Table I, items 1, 3, 4, 7a, 8c, 29.

IEF310I jjj - QUEUE MGR. READ ERROR ON VOLT

Explanation: An error was detected by the queue manager while reading a volume table (VOLT) from the SYS1.SYSJOBQE data set for job jjj.

System Action: The job was terminated.

Problem Determination: Table I, items 1, 3, 4, 7a, 8c, 29.

IEF311I NOP - SETPRT PARAMETER LIST INVALID

Explanation: When the SYSOUT writer issued the SETPRT macro to load the UCS/FCB buffer(s) on a 3211 printer for the input data set, no operation was performed because the SETPRT parameter list was not valid.

System Action: The SYSOUT Writer stopped processing the input data set and will go to process other input data sets.

Programmer Response: Make sure that the UCS/FCB parameters are correctly specified on the DD statement.

Problem Determination: Table I, items 1, 2, 3, 15, 29.

IEF312I INVALID BLKSIZE SPECIFIED FOR PROCEDURE LIBRARY

Explanation: The blocksize specified for the procedure library was not a multiple of 80.

System Action: The SYSIN reader was unable to read the procedure library and terminated the job.

In systems with MFT and MVT, since the job scheduler is invoked by means of procedures existing in the procedure library, the systems are rendered unusable.

Operator Response: Report this message to the system programmer. He should change the blocksize of the procedure library to a multiple of 80.

IEF314I SYSIO

Explanation: While a SYSOUT writer was printing or punching a SYSOUT data set, one of the following was detected:

- An uncorrectable input/output error in reading the input data set.
- For an input data set containing blocked variable format records, a logical record that was too short; that is, less than 5 characters for blocked variable format with control characters or less than 4 characters for blocked variable format with no control characters.
- For an input data set containing fixed or fixed blocked records, the BLKSIZE or LRECL of the data is not the same as the BLKSIZE or LRECL which describe the attributes of the data set.

System Action: The SYSOUT writer stopped processing the input data set and will go on to process other input data sets.

Programmer Response: Probable user error. Make sure that the input data set does not have a blocked variable format record that is too short. Then recreate the data set by again executing the job step that produced it.

Problem Determination: Table I, items 1, 3, 4, 25b, 29 of the volume containing the SYSOUT data set,

IEF315I VOLUME COUNT INCONSISTENT WITH UNIT COUNT

Explanation: One of the following conditions has occurred:

- The number of devices specified in the UNIT= parameter of the DD statement is greater than the number of volumes available to be mounted, or is greater than the number of volume serial numbers specified in the VOL= parameter.
- The starting volume specified in the volume sequence number subparameter of the VOL= parameter of the DD statement is not the first volume in the series of volumes; therefore the number of volumes to be mounted is less than the number of devices specified in the UNIT= parameter.

System Action: The job is terminated.

Programmer Response: Probable user error. Correct the erroneous UNIT= or VOL= parameter and rerun the job.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF316I CCBAD

Explanation: While a SYSOUT writer was printing or punching a SYSOUT data set, an invalid machine control character was detected in the input data set. The SYSOUT writer could not translate the character into an ASA character.

System Action: The SYSOUT writer stopped processing the input data set and will go on to process other input data sets.

Programmer Response: Probable user error. Make sure that the input data set contains valid control characters.

Problem Determination: Table I, items 1, 3, 4, 15, 29.

IEF317I TEMPORARY FAILURE OF OPEN FOR JOB jjj sss

Explanation: An error occurred during execution of an OPEN macro instruction for the JOBLIB, FETCHLIB, or STEPLIB data set for the step named sss of the job named jjj.

System Action: The job is terminated.

Operator Response: Rerun the job.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF320I STORAGE NOT AVAILABLE

Explanation: The IEFPRP (SPRINTER) program determined that not enough main storage space was available for the logical record of the data set.

System Action: The data set is skipped. Processing continues.

Programmer Response: Make sure the space allocation described in the IEFPRP program is sufficient. Then execute the job step again.

IEF321I INVALID SEGMENT

Explanation: In an input data set, a variable record extension (VRE) segment descriptor word is incorrect. For example, a beginning segment occurred before the end segment of the last logical record.

System Action: The writer closed its output data set and stopped itself.

Programmer Response: Probable user error. Make sure the segment descriptor words in the input data set are being created correctly. Then execute the job step again.

Problem Determination: Table I, items 1, 3, 15, 29.

IEF322I NO FCB IMAGE-ID SPECIFIED FOR VERIFICATION

Explanation: In response to a user request for verification of the FCB image on a 3211 printer, no image-id had been specified with the verification request.

System Action: The SYSOUT Writer ignores the request for verification and continues with remaining requests.

Programmer Response: VERIFY should only be specified with the FCB image-ID to be verified. Make sure the FCB image-ID is

correctly included following the FCB=keywords parameter on the DD statement.

Problem Determination: Table I, items 1, 2, 3, 15, 29.

IEF323I NO FCB IMAGE-ID SPECIFIED FOR ALIGNMENT

Explanation: In response to a user request for alignment of the FCB forms on a 3211 Printer, no image-ID had been specified with the alignment request.

System Action: The SYSOUT Writer ignores the request for alignment and continues with remaining requests.

Programmer Response: Align should only be specified with the FCB image-ID to be aligned. Make sure the FCB image-ID is correctly included following the FCB=keyword parameter on the DD statement. If the problem recurs do the following

Problem Determination: Table I, items 1, 2, 3, 15, 29.

IEF324I NO IMAGE-ID SPECIFIED FOR VERIFICATION

Explanation: In response to a user request for verification of the UCS image on a 3211 Printer, no image-ID had been specified with the verification request.

System Action: The SYSOUT Writer ignore the request for verification and continues with remaining requests.

Programmer Response: VERIFY should only be specified with the UCS-ID to be verified. Make sure the UCS image-ID is correctly included following the UCS=keyword parameter on the DD statement.

Problem Determination: Table I, items 1, 2, 3, 15, 29.

IEF325I OPERATOR CANCELLED LOAD. UCS/FCB IMAGE-ID/TRAIN NOT AVAILABLE.

Explanation: When the SYSOUT Writer issued the SETPRT macro to load the UCS/FCB buffer(s) on a 3211 printer for the input data set, either the image could not be found in the image library (SVCLIB) or the requested train was not available. Therefore, the operator cancelled the load.

System Action: The SYSOUT Writer stopped processing the input data set and will go on to process other input data sets.

Programmer Response: Load the required image into the system library or respecify the image-ID on the DD card to use an image and train available at the installation.

Problem Determination: Table I, items 1, 2, 3, 15, 29. Execute System Utility IEHLIST, LISTPDS DSNAME=image library on volume which contains the image library; save output.

IEF326I PERMANENT I/O ERROR ON BLDL LOCATE ON UCS/FCB IMAGE IN IMAGE LIBRARY

Explanation: When the SYSOUT Writer issues the SETPRT macro to load the UCS/FCB buffer(s) on a 3211 printer for the input data set, a permanent I/O error was detected when the BLDL macro instruction was issued by data management to locate the character set image in the image library.

System Action: The SYSOUT Writer stopped processing the input data set and will go on to process other input data sets.

Operator Response: Enter another START WTR command specifying the class name of the data that was being written.

Problem Determination: Table I, items 2, 29. Save associated output from WTR. Execute system utility IEHLIST, LISTPDS, DSNAME=image library on volume which contains the image library; save output.

IEF327I WTR ddd CLOSED. PERMANENT I/O ERROR WHILE LOADING UCS/FCB BUFFER

Explanation: When the SYSOUT Writer issued the SETPRT macro to load the UCS/fcb buffer(s) on a 3211 printer for the input data set, a permanent I/O error persisted after two attempts were made to load the associated buffer.

System Action: The SYSOUT Writer closed its SYSOUT data set on device ddd and stopped itself.

Operator Response: Enter another START WTR command, specifying the class name of the data that was being written.

Problem Determination: Table I, items 2, 29. Save associated output from WTR.

IEF328I WTR ddd CLOSED. PERMANENT I/O ERROR ON UCS/FCB IMAGE VERIFICATION.

Explanation: When the SYSOUT Writer issued the SETPRT macro to load the UCS/FCB buffer(s) on a 3211 printer for the input data set, a permanent I/O error was detected when an attempt was made to display the character set image on the printer for visual verification.

System Action: The SYSOUT Writer closed its SYSOUT data set on device ddd and stopped itself.

Operator Response: Enter another START WTR command, specifying the class name of the data that was being written.

Problem Determination: Table I, items 2, 29.

IEF329I WTR ddd CLOSED. OPERATOR CANCELLED LOAD. INCORRECT UCS/FCB IMAGE DISPLAYED FOR VERIFICATION

Explanation: When the SYSOUT Writer issued the SETPRT macro i to load the

UCS/FCB buffer(s) on 3211 printer for the input data set, the operator cancelled the load because an incorrect image was displayed on the printer for visual verification.

System Action: The SYSOUT Writer closed its SYSOUT data set on device ddd and stopped itself.

Programmer Response: Insure that the requested train contains the graphics necessary to print the image-ID specified and that the image-ID and desired verification image are correctly defined.

Problem Determination: Table I, items 1, 2, 3, 15, 29.

IEF330I INTERPRETER ABENDED DURING JOB jjj COMPLETION CODE hhh

Explanation: The interpreter invoked by the automatic SYSIN batching reader abnormally terminated with a completion code of hhh, in hexadecimal. The termination occurred during interpretation of the job control language for job jjj.

System Action: Job jjj and other remaining jobs in its batch were purged and the automatic SYSIN batching reader was terminated.

Operator Response: Enter a START command to begin processing at job jjj.

Problem Determination: Table I, items 1, 2, 3, 15, 7a, 29.

IEF331I WTR ddd CLOSED. SETPRT NOP-UNCORRECTABLE OUTPUT ERROR ON PREVIOUS OPERATION

Explanation: When the SYSOUT Writer issued the SETPRT macro to load the UCS/FCB buffer(s) on a 3211 printer for the input data set, no operation was performed due to an uncorrectable error in a previously initiated output operation.

System Action: The SYSOUT Writer closes its SYSOUT data set on device ddd because of the uncorrectable output error, and stops itself.

Operator Response: Follow action specified for those companion messages which describe the nature of the uncorrectable error. Enter another START WTR command, specifying the class name of the data that was being written.

Problem Determination: Table I, items 2, 29. Save associated output from WTR.

IEF334I QUEUE DEVICE I/O ERROR PROCESSING FOR JOB jjj

Explanation: An uncorrectable input/output error occurred while the automatic SYSIN batching reader was entering the job control language for job jjj into the SYS1.SYSJOBQE data set.

System Action: Job jjj was not placed in the input work queue, all preceding jobs were interpreted and the input stream was stopped at this point.

Operator Response: Enter a START command to begin processing at job jjj.

Problem Determination: Table I, items 1, 2, 4, 7a, 8b, 29.

IEF335I INSUFFICIENT QUEUE SPACE FOR JOB jjj

Explanation: Insufficient space was allocated to the automatic SYSIN batching reader for entering the job control language for job jjj into the SYS1.SYSJOBQE data set.

System Action: Job jjj was purged from the SYS1.SYSJOBQE data set, all preceding jobs were interpreted, and the input stream was stopped at this point.

Operator Response: Probable user error. Inform the programmer responsible for the system either to break up the job into smaller jobs or to increase the space allocation in the automatic SYSIN batching reader procedure.

Problem Determination: Table I, items 1, 2, 3, 7a, 29.

IEF336I QUEUE FULL AND WAITING

Explanation: During interpretation of job control language, the interpreter invoked by the automatic SYSIN batching reader found that no more space was available on the job queue.

System Action: The job being interpreted was saved and the interpreter region was freed. As soon as space becomes available on the job queue, the interpreter will be automatically restarted.

Operator Response: None.

IEF370I INSUFFICIENT MAIN STORAGE FOR MOUNT PROCESSING

Explanation: There is not enough main storage available to allocate volumes to a job step whose DD statements specify old data sets that reside on unmounted volumes.

System Action: The job step is terminated.

Programmer Response: Increase the value specified in the REGION parameter of the JOB statement, or reduce the number of DD statements that specify old data sets residing on unmounted direct access volumes.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF372I ddn VOLUME FIELD CONTAINS REFERENCE TO A DD NOT PREVIOUSLY RESOLVED

Explanation: In a DD statement (ddn in the message text), the VOLUME parameter contains a reference to a DD statement in a previous step. However, the previous step, which contains the referenced DD statement, was not executed because the condition test specified by the COND parameter of that step was satisfied.

System Action: The job was terminated.

Programmer Response: Probable user error. In the EXEC statement of the step containing DD statement ddn, include the same condition test specified in the EXEC statement of the step being referenced by

Problem Determination: Table I, items 2, 4, 7a, 29.

IEF373I STEP/sss START/yyddd.hhmm

Explanation: At step termination for SMF, this message indicates the time and date that step sss was started. In the message text, yy specifies the year, ddd specifies the day of the year (001-366), hh specifies the hour (00-23), and mm specifies the minute (00-59).

Programmer Response: None.

IEF374I STEP/sss STOP/yyddd.hhmm CPU xxxMIN xx.xxSEC MAIN xxxK LCS xxxK

Explanation: At step termination for SMF, this message indicates the time and date that step sss was terminated, the step program CPU time, and the total storage used.

In the message text, yy specifies the year, ddd specifies the day of the year (001-366), hh specifies the hour (00-23), and mm specifies the minute (00-59). For the CPU time, xxxMIN specifies the minute and xx.xxSEC specifies the second (in seconds and hundredths of a second). Also, the MAIN xxxK specifies the processor storage (hierarchy 0) and the LCS xxxK specifies the IBM 2361 core storage (hierarchy 1).

Programmer Response: None.

IEF375I JOB/jjj START/yyddd.hhmm

Explanation: At job termination for SMF, this message indicates the time and date that job jjj was started.

In the message text, yy specifies the year, ddd specifies the day of the year (001-366), hh specifies the hour (00-23), and mm specifies the minute (00-59).

Programmer Response: None.

IEF376I JOB/jjj STOP/yyddd.hhmm CPU xxxxMIN
xx.xxSEC

Explanation: At job termination for SMF, this message indicates the time and date that job jjj was terminated and the job problem program CPU time.

In the message text, yy specifies the year, ddd specifies the day of the year (001-366), hh specifies the hour (00-23), and mm specifies the minute (00-59). For the CPU time, xxxxMIN specifies the minute and xx.xxSEC specifies the second (in seconds and hundredths of a second).

Programmer Response: None.

IEF382A ddd WTR WAIT DUE TO PAUSE

Explanation: In response to a MODIFY command with a PAUSE=DATASET parameter, the SYSOUT writer is waiting before starting to write a SYSOUT data set on device ddd.

The previous data set or messages are completed; that is, all lines or cards have been printed or punched and completely checked.

Operator Response: Perform any desired actions on device ddd; then enter REPLY xx,'y' where y is any single character. This reply causes the writer to begin processing the data set.

Explanation: The SYSOUT writer is waiting for the operator to change the forms on device ddd to form number nnn. This message appears only when a data set to be printed or punched needs forms different from the forms used for the data set just printed by the SYSOUT writer.

The previous data set or messages are completed; that is, all lines have been printed or punched and completely checked.

Operator Response: Change the forms to form number nnn; then enter REPLY xx,'y' where y is any single character. This reply causes the writer to begin processing the data set.

IEF384I dsn NOT DELETED w
VOL SER NOS= ser x,ser x,ser x,ser x,ser x.

Explanation: A DD statement specified that a data set should be written directly in intermediate direct access storage and printed or punched later by a SYSOUT writer. After the data set is printed or punched, it is supposed to be deleted from intermediate storage. This message indicates that the data set, which is named dsn, was not deleted from the intermediate storage volumes whose serial numbers, ser, are listed in the message text.

Up to five volume serial numbers are listed. The last serial number is followed by a period.

The w in the message text indicates why the data set could not be deleted from all the volumes listed.

w Explanation

- 4 No device was available for mounting the volumes for deletion.
- 8 An unusual condition was detected for one or more of the listed volumes. This condition is identified in the codes, x, following each volume serial number.

x Explanation

- 0 Deletion was not attempted.
- 1 The data set was not found on the volume.
- 2 The data set is security protected and the correct password was not given.
- 3 The expiration date had not occurred. When the data set was created, the expiration date was specified by the EXPDT or RETPD subparameter in the LABEL parameter of the DD statement.
- 4 An uncorrectable input/output error occurred in deleting the data set from the volume.
- 5 The system was unable to have the volume mounted for deletion.
- 6 The system requested that the operator mount the volume, but the operator did not mount it.

Operator Response: If w = 4 or is w = 8 and x = 0-3 or 5-6, no action is necessary.

Problem Determination: If w = 8 and x = 4, see Table I, items 25a, 29.

IEF385I ddd DSO OPEN FAILURE OUTCLASS=s jjj

Explanation: While writing output separators and/or system messages directly to device ddd for job jjj, the system was unsuccessful in opening the direct system output (DSO) data set.

In the message text, ddd is the unit address of the device assigned to the writer, and s is the system output class being processed.

System Action: If a job step was being initiated when the error occurred, then the job will be terminated. If the system output class is the same as the message class for the job, then the system messages are enqueued to be written by a system output writer.

The DSO writer associated with device ddd is stopped.

Operator Response: If any output was enqueued, start a system output writer for the job, if one is not already started.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF386I ddd DSO OUTPUT I/O ERROR OUTCLASS=s jjj

Explanation: While writing output separators and/or system messages directly to device ddd for job jjj, a permanent input/output error was encountered.

In the message text, ddd is the unit address of the device assigned to the direct system output (DSO) writer, and s is the system output class being processed.

System Action: If a job step was being initiated when the error occurred, then the job will be terminated. If the system output class is the same as the message class for the job, then the system messages are enqueued to be written by a system output writer.

The DSO writer associated with device ddd is stopped.

Operator Response: If any output was enqueued, start a system output writer for the job, if one is not already started.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF387I DIRECT SYSOUT=sclass

Explanation: The system is displaying the classnames of the system output classes, including the message class, that are qualified to use the facilities of the direct system output (DSO) writer currently available.

In the message text, sclass is a listing of the classnames.

System Action: The data is written directly to the device assigned to the DSO writer instead of being spooled on disk and later written by the system output writer.

Programmer Response: None.

IEF388I jjj.sss.ddn WAITING FOR DEVICES

Explanation: The system was unable to satisfy the device request(s) by the data set named ddn for the step named sss of the job named jjj.

System Action: The initiator for step sss of job jjj will enter a wait state until the requested devices have been unallocated by terminating tasks and are available for use. Other jobs cannot go through allocation until this wait has terminated and current allocation processing has completed.

Operator Response: If desired, enter a CANCEL command to terminate the job named jjj.

In systems with MFT, a reply of CANCEL must be entered if no other scheduler size partition is available for termination services.

IEF389I jjj.sss.ddn SEP REQUEST IGNORED

Explanation: In a DD statement, channel or unit separation was requested by the SEP parameter or the SEP subparameter of the UNIT parameter. However, the system was unable to satisfy the request.

Separation was requested in the DD statement whose name field contains ddn for the step named sss of the job named jjj.

System Action: The system will ignore the separation request and attempt reallocation.

Operator Response: None.

IEF390I DSO (s,j,devtyp) NEEDED TO RESTART jjj[Pn]

Explanation: During execution of a checkpoint restart for job jjj, the system found that a direct system output (DSO) writer was required to restart the job.

The message text, s is the system output class, j is the job class, and devtyp is the device type associated with the DSO writer. In systems with MFT, Pn is the partition in which the DSO writer should be started.

System Action: The system will place the job on the hold queue.

Operator Response: Start the DSO writer required. In systems with MFT, the writer should be started in the indicated partition. Then, release the job from the hold queue.

IEF391I ddd DSO CLOSED

Explanation: In response to a STOP command or an input/output failure, the direct system output (DSO) writer closed its output data set and stopped itself. In the message text, ddd is the unit address of the device assigned to the writer.

Operator Response: None.

IEF392I ddd DSO JOBCLASS=jclass,OUTCLASS=s

Explanation: In response to a MODIFY command, the system output class and job classes associated with the direct system output (DSO) writer were changed.

In the message text, ddd is the unit address of the device assigned to the writer, jclass is a listing of the new job classes, and s is the new system output class.

Operator Response: None.

IEF393I ddd DSO COMMAND OR PROCEDURE ERROR

Explanation: While processing a START or MODIFY command, the direct system output (DSO) writer detected an error in the parameter field of the command. For a

START command, the error may have been a faulty parameter field in the procedure or a missing IEFORDER DD statement.

In the message text, ddd is the unit address of the device assigned to the writer.

System Action: If a START command was being processed, the DSO writer will terminate itself. If a MODIFY command was being processed, the command will not be executed.

Operator Response: Probable user error. Enter the command again correctly.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 26d, 29.

IEF394I ddd DSO PARTITION ERROR

Explanation: In systems with MFT, a START DSO command was issued for a partition that was not a problem program partition. In the message text, ddd is the unit address of the device assigned to the direct system output (DSO) writer.

System Action: The DSO writer will terminate itself.

Operator Response: Probable user error. Reissue the START DSO command for a problem program partition.

Problem Determination: Table I, items 2, 7a, 29.

IEF395I ddd DSO JOBQ I/O ERROR MSGCLASS=s jjj

Explanation: While writing the system messages directly to device ddd for job jjj, a read error on the SYS1.SYSJOBQE data set was encountered.

In the message text, ddd is the unit address of the device assigned to the direct system output (DSO) writer, and s is the message class being processed.

System Action: If a job step was being initiated when the error occurred, then the initiator is abnormally terminated with a system completion code of 0B0. In systems with MFT, all DSO writers in the partition are stopped.

Operator Response: None.

Problem Determination: Table I, items 1, 2, 4, 7a, 8b, 29.

IEF396I READER PARTITION ERROR

Explanation: In systems with MFT, two readers were started in the same partition.

System Action: The second reader will terminate itself.

Operator Response: None.

IEF397I ddd DSO END OF OUTPUT RECORD NOT WRITTEN

Explanation: While processing a STOP command, the direct system output (DSO) writer was unable to write the final record indicating end of output. In the message text, ddd is the unit address of the tape device assigned to the writer.

System Action: The DSO writer will terminate itself without writing the end of output record.

Operator Response: Label the tape externally to indicate that the end of output record is missing. (Although the IEFPRT (SPRINTER) program may be used to print the system output from this tape, the program's action upon reaching the end of the valid output is unpredictable.)

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF398I ddd DSO OPEN UNSUCCESSFUL

Explanation: While processing a START DSO command, the system was unsuccessful in opening the direct system output (DSO) data set.

In the message text, ddd is the unit address of the device assigned to the writer.

System Action: The DSO writer will terminate itself.

Operator Response: Enter the command again. There may be a problem with the particular reel of tape.

Problem Determination: Table I, items 2, 7a, 29.

IEF399I DSO ABEND EXIT PROCEDURES COMPLETED

Explanation: While processing a STOP or MODIFY command, the direct system output (DSO) writer encountered an abnormal condition.

System Action: The DSO writer will terminate itself, and the device assigned to the writer will be de-allocated. If the device was a tape device, the final record indicating end of output may not have been written.

Operator Response: If the device was a tape device, label the tape externally to indicate that the end of output record may be missing. (Although the IEFPRT (SPRINTER) program may be used to print the system output from this tape, if the end of output record is missing, the program's action upon reaching the end of the valid output may be unpredictable.)

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 11, 29.

IEF401W I/O ERROR SCHEDULER WORK AREA

Explanation: While starting the system, an uncorrectable input/output error occurred when the system was writing in the SYS1.SYSJOBQE data set.

System Action: System processing was stopped.

Operator Response: Start the system again.

Problem Determination: Table I, items 2, 7a, 8a, 29.

IEF403I jjj STARTED [TIME=hh.mm.ss]

Explanation: In response to a DISPLAY command with JOBNAMES in its operand, this message indicates that the system has begun processing the job named jjj. This message is also issued if job jjj has restarted in systems with MVT. If T is also specified in the operand of the DISPLAY command, then the time of day appears, where hh specifies the hour (00-23), mm specifies the minute (00-59), and ss specifies the second (00-59).

Operator Response: None. However, if the job should not be executed at this time, issue a CANCEL command and the job will be bypassed.

IEF404I jjj ENDED [TIME=hh.mm.ss]

Explanation: In response to a DISPLAY command with JOBNAMES in its operand, this message indicates that job jjj has terminated.

Note: If job jjj has been cancelled by the operator and not by the system, this message will not be issued.

If T is also specified in the operand of the DISPLAY command, then the time of day appears, where hh specifies the hour (00-23), mm specifies the minute (00-59), and ss specifies the second (00-59).

Operator Response: None.

IEF406I ddd - READER CANNOT BE OPENED

Explanation: The data control block for the SYSIN data set on device ddd could not be opened. Probably, the IEFRDER DD statement in the reader procedure was specified incorrectly.

Operator Response: Probable user error. Report this message to the programmer responsible for the system. He should correct any errors on the IEFRDER DD statement in the reader procedure, and then restart the reader procedure.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF407I ddd - PROCLIB CANNOT BE OPENED FOR READER

Explanation: The data control block for the SYS1.PROCLIB data set on device ddd

could not be opened. Probably, the IEFPDSI DD statement in the reader procedure was specified incorrectly.

Operator Response: Report this message to the programmer responsible for the system. He should correct any errors on the IEFPDSI DD statement in the reader procedure, and then restart the reader procedure.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF408I ddd - jjj JOB NOT FOUND FOR READER

Explanation: In a START command for reader ddd, job jjj was specified as a jobname parameter value. However, job jjj was not found in the input stream.

Operator Response: Probable user error. Make sure the jobname is spelled correctly in the START command, and make sure the job has been placed in the input stream. Then reenter the command.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF409I jjj,CLASS=cc,PRTY=pp,POS=nn,qqq

Explanation: In response to a DISPLAY command with the job name jjj in its operand, the system is displaying the following information about the job:

cc The job class assigned to the job if it is on an input queue or the output class assigned to the job if it is on a SYSOUT queue.

pp The priority of the job queue entry.

nn The position of the job on its queue.

qqqq The name of the queue. This can be either JOBQ x (where x is the class identifier of an input queue), BRDRQ, HOLDQ, ASBQ, or SOUTQ x (where x is the output class identifier of an output queue).

System Action: None.

Operator Response: None.

IEF410I INCORRECT PARTITION FOR START COMMAND

Explanation: A START command was entered for a procedure in a partition that was defined as a Reader or Writer partition, but the procedure was not a Reader or Writer.

System Action: The job is terminated.

Operator Response: Probable user error. Enter the command again, specifying a problem program partition.

Problem Determination: Table I, items 2, 26d, 29. Enter DEFINE LIST to obtain a listing of partitions that are currently active.

IEF412I SPOOL DEVICE I/O ERROR WRITING FOR JOB jjj

Explanation: While a SYSIN reader was writing a data set from the input stream on a direct access device an uncorrectable input/output error was encountered. The data set being moved was specified by a DD * or DD DATA statement.

System Action: Job jjj, which contains the input stream data set, was terminated. The job scheduler also wrote message IEF608I in the SYSOUT data set to inform the programmer.

Operator Response: Reenter job jjj through the input stream.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF413I QUEUE DEVICE I/O ERROR INTERPRETING JOB jjj

Explanation: An uncorrectable input/output error occurred while a SYSIN reader was writing in the SYS1.SYSJOBQE data set; the reader was queuing job jjj in the input work queue.

System Action: Job jjj was removed from the input work queue and was terminated.

Operator Response: Reenter job jjj through the input stream.

Problem Determination: Table I, items 1, 2, 4, 7a, 8b, 29.

IEF414I QUEUE DEVICE I/O ERROR ENQUEUEING JOB jjj

Explanation: An uncorrectable input/output error occurred while a SYSIN reader was writing in the SYS1.SYSJOBQE data set; the reader was queuing job jjj in the input work queue.

System Action: Job jjj was removed from the input work queue and was terminated.

Operator Response: Reenter job jjj through the input stream.

Problem Determination: Table I, items 1, 2, 4, 7a, 8b, 29.

IEF415I I/O ERROR ON ddd PURGING JOB jjj

Explanation: An uncorrectable input/output error occurred while the job scheduler was purging job jjj from the SYS1.SYSJOBQE data set, which is on device ddd.

This message can occur only during the job removal after message IEF413I or IEF414I.

System Action: Job removal on device ddd was stopped; however, removal continued on other devices.

Operator Response: Respond as indicated for message IEF413I or IEF414I. Notify the system programmer at the installation of this message.

Problem Determination: Table I, items 1, 2, 4, 7a, 8b, 29.

IEF416I SPOOL FULL AND WAITING jjj

Explanation: A SYSIN reader placing an input stream data set for job jjj on a direct access device found that no more space was available on the device. The data set was defined by a DD * or DD DATA statement.

System Action: The timer was set for 1 minute; at the end of the minute, the reader will determine if space had in the meantime become available on the direct access device. If space had become available, the reader will resume placing the data set on the direct access device. If space had not become available, the timer will again be set for 1 minute. Thus, this message will be issued once a minute until space becomes available.

Operator Response: If this message is repeated for too long a time, enter a STOP RDR command.

If space has become available, the system will continue processing and close the reader after job jjj has been read. In this case, reenter the JOB card for the job following jjj before the reader is started again, or the job following jjj will be flushed.

If space has not become available, the system will flush the input data for job jjj and stop the reader. In this case, reenter job jjj and the JOB card for the job following jjj.

IEF417I PROCLIB DEVICE I/O ERROR READING FOR JOB jjj

Explanation: During the processing of a request for a cataloged procedure, an input/output error occurred in reading or searching the SYS1.PROCLIB data set.

System Action: Job jjj, which was being processed, was terminated. If the error occurred in reading the procedure library, the job scheduler also wrote message IEF603I in the SYSOUT data set; if the error occurred in searching the procedure library, the job scheduler also wrote message IEF614I in the SYSOUT data set.

Operator Response: Reenter job jjj through the input stream.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF418I SPOOL DEVICE I/O ERROR OPENING FOR JOB jjj

Explanation: An uncorrectable input/output error occurred while the system was opening the data control block (DCB) that the job scheduler had created for a data set in the input stream. (The data set was defined by a DD * or DD DATA statement.)

System Action: Job jjj, which contained the input stream data set, was terminated.

Operator Response: Reenter job jjj through the input stream. If this message appears a second time for the same job notify the programmer that job jjj could not be executed.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF419I INPUT DEVICE I/O ERROR READING JOB jjj

Explanation: An uncorrectable input/output error occurred while a SYSIN reader was reading the input stream.

System Action: The SYSIN reader closed the input stream and stopped itself. The interpreter terminated the job named jjj, which was being read when the error occurred. The job scheduler also wrote message IEF602I in the SYSOUT data set to inform the programmer.

Operator Response: Enter a START RDR command and reenter job jjj through the input stream. If this message appears a second time for the same job, tell the programmer the name of the job; his action is needed to correct the card image being read when the error occurred. If the

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IEF420I RDR=jjj

Explanation: The job named jjj was being processed by the reader/interpreter when a system failure occurred or the power was turned off. (This message is issued during the subsequent system restart.)

Operator Response: Enter the job named jjj through the input stream.

IEF421I INIT=jjj.sss.ppp (x) cond

Explanation: When a system failure occurred or the power was turned off, procedure step ppp of step sss of job jjj was being initiated (x=1), was being executed (x=2), or was being terminated (x=3). (This message is issued during the subsequent system restart.)

If x=1 and cond=CANCELLED, initiation could not be resumed and the job was canceled.

If x=2 and cond=NO RESTART, either the step requested restart and the operator denied the request or the step did not request restart. Restart will not be performed.

If x=2 and cond=RESTART, the step requested restart. The operator authorized the restart and the restart will be performed.

If x=3 and cond=CANCELLED, the job failed before system failure occurred.

If x=3 and cond=CONTINUING, the step was not the last step. Termination was completed normally and the next step will be initiated normally.

If x=3 and cond=ENDED, the step was the last step. Step termination and job termination have completed normally.

Operator Response: Enter START WTR commands for the installation-defined classes. If cond=RESTART or CONTINUING, start an initiator for the job's input class.

If x=1, the following will be written:

- SYSOUT data sets for all steps preceding sss (or ppp).
- Job control statements and system messages for steps preceding sss (or ppp).
- Job control statements, but not messages, for step sss (or ppp) and all subsequent steps.

If x=2 and cond=NO RESTART or x=3 and cond=CANCELLED, the following will be written:

- SYSOUT data sets for steps preceding sss (or ppp) and, if they contain data, for step sss (or ppp).
- Job control statements and system messages for steps preceding sss (or ppp).
- Job scheduler messages (message code IEF), including device allocation messages, for step sss (or ppp).
- Job control statements, but not messages, for steps following sss (or ppp).

If x=2 and cond=RESTART or x=3 and cond=CONTINUING, all SYSOUT data sets, job control statements, and system messages for the job will be written after the initiator has finished processing the job.

If x=3 and cond=ENDED, all output for the job will be written.

Report the message to the programmer:

- If x=1, nontemporary data sets for step sss (or ppp) may have been created before the failure.
- If x=2 or 3, termination for step sss (or ppp) has completed normally.

IEF422I ddd I/O ERROR DURING SYSTEM RESTART (c)

Explanation: During system restart, an uncorrectable input/output error or unusual condition occurred while the system was reading or writing a data set control block (DSCB) for SYSIN data set on device ddd. The SYSIN data set was for a job that was abnormally terminated before the system was stopped. The (c) indicates that either (1) not all SYSIN data sets for abnormally terminated jobs were scratched from ddd or (2) the volume table of contents (VTOC) on ddd is unusable.

System Action: System restart continues.

Operator Response: None. However, the message indicates a potential problem on device ddd. If later messages indicate problems on ddd, then enter a VARY command to vary device ddd offline.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF423A SPECIFY JOB QUEUE PARAMETERS

Explanation: During system start, in response to a SET command with an F in its Q parameter, this message requests parameters describing the format for the SYS1.SYSJOBQE data set.

Operator Response: Enter one of the following, as specified by the system programmer at the installation:

- REPLY xx,'U' to indicate that the values specified during system generation are to be used.
- REPLY xx,'n,t,k,p' where n, t, k, and p are positional parameters that are either replaced by the desired values or omitted to indicate that the value specified during system generation is to be used. The parameters are:

- n Number of queue records per logical track. (Decimal number from 10 through 255.)
- t Number of queue records to be reserved for each initiator. (Up to 4 decimal digits.)
- k Number of queue records to be reserved for termination of jobs that require more than t records to initiate. (Up to 4 decimal digits.)
- p Number of queue records to be reserved for the write-to-programmer routine. (Decimal number from 0 through 20.)

Examples are:

- REPLY xx,'12' indicates that n is the only parameter to be different from the system generation values.
- REPLY xx,',,5' indicates that k is the only parameter to be different from the system generation values. Notice the commas that represent the two omitted positional parameters.

IEF424A INVALID PARAMETER/FORMAT

Explanation: The reply to message IEF423A was invalid. One or more parameters in the reply either contained characters other than numbers or were not within the allowable range (n: 10 through 255, t: 4 decimal digits, k: 4 decimal digits).

System Action: The system ignored the reply.

Operator Response: Probable user error. Enter the reply again correctly.

Problem Determination: Table I, items 2, 7a, 11, 29.

IEF425I jjj EXCEEDED SPECIFIED QUEUE SPACE

Explanation: The job named jjj requires too much queue space in the SYS1.SYSJOBQE data set for initiation.

The space reserved for each initiator was specified either during system generation or in the t parameter of the reply to message IEF423A.

Message IEF450I will normally follow this message. However, if the job exceeded the specified queue space during job termination, message IEF404I will follow.

System Action: The job was terminated.

Operator Response: Probable user error. Report this message to the programmer responsible for the system. He should either have the programmer divide the steps of the terminated job into two or more jobs or, the next time the system is started, specify that (1) the format of the SYS1.SYSJOBQE data set be changed (F in the Q parameter of the SET command) and (2) a larger t parameter be used in the reply to message IEF423A.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF426I QUEUE CRITICAL

Explanation: When the system attempted to terminate one or more jobs that required too much queue space in the SYS1.SYSJOBQE data set for initiation, the termination required too much queue space.

The space reserved for termination for jobs that require too much space for initiation was specified either during system generation or in the k parameter of the reply to message IEF423A.

System Action: No more queue space can be assigned. Therefore, the reader/interpreters, initiators, and SYSOUT writers can do no more work. Currently executing job steps will continue.

Operator Response: Probable user error. Report this message to the programmer responsible for the system. Then start the system, specifying that the format of the SYS1.SYSJOBQE data set be changed (F in the Q parameter of the SET command) and, in the reply to message IEF423A, using the larger t and/or k parameters specified by the programmer responsible for the system.

IEF427I CMD REJECTED FOR INITIATOR 'ident' - INSUFFICIENT QUEUE SPACE

Explanation: A START command was entered; however, not enough space is available in the SYS1.SYSJOBQE data set for another initiator.

The space to be reserved for each initiator was specified either during system generation or in the t parameter of the reply to message IEF423A.

In the message text, 'ident' specifies the identifier assigned to the task when it was started.

Operator Response: Enter a START command later when the queue has more free space. Free space is produced when a SYSOUT writer or the current initiator(s) finish processing a job.

IEF429I INITIATOR 'ident' WAITING FOR WORK

Explanation: Each input queue for the initiator either contains no jobs or is in a held status. Input queues are held with the HOLD Q command.

In the message text, 'ident' specifies the identifier assigned to the task when it was started.

System Action: While waiting for a job to initiate, the initiator's region is free and its storage is made available to other tasks.

Operator Response: More jobs may be read into the system or the RELEASE Q command may be entered, as desired.

IEF430I RESTART STEP NOT FOUND jjj

Explanation: During execution of a deferred restart for job jjj, it was found that the RESTART parameter of the JOB statement specified a step name that could not be found either in the resubmitted deck or in the specified cataloged procedure.

System Action: Restart for job jjj is terminated.

Operator Response: None.

IEF431W SYSTEM RESTART I/O ERROR ON JOB QUEUE

Explanation: The system restart function has encountered an uncorrectable input/output error on the SYS1.SYSJOBQE data set.

System Action: The system entered into a one-instruction loop.

Operator Response: Restart the system and reformat the SYS1.SYSJOBQE data set.

Problem Determination: Table I, items 2, 7a, 8a, 11, 29.

IEF432I START INIT REJECTED

Explanation: A START command was entered; however, not enough space is available in the SYS1.SYSJOBQE data set for another initiator.

The space to be reserved for each initiator was specified either during system generation or in the t parameter of the reply to message IEF423A.

Operator Response: Enter a START command later when the queue has more free space. Free space is produced when a SYSOUT writer or the current initiator(s) finish processing a job.

IEF438I SUBTASK OF utn TERMINATED. SYSTEM COMPLETION CODE hhh

Explanation: A subtask abnormally terminated; therefore, the system output (SYSOUT) writer was unable to print or punch the SYSOUT data set. In the message text, utn is the applicable unit name and hhh is the completion code, in hexadecimal.

Operator Response: None.

IEF439I DATASET WRITER xxx FOR DDN ddn COMPLETION CODE hhh

Explanation: The data set writer whose module name is xxx abnormally terminated while attempting to write the data set described by DD statement ddn; hhh, the completion code, is in hexadecimal.

System Action: The system output (SYSOUT) writer stopped processing the input data set, but will continue to process other input data sets.

Programmer Response: Use the system completion code specified in the message text to determine the cause of the failure. After correcting the error, resubmit the job step which created the data set.

IEF440I I/O ERROR IN THE SYS1.SYSJOBQE DATA SET FOR jjj sss nnn

Explanation: An uncorrectable input/output error occurred while the system was trying to read or write in the SYS1.SYSJOBQE data set.

In systems with MVT, jjj sss is the jobname and stepname or task name identifier for which information was being written at the time of the error.

In systems with MFT, jjj sss is the task name identifier of the applicable system task, or the partition number of the applicable partition.

in either case, nnn is the IOS return code from the read/write operation in question. It will be one of the following:

X'41' The I/O activity was not completed because an uncorrectable error occurred. Probable hardware error.

- X'42' The activity was not started because a pointer referenced an area out of the SYS1.SYSJOBQE direct access extent. Probable software error.
- X'44' The request was intercepted because a permanent error occurred the last time the device was used.
- X'48' The request element has been freed because the data set is permanently in error.
- X'4F' A direct access error recovery routine was unable to read the home address or record 0.

System Action: The read or write operation was not performed.

Operator Response: Report this message to system programmer or installation manager. The message indicates a potential problem with the SYS1.SYSJOBQE data set. If the message is repeated, restart the system and reformat the queue at the earliest convenient opportunity.

Problem Determination: Table I, items 1, 2, 4, 7b, 8b, 29.

```
IEF441I SYSTEM RESTART ERROR ON ( j j j
                                FREELIST
                                QUEUE ) , q q q q ,
```

```
{ TTR=nnn } , { status } , [sense] , mod
{ NN=nn } , { C
              E
              D }
```

Explanation: An uncorrectable error occurred during system restart processing for job jjj. In the message text, the first variable field contains one of the following:

- Name of the job being processed (jjj).
- FREELIST, which indicates that an error occurred while tracks were being returned to the free track queue on the SYS1.SYSJOBQE data set.
- QUEUE, which indicates that the error occurred during processing of a queue control record. The TTR=nnn or NN=nn field will contain blanks if QUEUE appears in this field, and messages IFD442I and IEF443I will follow this message.
- bbbbbb (blanks), which indicates that the error occurred while the system was attempting to read the logical track header for a job.

The qqqq field identifies the queue type that was being processed at the time of the error.

- HOLD
- ASB
- OUTPUT=x
- RJE
- INPUT=x
- BRDRQ

where x is the input or output class identifier.

In the next field, TTR=nnn or NN=nn represents the address of the logical track header assigned to the job on the queue.

The status field contains either the two-byte portion of the channel status word (CSW) followed by the first two sense bytes for the error condition, or one of the following error codes.

- C - The error occurred during the conversion of the TTR.
- E - The error occurred while the job was being enqueued.
- D - The error occurred while a job was being deleted from a queue.

The mod field contains the three-byte identifier of the module that detected the error condition. The assembly module name can be determined by adding the prefix IEFSD to this identifier.

System Action: System restart processing for job jjj is terminated; however, processing will continue with the next job on the SYS1.SYSJOBQE data set. The tracks assigned to job jjj are not released.

Operator Response: Process current work on the queues. Reformat the SYS1.SYSJOBQE data set at the earliest convenient time by entering SET Q=(unitname,F). Jobname jjj must be reentered into the system after the queue has been reformatted.

Problem Determination: Table I, items 2, 3, 8a, 29.

IEF442I AUTO COMMANDS SUPPRESSED ON RESTART ERROR

Explanation: An uncorrectable error occurred during processing of a queue control record (QCR). Any automatic start commands that were authorized for initiation have been suppressed. Message IEF443I follows this message to indicate the queues that have work on them.

System Action: The system issues message IEF443I and then enters a wait state until the operator enters a start command.

Operator Response: Respond as indicated to message IEF443I.

```
IEF443I WORK ON QUEUES: [HOLD], [ASB],
[OUTPUT=list], [RJE], [INPUT=list], [BRDRQ]
```

Explanation: This message follows message IEF442A; it indicates the queues that have data on them and can have writers or initiators started for them.

System Action: The system enters a wait state until the operator enters a START command.

Operator Response: Start writers and/or initiators for the indicated classes as required.

Once the operating system has quiesced, execute the standalone program IMCJQDMP to dump the SYS1.SYSJOBQE data set. Then reformat the SYS1.SYSJOBQE data set using the Q= parameter of the SET command.

IEF444I SYSTEM RESTART ERROR TERMINATING JOB jjj

Explanation: The system restart function encountered an uncorrectable input/output error on the SYS1.SYSJOBQE data set. In the message text, jjj is the jobname.

System Action: The read or write operation was not performed. Processing continues.

Operator Response: Probable hardware error. Report this message to the system programmer.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 8a, 29.

IEF450I jjj.sss.[ppp]ABEND (Shhh
Udddd)
[TIME=hh.mm.ss]

Explanation: A job step was abnormally terminated during (1) step sss of job jjj, or (2) step ppp, which is part of a cataloged procedure called by step sss of job jjj.

The first format of the message indicates that the job step was abnormally terminated by the control program; hhh, the completion code, is in hexadecimal. The second format of the message indicates that the job step was terminated by the problem program; dddd, the completion code, consists of 4 decimal digits.

In response to a DISPLAY command with JOBNAMES,T in its operand, this message also indicates the time of day, where hh specifies the hour (00-23), mm specifies the minutes (00-59), and ss specifies the second (00-59).

Operator Response: None.

IEF451I jjj.sss.[ppp] ENDED BY CC dddd
[TIME=hh.mm.ss]

Explanation: A condition test specified in the COND parameter of a JOB statement was satisfied by the completion code dddd for (1) step sss of job jjj, or (2) step ppp, which is part of a cataloged procedure called by step sss of job jjj. Completion code dddd consists of 4 decimal digits.

In response to a DISPLAY command with JOBNAMES,T in its operand, this message also indicates the time of day, where hh specifies the hour (00-23), mm specifies the minute (00-59), and ss specifies the second (00-59).

System Action: The job named jjj was terminated.

Operator Response: None.

IEF452I xxx JOB NOT RUN - JCL ERROR
[TIME=hh.mm.ss]

Explanation: If xxx is a job name, the reader/interpreter detected an error in a job control statement or the job was canceled while on the input queue. If the error was detected on a JOB statement, the xxx appears as JOBFAIL.

If xxx is a cataloged procedure name, the procedure was specified in the first operand of a START command. In this case, either the procedure was not found in the system procedure library (SYS1.PROCLIB) or, if found, the procedure had an error in a job control statement. Message IEE132I will always follow this message on the console listing.

The actual error message appears in the system output (SYSOUT) data set.

In response to a DISPLAY command with JOBNAMES,T in its operand, this message also indicates the time of day, where hh specifies the hour (00-23), mm specifies the minute (00-59), and ss specifies the second (00-59).

System Action: If xxx is a job name, the job was not initiated and no steps were executed. If xxx is a procedure name, the START command was not executed.

Operator Response: If xxx is a job name, none. If xxx is a procedure name, either reenter the START command with the correct procedure name, or, if the procedure name is correct, have the programmer responsible for the system check the procedure for errors.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF453I jjj JOB FAILED - JCL ERROR

Explanation: In a job control statement, an error was detected by the initiator, or an error was detected in a subsequent job step by the reader/interpreter. The actual error message appears in the system output (SYSOUT) data set.

System Action: The job named jjj was terminated. If the error was detected by the initiator, the job was terminated either before or after any steps were executed; if the error was detected by the reader/interpreter, the job was terminated after one or more steps were executed.

Operator Response: None.

IEF454E DOS VTOC CANNOT BE CONVERTED TO OS VTOC

Explanation: A DD statement requested space on a direct access volume on which the DOS contamination bit was set. In attempting to convert the DOS VTOC to OS VTOC format, one of the following three data set a-locations was found:

- A split cylinder data set was located on cylinder zero.
- A split cylinder data set was located on the same cylinder as the VTOC.
- A split cylinder data set was located on the same cylinder as a non-split cylinder data set.

System Action: If the DD statement specifically requested this volume then the job will be terminated. The system will issue a mount message.

Programmer Response: Either scratch or move the split cylinder data set that is creating the error, and execute the job again.

Operator Response: Demount the volume on which the split cylinder data set resides. (Note that it may be used only in a DOS environment until the offending split cylinder data set has been moved or scratched.) Respond to the mount messages issued following this message.

Problem Determination: Table I, items 1, 2, 4, 7b, 29.

IEF460I WTP MESSAGE LIMIT EXCEEDED

Explanation: A WTOR or WTO message with a ROUTCDE=11 parameter was issued for a task that used the maximum number of SYS1.SYSJOBQE records available; the limit was specified at system generation in the JOBQWTP parameter of the SCHEDULR macro instruction.

System Action: Problem program messages to be processed by the write-to-programmer routine for the current job are suppressed.

If the write-to-programmer routine was attempting to process a system message, the message will be processed (and will follow this message). In this step, one additional system message will also be processed. Further system messages will be suppressed.

Operator Response: Probable user error. Increase the value of the system generation JOBQWTP parameter or change the value of the parameter in response to message IEE423A.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF461I I/O ERROR SYS1.SYSJOBQE, WTP PROCESSING FOR jjj

Explanation: An uncorrectable input/output error occurred on the SYS1.SYSJOBQE data set while the write-to-programmer routine was processing a message for job jjj. The message the routine was attempting to process follows this message.

System Action: Further messages to be processed by the write-to-programmer routine for this job are suppressed.

Operator Response: Probable hardware error. Report this message to the programmer responsible for the system.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 8b, 29.

IEF462I NO RECORDS AVAILABLE SYS1.SYSJOBQE, WTP PROCESSING jjj

Explanation: The write-to-programmer routine attempted to process a message for job jjj, but was unable to get a record in the SYS1.SYSJOBQE data set.

System Action: If the write-to-programmer routine was attempting to process a problem program message, the message is not processed; if the routine was attempting to process a system message, the message will be processed. (One, two, or three system messages may follow this message.)

Operator Response: Report this message to the programmer responsible for the system. The problem was caused by the initiator using records belonging to the write-to-programmer routine.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF500I VOLUME NEEDED ON DIFFERENT UNIT

Explanation: One of the following occurred:

- A DD statement requested that this volume be mounted on a particular unit but the volume is presently mounted on another unit.
- A DD statement requested this specific volume, but the unit on which it is presently mounted is ineligible for this request.

System Action: Message IEF234E follows indicating the volume to be demounted.

Operator Response: After the volume is demounted in response to message IEF234E, wait for a mount message to be issued.

IEF501I UNIT NEEDS DIFFERENT VOLUME

Explanation: A DD statement requested that a specific volume be mounted on a particular unit. However, a different volume is presently mounted on that unit. Message IEF234E follows, indicating the volume to be demounted.

Operator Response: After the volume is demounted in response to message IEF234E, wait for a mount message to be issued. During this job step, if the demounted volume is later requested by the non-specific mount message IEF504A, do not mount the volume on the unit from which it has just been removed; mount the volume on another unit.

IEF502I DUPLICATE SERIAL

Explanation: Two volumes with the same volume serial number are mounted. Each message IEF234E which follows indicates a volume to be demounted.

System Action: If both volumes are permanently resident or reserved, the job is canceled. If only one volume is permanently resident or reserved, the other volume is unloaded. If neither volume is permanently resident nor reserved, both volumes are unloaded.

Operator Response: Probable user error. After a volume is demounted in response to each message IEF234A, determine which of the volumes should be used. When requested by the system, mount the correct volume, making sure that the volume label is correct.

Problem Determination: Table I, items 2, 7a, 29.

IEF503I WRONG DENSITY OR INCORRECT LABEL

Explanation: An error occurred while the job scheduler was reading the label on a volume. This error can be one of the following:

- An uncorrectable input/output error.
- An unlabeled tape.
- A nonstandard label for which a user's nonstandard label handling routine has not been provided.
- For 7-track tape, a density different than the density specified during system generation.

Message IEF234E follows, indicating the unit and the volume serial number.

System Action: The volume is unloaded.

Operator Response: Probable user error. No action necessary. However, if the volume is subsequently requested by mount message IEF504A and if, after the volume is mounted, this message appears again, cancel the job, making sure that the volume label is correct.

Problem Determination: Table I, items 2, 7a, 29.

IEF504A M dvtyp,ser,, {
 } j,jj
 } j,jj,sss
 } j,jj,sss,dsn
 } j,jj,,dsn

Explanation: M indicates that the volume whose serial number is ser should be mounted on any available unit of the indicated device type, dvtyp.

The volume was required by job j,jj or, if applicable, step sss of job j,jj. (If this message is issued for a system task, sss will appear as a system task identifier.) If a DISPLAY DSNNAME command is active, the first nontemporary data set name, dsn, is also specified in the message text.

System Action: The system waits until the operator mounts the volume or cancels the job.

Operator Response: Mount the volume on any available device of the proper type. If the volume cannot be mounted, cancel the job.

IEF505I UNIT REQUIRED

Explanation: A volume has to be unloaded to provide a free device to hold the volume which has been, or will be, requested by message IEF504A. Message IEF234E follows, indicating the volume to be demounted.

Operator Response: None. However, perform the actions indicated in accompanying messages.

IEF506I ddn NO STORAGE VOLUMES. 'VOLUME=PRIVATE' ASSUMED.

Explanation: The DD statement named ddn requested allocation of space for a new data set on a non-private volume; the statement did not specify a volume serial number.

The only way to satisfy such a request is allocation on a storage volume; however, the system contains no storage volumes.

System Action: The system assumed VOLUME=PRIVATE and allocated space to the data set on that basis.

IEF507I utn[,N] - SYS1.ACCT - text
IEF507D REPLY XXX OR XXX,N OR SKIP

Explanation: An error occurred during execution of the accounting routine. The first line of the message text identifies the specific error. The second line of the message text describes the three basic replies demanded of the operator. (The three basic replies are described more fully under the description of each text.)

In the message text, the fields are:

utn
The unit name of the device.

N
If N is specified in the first line of the message text, the error occurred during an attempt to write the account data from the beginning of the SYS1.ACCT extent. If N is specified in a reply, the account data will be written from the beginning of the SYS1.ACCT extent; if N is not specified in a reply, the account data will be written from the last record written.

SKIP
SKIP results in the date, time of day, and reason code being written on the console. Control is then returned to the accounting routine. If the parameter SKIP is used, the same message will be repeated on the console

at the next entrance to the accounting routine whenever the factors which caused the original message still prevail.

text

ERROR IN UNIT NAME

Explanation: An invalid unit name was specified in a reply to message IEF507D or in a SET command.

Operator Response: Probable user error. Enter the reply again correctly.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

NO END OF FILE

Explanation: The end of file terminating the SYS1.ACCT data set was lost. Therefore, the program is unable to position to the end of the data set to write the next record.

Operator Response: If the SYS1.ACCT data set was allocated to two resident devices, enter REPLY xx,'XXX' or REPLY xx,'XXX,N' where XXX is the unit name of the second device.

If the SYS1.ACCT data set was not allocated to two resident devices, enter REPLY xx,'SKIP'. Then, if possible, submit a job to allocate the data set to another device; otherwise, submit a job to retrieve the data set. When this job is completed, respond to the next occurrence of this message with REPLY xx,'XXX,N'. If the problem

Problem Determination: Table I, items 2, 7a, 29.

NOT PREALLOCATED

Explanation: The SYS1.ACCT data set was not found on the device specified or, if no device was specified, on the system residence device.

Operator Response: Probable user error. If the SYS1.ACCT data set resides on a device other than that specified, enter REPLY xx,'XXX' or REPLY xx,'XXX,N' where XXX is the unit name of the device on which the data set resides.

If the SYS1.ACCT data set does not reside on any device, enter REPLY xx,'SKIP'. Then submit a job to allocate the data set to a device.

Problem Determination: Table I, items 2, 7a, 25b, 29.

PERMANENT I/O ERROR

Explanation: A permanent input/output error occurred while processing the SYS1.ACCT data set.

Operator Response: If the SYS1.ACCT data set was allocated to two resident devices, enter REPLY xx,'XXX' or REPLY xx,'XXX,N' where XXX is the unit name of the second device.

If the SYS1.ACCT data set was not allocated to two resident devices, enter REPLY xx,'SKIP'. Then, if possible, submit a job to allocate the data set to another device; otherwise, submit a job to retrieve the data set. When this job is completed, respond to the next occurrence of this message with REPLY xx,'XXX,N'.

Problem Determination: Table I, items 2, 7a, 29.

SPACE NOT AVAILABLE

Explanation: The extent of the SYS1.ACCT data set is full.

Operator Response: Probable user error. If the SYS1.ACCT data set was allocated to two resident devices, enter REPLY xx,'XXX' or REPLY xx,'XXX,N' where XXX is the unit name of the second device. Then submit a job to retrieve the SYS1.ACCT data set which is full so that it, in turn, may be used when the second data set is full.

If the SYS1.ACCT data set was not allocated to two resident devices, enter REPLY xx,'SKIP'. Then submit a job to retrieve the data set. When this job is completed, respond to the next occurrence of this message with REPLY xx,'XXX,N'.

Problem Determination: Table I, items 2, 7a, 29.

SYNTAX ERROR

Explanation: A syntax error was detected in a reply to message IEF507D.

Operator Response: Probable user error. Enter the reply again correctly.

Problem Determination: Table I, items 2, 7a, 29.

DEVICE NOT RESIDENT

Explanation: The unit name specified in reply to message IEF507D was not a resident device.

Operator Response: If the SYS1.ACCT data set resides on a permanently resident device, reply correct unit name; if not, submit a job to allocate the data set to a permanently resident device.

Display the unit specified in reply to message IEF507D, using the DISPLAY UNIT command.

Problem Determination: Table I, items 2, 7a, 29.

IEF601I INVALID STATEMENT IN PROCEDURE

Explanation: One of the following invalid statements was found in a procedure:

- JOB statement.
- A statement other than a job control statement; that is, a statement that does not begin with //.
- A DD * or a DD DATA statement in an instream procedure.
- A null statement or a delimiter.

System Action: The job is terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the procedure by removing the invalid card. The invalid card will appear in the SYSOUT listing immediately before the error message if MSGLEVEL=1 is coded on the job statement. Rerun the job.

Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF508I VOLUME MOUNTED ON INELIGIBLE DEVICE

Explanation: A DD statement requested that a tape volume be mounted on a 3400 series tape drive, and the tape volume was found mounted on a 2400 series drive. A 2400 series tape drive cannot satisfy a request for a 3400 series drive because the 2400 drives do not have the unload security feature.

System Action: Message IEF234E follows, indicating that the volume is to be demounted.

Operator Response: After the volume is demounted, in response to message IEF233A, mount the volume on the appropriate 3400 series tape drive.

IEF510E VOLUME HAS ANS LABEL.

Explanation: A tape volume that has an American National Standard label was mounted in a system which does not support ASCII tape processing.

System Action: The tape volume is unloaded. A demount message, IEF234E, is issued to point out the device on which the wrong volume was mounted.

Operator Response: Set aside jobs that require ASCII tapes until a system that supports ASCII is available.

IEF602I INPUT DEVICE I/O ERROR READING JOB

Explanation: An uncorrectable input/output error occurred while a SYSIN reader was reading the input stream.

System Action: The SYSIN reader closed the input stream and stopped itself. The job scheduler interpreter terminated the job being read when the error occurred. The job scheduler also wrote message IEF419I on the console; in response, the operator started a SYSIN reader and reentered the job through the input stream.

Programmer Response: If this message is repeated for the same job, as indicated by IEF419I, check the format of the card image being read when the error occurred. Make any corrections needed, and submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF533A M ddd,ser,

}	jjj
	jjj,sss
	jjj,sss,dsn
	jjj,,dsn

Explanation: Job jjj requires that volume ser be mounted on device ddd. If a DISPLAY DSNAM command is active in the system, the first nontemporary data set name appears in the message text as dsn. (This field will not appear if a DISPLAY DSNAM command is not active or if this message follows message IEF534E.) In the message text, sss is the name of the step that requires the volume; if no step name was specified in the EXEC statement, the sss field is left blank.

This message may be issued for more than one job at a time.

System Action: The task waits for the volume to be mounted. Other jobs may be allocated or terminated.

Operator Response: If device ddd is direct access, and if this message appears in conjunction with message IEF233A, honor the IEF233A mount message first. Otherwise, mount volume ser on device ddd as indicated in the message text, and ready the device. If the volume cannot be mounted, enter a CANCEL command for job jjj and for all other jobs that require the volume and call IBM for hardware support.

IEF603I PROCLIB DEVICE I/O ERROR READING FOR JOB

Explanation: An uncorrectable input/output error occurred in reading the procedure library (SYS1.PROCLIB) during processing of a job that requested a cataloged procedure.

System Action: The job being processed was terminated. The job scheduler also wrote message IEF417I on the console; in response, the operator reentered the job through the input stream.

Programmer Response: None.

IEF604I INPUT STREAM DATA FLUSHED

Explanation: In a system with MVT, the job was terminated for the reasons indicated in previous messages. While scanning the remaining job control

statements for the job for syntax errors, the scheduler found a data set in the input stream; the data set was specified by a DD * or DD DATA statement. The data in this data set was ignored. Scanning for errors was resumed with the first statement following the data set.

No previous message will have been issued if the input stream contained data that was not preceded by a valid EXEC statement.

Programmer Response: In systems with MFT or MVT, insure that a valid EXEC statement precedes any data in the input stream.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF605I UNIDENTIFIED OPERATION FIELD

Explanation: In a job control statement, either an operation field could not be found or the operation field could not be identified as JOB, EXEC, DD, or any valid operator command.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Check that the operation field is spelled correctly and that it is preceded and followed by at least one blank. After correcting the error, submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF606I MISPLACED DD STATEMENT

Explanation: A DD statement between the JOB statement and first EXEC statement did not contain JOBLIB in its name field. Possibly, JOBLIB was misspelled or misspelled. Possibly, the operation field of the first EXEC statement was not correctly specified.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the DD or EXEC statement, or place the DD statement in the job step in which it belongs. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF607I JOB HAS NO STEPS

Explanation: The job control statements following a JOB statement did not include an EXEC statement.

This message is also issued if the job contains a PROC statement prior to any EXEC or SYSCHK DD statement but contains no PEND statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors. A dummy EXEC statement with EXECFAIL in its name field was inserted.

If a PEND statement was omitted, the remainder of the job was considered part of the in-stream procedure.

Programmer Response: Probable user error. Insert an EXEC or PEND statement or correct an EXEC or PEND statement containing errors that made it unrecognizable as applicable. Submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF608I SPOOL DEVICE I/O ERROR WRITING FOR JOB

Explanation: While a SYSIN reader was writing a data set from the input stream on a direct access device, an uncorrectable input/output error was encountered.

System Action: The job containing the input stream data set was terminated. The job scheduler also wrote message IEF412I on the console; in response, the operator reentered the job through the input stream.

Programmer Response: None.

IEF609I INVALID OVERRIDE KEYWORD xxxxx

Explanation: An EXEC statement containing a PROC parameter specified two identical override keywords that both refer to the same step in a cataloged or in-stream procedure.

In the message text, xxxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

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System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Change the override parameters. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF610I PROCEDURE HAS NO STEP

Explanation: The job control statements in a procedure did not include an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the procedure by inserting an EXEC statement or correcting an EXEC statement that contained errors that made it unrecognizable. Submit the job again. IF

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF611I OVERRIDDEN STEP NOT FOUND IN PROCEDURE

Explanation: An EXEC or DD statement, which was to override a corresponding EXEC or DD statement in a cataloged or in-stream procedure, specified a step name that could not be found in the procedure. Probably, the step name was misspelled or the DD override statements did not appear in the same order as the corresponding statements in the procedure.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the step name in the EXEC or DD statement in the input stream, correct the order of the DD override statements in the input stream, or correct the procedure. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF612I PROCEDURE NOT FOUND

Explanation: The procedure specified in the first parameter of an EXEC statement could not be found in the procedure library (SYS1.PROCLIB) or in the in-stream procedure directory. Possibly, the procedure name was misspelled or the PEND statement ending the previous in-stream procedure was omitted.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the procedure name in the EXEC statement in the input stream, in the PROC statement in the input stream, or in the

procedure library. If the procedure name is correct, insert the missing PEND statement. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF613I PROCEDURE WITHIN A PROCEDURE

Explanation: In a procedure, an EXEC statement contained a PROC parameter or a procedure name, implying a procedure within a procedure. A procedure cannot be specified within a procedure.

System Action: The job containing the EXEC statement that invoked the procedure was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Replace the invalid EXEC statement with either (1) the procedure that it called or (2) a valid EXEC statement containing a PGM parameter. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF614I PROCLIB DEVICE I/O ERROR SEARCHING FOR PROCEDURE

Explanation: An uncorrectable input/output error occurred in searching the procedure library (SYS1.PROCLIB) during processing of a job that requested a cataloged procedure.

System Action: The job being processed was terminated. The job scheduler also wrote message IEF417I on the console; in response, the operator reentered the job through the input stream.

Programmer Response: None.

IEF615I EXCESSIVE PROCSTEP NAME xxxx

Explanation: In an EXEC statement that specified a procedure, the name of a step to be overridden was longer than 8 characters.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)

- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the step name so that it consists of not more than 8 alphameric characters, with the first character alphabetic. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF616I SUBLIST WITHIN SUBLIST INCORRECT xxxx

Explanation: In a job control statement, a subparameter list was specified within a subparameter list. This arrangement is invalid. Possibly, too many parentheses were used, so that a list appeared to be within a list.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the subparameter. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF617I NO NAME ON FIRST DD STATEMENT AFTER EXEC STATEMENT

Explanation: The first DD statement following an EXEC statement did not contain a data definition name in its name field; that is, column 3 of the DD statement was blank. Possibly, the first statement for a concatenation of data sets was omitted.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Either put a data definition name in the name field of the DD statement or place it among other DD statements so that a proper concatenation is defined. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF618I OPERAND FIELD DOES NOT TERMINATE IN COMMA OR BLANK

Explanation: In a job control statement, the operand field does not terminate with one of the following:

- A comma after the last parameter in the card image, if the statement is to be continued in the next card image. The comma must be before column 72.
- A blank after the last parameter, if the statement is not to be continued. The blank may be in column 72 or any previous column.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the operand field. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF619I DATA IN THE INPUT STREAM CANNOT BE PROCESSED, NO IEFDATA CARD IN THE READER PROCEDURE

Explanation: The reader procedure used to start the reader interpreter did not contain an IEFDATA statement. Therefore, no attempt was made to allocate a spooling device or create a spool data set and the data in the input stream cannot be processed.

System Action: The job was terminated and the data in the input stream was flushed.

Programmer Response: Probable user error. Insert an IEFDATA statement in the reader procedure.

Problem Determination: Table I, items 26d, 29.

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IEF620I CPP PARAMETERS NOT COMPATIBLE WITH SYSTEM
READER - DEFAULT VALUES USED xxxx

Explanation: A keyword parameter was syntactically incorrect or specified a value too large for the system reader reading the input stream. The parameter appeared on one of the following:

- The preceding DD * or DD DATA statement.
- A previous DD statement that contained a DDNAME parameter specifying the name of the DD * or DD DATA statement.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The parameter was ignored and the concurrent peripheral processing (CPP) data set was created on a direct access device using the system reader default values (as specified on the IEFDATA DD statement of the reader cataloged procedure). Processing continues.

Programmer Response: Probable user error. Correct any syntax errors. If the parameter specified too large a value for the system reader, either specify a smaller value or request the operator to start a system reader that can handle the larger value. Then resubmit the job.

Problem Determination: Table I, items 3, 4, 7a, 29.

IEF621I EXPECTED CONTINUATION NOT RECEIVED

Explanation: In a job control statement, continuation was indicated by a comma at the end of the operand or by a nonblank character in column 72, or both. However, the following card image was not a continuation.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Provide the missing continuation card, if it was lost. If no continuation was intended, correct the card so that column 72 is blank and the operand ends with a blank.

If the continuation card was present, correct it so that slashes (//) appear in columns 1 and 2, a blank appears in column 3, and the continuation of a comment begins anywhere after column 3 or the continuation of the operand begins in columns 4 through 16.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF622I UNBALANCED PARENTHESIS xxxx

Explanation: In a job control statement, one of the following appeared:

- A valid left parenthesis not followed by a right parenthesis.
- A valid right parenthesis not preceded by a left parenthesis.
- A right parenthesis where it is not permitted.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the error. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF623I SOURCE TEXT CONTAINS UNDEFINED OR ILLEGAL CHARACTERS xxxx

Explanation: A job control statement contained one or more invalid characters. All characters in a job control statement must belong to the character sets defined in the publication IBM System/360 Operating System: Job Control Language, GC28-6539.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: If the statement contains any invalid characters, correct it. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF624I INCORRECT USE OF PERIOD xxxx

Explanation: In a job control statement, a period appeared in a parameter or field in which a period is not permitted.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword

parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)

- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the parameter or field. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF625I INCORRECT USE OF LEFT PARENTHESIS xxxx

Explanation: In a job control statement, a left parenthesis appeared in a parameter or field in which a left parenthesis is not permitted.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the parameter or field. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF626I INCORRECT USE OF PLUS xxxx

Explanation: In a job control statement, a plus sign appeared in a parameter or field in which a plus sign is not permitted.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the parameter or field. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF627I INCORRECT USE OF AMPERSAND xxxx

Explanation: In a job control statement, an ampersand appeared in a parameter or field in which an ampersand is not permitted.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword

parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)

- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the parameter or field. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF628I INCORRECT USE OF ASTERISK xxxx

Explanation: In a job control statement, an asterisk appeared in a parameter or field in which an asterisk is not permitted.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the parameter or field. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF629I INCORRECT USE OF APOSTROPHE xxxx

Explanation: In a job control statement, an apostrophe was used incorrectly.

Single apostrophes are used to enclose certain parameters containing special characters or blanks. Two apostrophes within a parameter enclosed in apostrophes are used to represent an apostrophe.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the invalid use of the apostrophe. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF630I UNIDENTIFIED KEYWORD xxxx

Explanation: In a job control statement, the scheduler found that:

- A character string followed a blank or comma and preceded an equal sign, but could not be recognized as a valid keyword. Either the keyword was misspelled, the equal sign was misplaced or, because of the absence of a right parenthesis after the previous major keyword, a valid major keyword was considered a minor keyword.
- A valid subparameter keyword appeared without the corresponding parameter keyword; for example, SER without VOLUME.
- A valid keyword was not consistent with the statement operation code; for example, DSNAME in an EXEC statement.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is the most recently encountered minor keyword parameter associated with the major keyword parameter prm2, which precedes the error.
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the statement. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF631I NUMBER OF DDNAMES EXCEEDS MAXIMUM

Explanation: In the DD statements for a step, the DDNAME parameter appeared in 6 or more DD statements. This parameter can appear in no more than 5 DD statements in a step.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Change the DD statements for the step so that 5 or fewer use the DDNAME parameter. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF632I FORMAT ERROR xxxx

Explanation: In a job control statement, the format of a parameter was incorrect. For example:

- Too many or too few levels of qualification were specified.
- No enclosing parentheses appeared.
- An operator was missing in a COND parameter.
- The EVEN and ONLY subparameters were both specified in the COND parameter of the EXEC statement.
- A comma, right parenthesis, ampersand, or blank did not follow a right parenthesis in a SPACE parameter.

- The keyword specified is shorter than the required length.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.
- IN THE prm FIELD, where the value specified for the particular prm was less than the acceptable length.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the parameter. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF633I PROGRAMMER NAME MISSING xxxx

Explanation: The programmer's name, established as an installation requirement in the PARM parameter of the reader procedure, was omitted from the JOB statement.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)

- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Specify a programmer's name. If a programmer's name had been specified, correct the order of the positional parameters. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF634I ACCOUNT NUMBER MISSING xxxx

Explanation: The account number, established as an installation requirement in the PARM parameter of the reader procedure, was omitted from the JOB statement.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Specify an account number. If an account number had been specified, check for a comma or a parameter before the account number; if one appears, remove it. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF635I JOBNAME MISSING xxxx

Explanation: The job name, which must appear in the name field of a JOB statement, was missing.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Specify a job name. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF636I MISPLACED JOBLIB STATEMENT

Explanation: A DD statement containing JOBLIB in its name field appeared after an EXEC statement. Or a second JOBLIB DD statement appeared in the control statements for a job. A JOBLIB DD statement, which defines a job library, can appear only immediately after a JOB statement and before the first EXEC statement in a job. Only one statement containing JOBLIB in its name field can appear in the statements for a job.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Place the JOBLIB DD statement immediately after the JOB statement. If two or more job libraries are to be used as one library, put blanks in the name fields of the concatenated DD statements. Place the concatenated DD statements immediately after the JOBLIB DD statement. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF637I EXCESSIVE ACCOUNT FIELD LENGTH xxxxx

Explanation: In a JOB or EXEC statement, the accounting information was longer than the 142 characters permitted.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Shorten the accounting information. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF638I SPECIFIED NUMERIC EXCEEDS MAXIMUM ALLOWED xxxxx

Explanation: In a job control statement, a parameter or subparameter value contains a valid number of digits, but exceeds the maximum numeric limit.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)

- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the parameter or subparameter value. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF639I INVALID CLASS DESIGNATION xxxx

Explanation: In a job control statement, the class name specified as the operand of a parameter or subparameter was not one of a set of names or values acceptable for that parameter or subparameter.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error. (For example, CLASS=U is invalid since the acceptable class names for the CLASS parameter are A through O.)
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the class name. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF640I EXCESSIVE NUMBER OF POSITIONAL PARAMETERS xxxx

Explanation: A job control statement contained too many positional parameters. A misplaced comma, a duplication, or a null operand field could cause such an error.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the statement, and submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF641I IMPROPER SUBPARAMETER LIST xxxx

Explanation: A job control statement contains an incorrect subparameter list for a positional parameter. Either such a list is required and is missing, or is not permitted but is present.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were

processed. (For example, an error was detected in the name field of a statement.)

- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the parameter. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF642I EXCESSIVE PARAMETER LENGTH xxxxx

Explanation: In a job control statement, a positional parameter was longer than permitted.

In the message text, xxxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Shorten the parameter to the maximum permitted length or less. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF643I UNIDENTIFIED POSITIONAL PARAMETER xxxxx

Explanation: In a job control statement, a positional parameter that has certain permitted values was not recognized. It may be invalid, misspelled, or misspunched.

In the message text, xxxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the erroneous positional parameter. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF644I INVALID NUMERIC xxxxx

Explanation: In a job control statement, an alphabetic or special character appeared in a parameter that can contain only numeric characters.

In the message text, xxxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a

minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)

- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the erroneous parameter. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF645I INVALID REFER BACK xxxx

Explanation: In a job control statement, a parameter specified the name of a previous statement. However, a statement with that name was not found.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Check the spelling and punching of the parameter containing the reference and of the name in the statement to which it refers. Determine if the parameter containing the reference can validly contain a reference. After correcting the error, submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF646I REQUIRED POSITIONAL PARAMETER MISSING xxxx

Explanation: In a job control statement, a required positional parameter or subparameter was not specified.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Insert the missing parameter or subparameter. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF647I NON-ALPHABETIC FIRST CHARACTER OF NAME xxxx

Explanation: In a job control statement, the first character in a name is not alphabetic. The name can be the name field, a procedure name in a parameter, or a program name in a parameter.

This message will also appear when a relative generation number of a generation data group is used without a plus or minus sign. For example, DSNAME=dsname(+1) is correct, whereas DSNAME=dsname(1) is incorrect.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was

detected in the name field of a statement.)

- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the name field. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF648I INVALID DISP FIELD - xxxx SUBSTITUTED

Explanation: In a DD statement, a subparameter specified in the DISP parameter is invalid:

- A disposition of KEEP is invalid for a temporary data set. In this case, xxxx will appear as PASS. If a DSNAME parameter references a data set which has a disposition of DELETE, xxxx will also appear as PASS.
- A disposition of CATLG is invalid for a data set whose data set name is enclosed in apostrophes. (In this case, xxxx will appear as KEEP.)

System Action: The system changed the disposition of the data set to xxxx. Processing continued.

Programmer Response: Probable user error. If the job is to be executed again, correct the invalid disposition.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF649I EXCESSIVE NUMBER OF DD STATEMENTS

Explanation: More than 255 DD statements appeared in one job step. Possibly, an EXEC statement is missing.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors. The system printed the message with each DD statement after the 255th.

Programmer Response: Probable user error. Either remove the excess DD statement(s) or add a missing EXEC statement. Then submit the job again.

Problem Determination: Table I, items 1, 7a, 29.

IEF650I INCORRECT USE OF SLASH xxxx

Explanation: In a job control statement, a slash appeared in a parameter or field in which a slash is not permitted.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)
- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the parameter or field. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF651I INCORRECT USE OF MINUS xxxx

Explanation: In a job control statement, a hyphen (or minus sign) appeared in a parameter or field in which a hyphen is not permitted.

In the message text, xxxx is one of the following phrases:

- IN THE prm FIELD, where prm is the most recently encountered keyword parameter preceding the error.
- ON THE cntr STATEMENT, where cntr indicates the job control statement on which the error occurred. This phrase usually occurs if the error was detected before any keyword parameters were processed. (For example, an error was detected in the name field of a statement.)
- IN THE prm1 SUBPARAMETER OF THE prm2 FIELD, where prm1 is a minor keyword parameter associated with major keyword parameter prm2. (For example, SER is a minor keyword parameter that appears only when associated with major keyword parameter VOLUME.)

- IN THE SYMBOLIC PARAMETER, if the error was detected in the symbolic parameter.
- IN THE VALUE FIELD OF THE SYMBOLIC PARAMETER, if the error was detected in the field which assigns a value to a symbolic parameter.
- IN THE prm OVERRIDE FIELD, where prm is an override keyword parameter on an EXEC statement.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the parameter or field. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF652I MUTUALLY EXCLUSIVE KEYWORDS - KEYWORD IN THE prm FIELD IS MUTUALLY EXCLUSIVE WITH KEYWORD ON THE cntr STATEMENT

Explanation: A job control statement, indicated by cntr in the message text, contained two or more parameters that cannot appear together. Keyword prm and another keyword or positional parameter on the same statement are either mutually exclusive or identical.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Correct the statement. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF653I SUBSTITUTION JCL - xxxx

Explanation: In a cataloged procedure statement, one or more symbolic parameters were used. In the message text, xxxx represents the text that results from the symbolic parameter substitution. If DD DUMMY or DD DYNAM is used to override a JCL statement in a cataloged procedure, the overridden parameters in the message text will appear as DUMM= or DYNA=.

Programmer Response: None.

IEF654I MULTIPLE DDNAMES REFER TO ONE DD STATEMENT

Explanation: In the job control statements for a job step, two DD statements contain DDNAME parameters that specify the same name.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Either delete one of the DD statements or change the name in one of the duplicate DDNAME parameters. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF655I DSNAME INVALID WHEN SYSOUT SPECIFIED

Explanation: A DD statement contained a SYSOUT parameter and a DSNAME parameter.

System Action: The DSNAME parameter was ignored. Processing continued.

Programmer Response: Probable user error. If the job is to be executed again, correct the statement by removing the DSNAME or SYSOUT parameter.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF656I 16 EXTENTS EXCEEDED SPOOLING JOB [-jjj]

Explanation: A SYSIN reader was writing an input stream data set, defined by a DD * or DD DATA statement, on a direct access device. Because the data set was large, the reader had to repeatedly ask for more storage. This message was issued when so much storage was required that a 17th extent would have been needed. In the message text, jjj is the job name.

System Action: The SYSIN reader stopped writing the data set. If the message appears on the console, the reader stopped itself; if the message appears on the SYSOUT job listing, only job jjj was terminated.

Programmer Response: Probable user error. Remove the data set from the input stream, change its DD statement so that * or DATA is not specified, and place the data set on magnetic tape, direct access storage, or another card reader; then submit the job again.

If the data set must remain in the input stream, change the IEFDATA DD statement in the cataloged reader procedure to specify a larger incremental quantity in the SPACE parameter; then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

Operator Response: Report the message to the programmer, and restart the SYSIN reader.

IEF657I SYMBOL NOT DEFINED IN PROCEDURE

Explanation: In an EXEC statement calling a cataloged procedure, a value was assigned to a symbolic parameter not defined for that procedure.

System Action: The job is terminated.

Programmer Response: Probable user error. Include the symbolic parameter in the procedure's PROC statement, or remove the symbolic parameter from the EXEC statement.

Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF658I PROC VERB STATEMENT OUT OF SEQUENCE

Explanation: A statement which specified PROC in its operation field was not the first statement in a procedure. The PROC statement is valid only as the first statement in a procedure.

System Action: The job was terminated.

Programmer Response: Probable user error. If a PROC statement is to be used, make sure that it appears only as the first statement in the procedure.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF659I MISPLACED SYSCHK DD STATEMENT

Explanation: During execution of a deferred restart, it was found that a SYSCHK DD statement preceded the first EXEC statement in the resubmitted deck. However, the RESTART parameter of the JOB statement did not specify a checkpoint identification.

System Action: Restart was terminated.

Programmer Response: Probable user error. If checkpoint restart is desired, specify a checkpoint identification in the RESTART parameter of the JOB statement. If step restart is desired, remove the SYSCHK DD statement.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF660I MISSING SYSCHK DD STATEMENT

Explanation: During execution of a deferred checkpoint restart, it was found that the RESTART parameter of the JOB statement specified a checkpoint identification. However, a SYSCHK DD statement did not precede the first EXEC statement in the resubmitted deck.

System Action: Restart was terminated.

Programmer Response: Probable user error. Place a SYSCHK DD statement before the first EXEC statement. Then resubmit the job.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF661I RESTART STEP NOT FOUND

Explanation: During execution of a deferred restart, it was found that the RESTART parameter of the JOB statement specified a step name that could not be found either in the resubmitted deck or in the specified cataloged procedure.

System Action: Restart was terminated.

Programmer Response: Probable user error. Correct the RESTART parameter and resubmit the job.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF662I INVALID LABEL ON THE { PROC } STATEMENT
{ PEND }

Explanation: The name in the name field of the PROC or PEND statement, as indicated in the message text, either is too long or contains an invalid character.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Correct the name field of the statement. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF663I NO LABEL ON THE PROC STATEMENT

Explanation: No name was specified in the name field of the PROC statement for an in-stream procedure.

System Action: The job is terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: Probable user error. Specify a name in the name field of the PROC statement. Then submit the job again.

Problem Determination: Table I, items 1, 4, 7a, 29.

IEF665I EXCESSIVE NUMBER OF IN-STREAM PROCEDURES

Explanation: The job contains more than 15 in-stream procedures.

System Action: The job was terminated. The remaining job control statements for the job were scanned for syntax errors.

Programmer Response: Probable user error. Make sure that no more than 15 in-stream procedures are specified in the job. Then submit the job again. If the problem recurs, do the following before calling

IEF666I SPOOL FULL - OPERATOR STOPPED RDR

Explanation: In response to message IEF416I, the operator issued a STOP RDR command.

System Action: If message IEF604I does not follow this message, then space became available before the STOP RDR command was executed, and the job was read.

Programmer Response: None.

IEF667I Sccc ABEND IN OPEN DURING INTERPRETER
INITIALIZATION

Explanation: The reader/interpreter failed during OPEN processing with a completion code of ccc. If messages IEF406I and IEF407I follow, the termination occurred during opening of the SYSIN data set. If the message IEF407I follows, the termination occurred during opening of the SYS1.PROCLIB data set.

System Action: The reader closes and processing continues.

Operator Response: Probable user error. Report this message to the system programmer or installation manager.

Programmer Response: Check the IEFRDER and IEFPDSI DD statements in the reader procedure. Correct any errors and restart the reader.

Problem Determination: Table I, items 2, 7ab, 29.

IEF668I PEND VERB STATEMENT OUT OF SEQUENCE

Explanation: A PEND statement has been encountered which does not terminate an in-stream procedure; that is, either it is not preceded by a valid PROC statement, or the procedure contains data, a DD * statement, or a DD DATA statement. The PEND verb is valid only as the last statement in the in-stream procedure.

System Action: The job was terminated. The remaining job control statements for the job are scanned for syntax errors.

Programmer Response: If the PEND statement is unnecessary, remove it. Otherwise, either supply a correct PROC statement or remove from the in-stream procedure the data, DD * statement or DD DATA statement. Resubmit the job.

IEF669I INVALID REFER FORWARD TO DYNAM DATA SET

Explanation: The system has encountered a DD statement in which the DDNAME parameter specifies the name of a DD statement that contains a DYNAM parameter.

System Action: The job is terminated. The remaining job control statements are scanned for syntax errors.

Programmer Response: Probable user error. Either change the reference in the DDNAME parameter or delete the DYNAM parameter in the referenced DD statement. Submit the job again.

Problem Determination: Table I, items 1, 4, 5a, 29.

IEF670I NO VALUE ASSIGNED TO SYMBOLIC PARAMETER ON
PROC STMT VIA THE EXEC STMT

Explanation: A jobstep calling a cataloged procedure has not provided a value in its EXEC statement for a symbolic

parameter contained in the PROC statement of the procedure. The symbol has no default value, and is therefore undefined.

Note: The symbolic parameter in question may have the same spelling as some valid EXEC statement keyword, such as REGION.

System Action: The job is terminated.

Programmer Response: Correct the error by giving the symbolic parameter a default value on the PROC statement, by making a value assignment for it on the EXEC statement, or by changing the name of the symbolic parameter.

Problem Determination: Table I, items 1, 3, 4, 7a, 29.

IEF861I FOLLOWING RESERVED DATA SET NAMES
UNAVAILABLE TO jjj

Explanation: The job named jjj has requested use of one or more data set names that are reserved for other jobs currently executing in the system. Message IEF863I and IEF864D follow, listing the data set name(s) and requesting operator action.

System Action: Processing of the job named jjj is suspended.

Operator Response: Respond as indicated for message IEF864D.

IEF862I FOLLOWING RESERVED DATA SET NAMES
UNAVAILABLE TO jjj, IN Pnn.

Explanation: While scheduling is being performed in a large partition for the small partition nn, the job named jjj has requested use of one or more data set names that are reserved for other jobs currently executing in the system. Messages IEF863I and IEF864D follow, listing the data set name(s) and requesting operator action.

System Action: Processing of the job named jjj is suspended.

Operator Response: Respond as indicated for message IEF864D.

IEF863I DSNAME=dsn

Explanation: Data set name dsn is not available to the job named in preceding messages IEF861I or IEF862I. This message will appear for each data set name that is not available.

System Action: None.

Operator Response: None.

IEF864D REPLY 'RETRY' OR 'CANCEL' [OR 'WAIT']

Explanation: This message follows message IEF863I and permits the operator to respond to preceding messages IEF861I or IEF862I.

System Action: The system action depends on the operator's response.

Operator Response: If the job named in preceding message IEF861I or IEF862I is requesting data set names which another job or series will release upon termination, enter REPLY xx, 'RETRY'. However, the reply need not be entered until another job in the system has terminated and the data set names are available. The scheduler will then repeat its attempt to reserve the data set name(s) for the job. If data set names are still not available, the message sequence is repeated.

In MFT, if the partition in which scheduling is being performed is the only large partition which does not contain an unending job, a system interlock can occur unless REPLY xx, 'CANCEL' is entered. Knowledge of the system and of the status of all data set names requested will normally determine the reply. However, if at least one other large partition is available for scheduling and the data set name(s) can become available, REPLY xx, 'RETRY' should be entered.

In MVT, enter REPLY xx, 'CANCEL' to terminate the job. The system will terminate processing of the job named in message IEF861I or IEF862I, and message IEF452I will be issued.

In MVT only, enter REPLY xx, 'WAIT' to suspend processing of the job named in message IEF861I or IEF862I until the data set name(s) become available. When the data set names are free, the system will reserve them for the job and processing will continue.

IEF865A Q FULL - REPLY 'WAIT' OR 'CANCEL' - jjj.

Explanation: A transient input reader has run out of available direct access space in the SYS1.SYSJOBQE data set on which to place input data. Therefore, the reader cannot continue interpreting job jjj, the job currently being read.

System Action: The system issues a DISPLAY A command to display the active jobs and job steps. Further system action depends on the operator's response.

Operator Response: If termination of another job currently executing in the system will free space for the input data set, enter REPLY xx, 'WAIT'. The reader will wait until space in the SYS1.SYSJOBQE data set is made available, and then will continue.

If the reader is to be terminated enter REPLY xx, 'CANCEL'. Then, if the reader is to be restarted, reposition the input stream to begin with the job named jjj. This reply must be used if the reader is operating in the only scheduler-size partition which does not contain an unending job such as graphics or telecommunications.

IEF866E SCHEDULER ABEND COMPLETION CODE hhh

Explanation: During execution of a scheduler routine, the ABEND routine was entered and abnormal termination occurred. Completion code hhh is in hexadecimal.

System Action: The system has recovered in the affected partition, and the scheduler has been restarted. However, there may be extraneous information left on the SYS1.SYSJOBQE data set as a result of the abnormal termination.

Operator Response: To remove the extraneous information left on the SYS1.SYSJOBQE data set, restart the system at the earliest convenient time.

Problem Determination: Table I, items 1, 2, 3, 4, 7a, 29.

IEF867D CPO FULL -- REPLY 'WAIT' OR 'CANCEL' jjj

Explanation: Direct access space for input stream data could not be allocated by a reader for the job named jjj.

System Action: The system issues a DISPLAY ACTIVE command to display the active jobs and job steps. Further system action depends on the operator's response. (Jobs in other partitions continue execution.)

Operator Response: If the system contains at least one other scheduler-size partition which does not contain an unending job, enter REPLY xx, 'WAIT'. This reply causes the reader to wait on an event control block (ECB) which will be posted by a writer or terminator when space used for concurrent peripheral operations online (CPO) is freed. The reader will then repeat its attempt to allocate space. If sufficient space is still not available, the message is repeated.

If the reader occupies the only large partition available for scheduling enter REPLY xx, 'CANCEL'. This reply will cause the reader to be closed and make the partition available for use by other jobs. When sufficient CPO space has been subsequently freed, the reader may be restarted. However, reposition the input stream to begin with the job named jjj.

Note: Inform the system programmer that you have received this message.

Programmer Response: If this message occurs frequently, list the VTOC of the volume(s) in question to determine whether more space is needed for input stream data, or whether a larger VTOC is needed.

Note: Check the space requirement specified in the IEFDATA DD statement of the reader procedure. The amount of space specified there is allocated for each job with input stream data, regardless of the amount of spaces actually used. If space requests are unusually high, it may be

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advisable to force CPO data to be written on a unique direct access device by specifying the volume serial number in the IEFDATA DD statement.

IEF868I ddd WTR WAITING FOR WORK

Explanation: The writer associated with device ddd is waiting for work. That is, there are no output data sets on the queue of the output class(es) that this writer was established to service.

System Action: None.

Operator Response: If jobs currently executing in the system will establish output queue entries of the class(es) assigned this writer, none. Otherwise, the partition may be redefined as a problem program partition or the MODIFY command can be used to assign new output classes to the writer.

IEF869I hh.mm.ss QUEUE DISPLAY [id]
QUEUE JOBS STAT QUEUE JOBS STAT
XXXX X XXXX XXXX XXXX X XXXX XXXX
QUEUE JOBS STAT QUEUE JOBS STAT
XXXX X XXXX XXXX XXXX X XXXX XXXX

Explanation: This is the control line of the Status Display initiated by the DISPLAY Q or DISPLAY Q, (list) command. The label line describes the fields of data.

[id]

A three-digit decimal identification number. It is used in conjunction with the CONTROL C,D command for canceling status displays being written on typewriter or printer consoles or being displayed in-line (not in a display areas on a display (CRT) console. This identification number does not appear when the display is presented in a display area on a display console.

QUEUE

This field is one of the following:

- JOB X, where X is the class identifier of an input queue.
- HOLD, which contains all jobs assigned to the HOLD queue by the HOLD command, or by the TYPRUN=HOLD parameter of the JOB statement.
- SOUT X, where X is the class identifier of an output queue.

JOBS

The number, in decimal, of the jobs contained in the queue of the QUEUE field.

STAT

HELD if queue has been held.

Operator Response: None.

IEF871I SYSTEM ISSUED DISPLAY A

Explanation: This message accompanies message IEF865A or IEF867D, and indicates that the system has entered a DISPLAY

ACTIVE command to display the active jobs and job steps.

System Action: The system entered a DISPLAY ACTIVE command. Further system action depends on the operator's response to message IEF865A or IEF867D.

Operator Response: None.

IEF874I ddd DSO INVALID DCB SUBPARAMETER

Explanation: While processing a start command, the direct system output (DSO) writer detected an error in one of the DCB subparameters. If a 3525 punch is on the system, check the DSO procedure; the FUNC parameter values are probably invalid for the IEFORDER DD statement. (Valid parameters are I and P.)

System Action: The DSO writer will terminate.

Operator Response: Probable user error. Notify the system programmer or installation manager.

Problem Determination: Table I, items 2, 7a, 26a, 29.

IEF875I proc FAILED, JCL ERROR

Explanation: A START command was entered for procedure proc in the SYS1.PROCLIB data set but the system encountered an error in the job control statements in the procedure.

System Action: The job is terminated.

Operator Response: Inform the programmer that you have received this message.

Programmer Response: Probable user error. Correct any errors in the job control statements in the procedure, and execute the job step again.

Problem Determination: Table I, items 2, 26d, 29.

IEF876I proc FAILED, I/O ERROR

Explanation: A START command was entered for procedure proc in the SYS1.PROCLIB data set but the system encountered an input/output error while attempting to read the job control statements in the procedure.

System Action: The job is terminated.

Operator Response: Inform the programmer that you have received this message.

Programmer Response: Probable user error. Make sure that the SYS1.PROCLIB data set has not been modified incorrectly.

Problem Determination: Table I, items 2, 7a, 26d, 29.

IEF877I proc FAILED, INSUFFICIENT Q-SPACE

Explanation: A START command was entered for procedure proc in the SYS1.PROCLIB data set; the procedure could not be started because not enough logical tracks were available in the SYS1.SYSJOBQ data set.

System Action: The job is terminated.

Operator Response: Probable user error. Stop some of the readers that are operating and allow the jobs that are in the system to finish processing. Then try the job again.

Problem Determination: Table I, items 2, 8a, 29.

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System Utility Messages (IEH)

Component Name	IEH																
Program Producing Message	System utility programs: IEHATLAS, IEHDASDR, IEHINITT, IEHIOSUP, IEHLIST, IEHMOVE, IEHPROGM.																
Audience and Where Produced	For programmer: SYSPRINT data set. For operator: console.																
Message Format	<p>IEHnnnI text (in SYSPRINT) xx IEHnnns text (on console)</p> <p>nnn Message serial number, which is coded to indicate the utility program:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">1nn</td> <td style="width: 33%;">IEHLIST</td> <td style="width: 33%;">6nn</td> <td>IEHINITT</td> </tr> <tr> <td>2nn</td> <td>IEHPROGM</td> <td>7nn</td> <td>IEHIOSUP</td> </tr> <tr> <td>3nn and 4nn</td> <td>IEHMOVE</td> <td>8nn</td> <td>IEHDASDR</td> </tr> <tr> <td></td> <td></td> <td>9nn</td> <td>IEHATLAS</td> </tr> </table> <p>text Message text.</p> <p>xx Message reply identification (absent, if operator reply not required).</p> <p>s Type code:</p> <p>A Action; operator must perform a specific action. D Decision; operator must choose an alternative. I Information; no operator action is required.</p>	1nn	IEHLIST	6nn	IEHINITT	2nn	IEHPROGM	7nn	IEHIOSUP	3nn and 4nn	IEHMOVE	8nn	IEHDASDR			9nn	IEHATLAS
1nn	IEHLIST	6nn	IEHINITT														
2nn	IEHPROGM	7nn	IEHIOSUP														
3nn and 4nn	IEHMOVE	8nn	IEHDASDR														
		9nn	IEHATLAS														
Comments	None.																
Associated Publications	<u>IBM System/360 Operating System: Utilities, GC28-6586</u>																
Problem Determination	Refer to the fold-out in part VI of this publication for problem determination instructions.																

IEHLIST Program Messages

IEH101I NO CATALOG ON SPECIFIED VOLUME

Explanation: No catalog exists on the volume identified in the LISTCTLG statement.

System Action: The request is ignored. (The return code is 8.)

Programmer Response: Probable user error. Ensure that the correct volume is specified. (If a volume was not specified, then the system residence volume is assumed.) If the volume was correct, insert a LISTVTOC statement for the other system volumes to determine where the SYSCTLG data set resides. If

Problem Determination: Table I, items 1, 2, 3, 7a, 13, 29.

IEH102I THIS VOLUME DOES NOT CONTAIN DATA SET dsn

Explanation: Data set dsn specified in the LISTVTOC or LISTPDS statement is not contained in the specified volume's table of contents.

System Action: The request is ignored. (The return code is 8.)

Programmer Response: Probable user error. Ensure that the data set name and volume are specified correctly. (If a volume was not specified, the system residence volume is assumed.) If the volume and data set name are correct, insert a LISTVTOC statement for the system volumes to determine where the data set resides.

Problem Determination: Table I, items 1, 2, 3, 7a, 13, 29.

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IEH103I INVALID CONTROL STATEMENT -- xxx

Explanation: A utility control statement is invalid. In the message text, xxxx is the entire invalid statement.

System Action: The request is ignored. (The return code is 8.)

Programmer Response: Probable user error. Correct any improper specifications and/or misspelled keywords on the preceding statement.

Problem Determination: Table I, items 1, 2, 3, 7a, 13, 29.

IEH104I THE PDS ORGANIZATION DOES NOT APPLY FOR DATA SET xxx

Explanation: Data set dsn specified in the LISTPDS statement is not partitioned.

System Action: The request is ignored. (The return code is 8.)

Programmer Response: Probable user error. Ensure that the data set name specified is correct. If the name is correct, insert a LISTVTOC FORMAT statement specifying the data set name and volume; the true data set information will then be listed.

Problem Determination: Table I, items 1, 2, 3, 7a, 13, 29.

IEH105I ILLEGAL NODE POINT SPECIFIED, OR INCONSISTENT CATALOG STRUCTURE FOUND -- REQUEST TERMINATED

Explanation: Either the node point identified in the LISTCTLG statement is invalid, or an incorrect catalog structure exists.

System Action: The request is ignored. (The return code is 8.)

Programmer Response: Ensure that the node point specified in the LISTCTLG statement is correct or that no inconsistencies occur in the catalog structure, as necessary.

Problem Determination: Table I, items 1, 2, 3, 7a, 15, 29. Execute the IEHDASDR utility program (dump to printer) for the catalog data set, and save the output.

IEH106I UNAVAILABLE DEVICE TYPE OR VOLUME I.D SPECIFIED

Explanation: Either the VOL parameter of the control statement is invalid or the volume specified cannot be mounted.

System Action: The request is ignored. (The return code is 8.)

Programmer Response: Probable user error. Ensure that a DD statement is included for the volume, the VOL parameter of the control statement is specified correctly, and the volume is mounted.

Problem Determination: Table I, items 1, 2, 3, 7a, 13, 29.

IEH107I JOB TERMINATED -- I/O ERROR ON SYSIN

Explanation: An input/output error occurred while reading the SYSIN data set; additional input statements cannot be read.

System Action: The program is terminated. (The return code is 16.)

Programmer Response: Resubmit the job with all the control statements that were not processed on the initial pass.

Problem Determination: Table I, items 1, 2, 3, 7a, 13, 29.

IEH108I REQUEST TERMINATED -- PERMANENT I/O ERROR WHILE READING DATA SET

Explanation: A permanent input/output error occurred while reading a volume table of contents, a catalog, or a partitioned data set.

System Action: The program is terminated. (The return code is 12.)

Programmer Response: Rerun the job.

Problem Determination: Table I, items 1, 2, 3, 13, 29.

Execute the same IEHLIST operation for some option other than the failing one (i.e., if using LISTVTOC FORMAT, attempt LISTVTOC DUMP; if using LISTPDS FORMAT, attempt LISTPDS DUMP; if using LISTCTLG, attempt LISTCTLG NODE=, for the failing node) and save the output.

Execute the IMAPTFLS service aid program (dump to printer) for the failing data set (VTOC, SYSCTLG, or PDS), and save the output.

Execute the IEHDASDR utility program (dump to printer) for the failing data set (VTOC, SYSCTLG, or PDS), and save the output.

IEH109I SYSIN CANNOT BE OPENED -- CHECK SYSIN DD CARD

Explanation: Either the SYSIN DD statement was omitted from the job step or the SYSIN ddname is incorrect.

System Action: The program is terminated. (Return code - 16.)

Programmer Response: Probable user error. Insert the missing SYSIN DD statement or correct the ddname, as necessary.

Problem Determination: Table I, items 1, 2, 3, 7a, 13, 29.

IEH110I JOB TERMINATED -- INVALID DCB PARAMETER

Explanation: The SYSIN DD statement specified a block size that was not a

multiple of the specified logical record length.

System Action: The program is terminated. (Return code - 16.)

Programmer Response: Probable user error. Correct the BLKSIZE parameter on the SYSIN DD statement.

Problem Determination: Table I, items 1, 2, 3, 7a, 13, 29.

IEH112I MEMBERS OF SPECIFIED PDS NOT CREATED BY LINKAGE EDITOR - DUMP OPTION OUTPUT GENERATED

Explanation: The directory entry is less than 34 bytes, indicating that this member was not created by the Linkage Editor.

System Action: Processing continues as if the DUMP option were specified for this member. The program will attempt to format subsequent member(s) as they exist.
Programmer Response: None.

Problem Determination: Table I, items 1, 2, 3, 7a, 13, 29.

IEHPRGM PROGRAM MESSAGES

IEH201I INVALID REQUEST. STATEMENT IGNORED

Explanation: In the utility statement preceding this message, the operation is invalid.

System Action: The request is ignored. (Return code - 8.)

Programmer Response: Probable user error. Correct the invalid operation on the preceding statement. Rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH202I INVALID KEYWORD OR CONTROL STATEMENT SYNTAX

Explanation: In the utility statement preceding this message, a required keyword is incorrect.

System Action: The request is ignored. (Return code - 8.)

Programmer Response: Probable user error. Correct the required keyword on the preceding statement. Rerun the job.

Problem Determination: Table I, items 1, 3, 15, 29.

IEH203I THE SYSCTLG DATA SET IS NOT AVAILABLE OR FORMS A LOOP

Explanation: Either no catalog exists on the volume specified by the CVOL parameter of the control statement or the volumes are incorrectly connected to each other.

System Action: The request is ignored. (Return code - 8.)

Programmer Response: Probable user error. Either allocate space for the catalog on the specified volume or make sure the volumes are correctly connected to each other, as necessary.

Problem Determination: Table I, items 1, 3, 15, 25ad, 29.

IEH204I STATUS OF THE REQUESTED TASK CANNOT BE DETERMINED. AN UNDEFINED ERROR CODE HAS BEEN ENCOUNTERED

Explanation: The return code returned by a system macro instruction is invalid.

System Action: The request is ignored. (Return code - 8.)

Programmer Response: None.

Problem Determination: Table I, items 1, 3, 15, 29.

IEH205I INFORMATION IN CONTROL STATEMENT IS REDUNDANT NOT SUFFICIENT

Explanation: In the utility statement preceding this message, either an invalid parameter was specified or all the required parameters were not specified for the operation requested.

System Action: The request is ignored. (Return code - 8.)

Programmer Response: Probable user error. Correct the parameters on the preceding statement.

Problem Determination: Table I, items 1, 3, 15, 29.

IEH206I CVOL IS NOT DIRECT-ACCESS

Explanation: In the utility statement preceding this message, the volume specified in the CVOL parameter is not on a direct access device.

System Action: The request is ignored. (Return code - 8.)

Programmer Response: Probable user error. Correct the device type specification in the CVOL parameter of the preceding statement.

Problem Determination: Table I, items 1, 3, 15, 29.

IEH207I STATUS OF USERS REQUEST TO
{SCRATCH} DATA SET dsnn
{RENAME }

VOLUME ID	ACTION TAKEN	REASON
ser	xxxx	yyyy

END OF LISTING OF DATA SETS TO BE SCRATCHED OR RENAMED

Explanation: An unusual condition occurred during a SCRATCH or RENAME operation. In the message text, the third line appears for each volume on which the data set resides; dsn is the data set name, ser is the serial number of the volume, xxxx is the action taken on the volume, and yyy is the condition.

System Action: The request is ignored. (Return code - 8.)

Programmer Response: Probable user error. Ensure that the data set name is specified correctly on the control statement.

Problem Determination: Table I, items 1, 3, 15, 25a, 29.

IEH207I STATUS OF USERS REQUEST TO SCRATCH THE VOLUME TABLE OF CONTENTS

DATA SET NAME	ACTION TAKEN	REASON
dsn	xxxx	YYYY

END OF SCRATCH VTOC

Explanation: For the first format of the message, an unusual condition occurred during a SCRATCH or RENAME operation. In the message text, the third line appears for each volume on which the data set resides; dsn is the data set name, ser is the serial number of the volume, xxxx is the action taken on the volume, and yyyy is the condition.

For the second format of the message, either an unusual condition occurred during a SCRATCH VTOC operation or a data set was successfully scratched. In the message text, the third line appears for each data set; dsn is the data set name, xxxx is the action taken on the data set, and yyyy is the condition.

System Action: For the first format of the message, the request is ignored. (Return code - 8.)

For the second format of the message, processing continues.

Programmer Response: Probable user error for the first format of the message. Ensure that the data set name is specified correctly on the control statement.

Problem Determination: Table I, items 1, 3, 15, 25a, 29. For the second format of the message no programmer response is required.

IEH208I LIST TRUNCATED TO 1 VOLUME FOR SCRATCH VTOC

Explanation: In the SCRATCH VTOC statement preceding this message, more than one volume was specified.

System Action: Only the data sets on the first volume specified are scratched; the remaining volumes are ignored. (Return code - 8.)

Programmer Response: Probable user error. Insert a SCRATCH VTOC statement for each volume that was not processed and rerun the job.

Problem Determination: Table I, items 1, 3, 15, 29.

IEH209I STATUS OF USERS REQUEST TO SCRATCH THE VOLUME TABLE OF CONTENTS

DATA SET NAME	ACTION TAKEN	REASON
dsr	xxxx	YYYY

Explanation: Either an unusual condition occurred during a SCRATCH VTOC operation or a data set was successfully scratched. In the message text, the third line appears for each data set; dsn is the data set name, xxx is the action taken on the data set, and yyyy is the condition.

System Action: Processing continues.

Programmer Response: No programmer response is required.

IEH210I REQUEST CANNOT BE SERVICED

Explanation: An unusual condition occurred during a catalog or index operation. Following this message is a more specific message describing the error condition in detail.

System Action: The request is ignored. (The return code is 0 when there is an attempt to uncatalog a data set that is not cataloged; in all other cases, the return code is 8.)

Programmer Response: Probable user error. Respond as indicated to the message that follows this message.

Problem Determination: Table I, items 1, 3, 15, 29.

IEH211I REQUIRED VOLUME COULD NOT BE MOUNTED

Explanation: One of the following occurred:

1. No device was allocated for the required volume; that is, the serial number of the required volume was not found in the unit control block and no other volume allocated to the job could be unloaded to allow the mounting of the required volume.
2. A device type was specified which is either not existent or not included for the system during system generation.

System Action: The request is ignored. (Return code - 8.)

Programmer Response: Probable user error. Ensure that the volume serial number specified on the DD statement is the same as the volume serial number specified on the control statement.

Problem Determination: Table I, items 1, 3, 15, 29.

IEH212I I/O ERROR ON SYSIN DATA SET -- JOB
TERMINATED

Explanation: An uncorrectable
input/output error occurred while the
SYSIN data set was being read.

System Action: The program is terminated.
(Return code - 8.)

Programmer Response: Rerun the job.

Problem Determination: Table I, items 1,
3, 15, 29.

IEH213I JOB TERMINATED -- INVALID BLOCKSIZE
SPECIFIED IN SYSIN DCB

Explanation: In the SYSIN DD statement
preceding this message, the block size
specified is not a multiple of the logical
record length (that is, is not a multiple
of 80).

System Action: The program is terminated.
(Return code - 16.)

Programmer Response: Probable user error.
Correct the block size specified in the
preceding statement. Rerun the job.

Problem Determination: Table I, items 1,
3, 15, 29.

IEH214I CONTINUATION CARD EXPECTED -- REQUESTS
CANNOT BE SERVICED

Explanation: The statement preceding this
message is not a valid continuation
statement; that is, the previous statement
contains a nonblank character in column
72, indicating that a continuation
statement is to follow.

System Action: The request is ignored
(Return code - 8.)

Programmer Response: Probable user error.
Correct the preceding continuation
statement. Rerun the job.

Problem Determination: Table I, items 1,
3, 15, 29.

IEH215I SYNTAX ERROR ENCOUNTERED IN NAME FIELD OF
CONTROL STATEMENT -- PROCESSING IS
CONTINUED

Explanation: In the statement preceding
this message, the name field contains one
of the following errors:

- The first character is not alphabetic.
- A character was encountered that is not
alphanumeric or national.
- The name field is longer than 8
characters.

System Action: Processing continues.
(Return code - 4.)

Programmer Response: Probable user error.
Correct the name field on the preceding
statement. Rerun the job.

Problem Determination: Table I, items 1,
3, 15, 29.

IEH216I SYSIN CANNOT BE OPENED -- CHECK SYSIN DD
CARD

Explanation: Either the SYSIN DD
statement was inadvertently omitted from
the job step or it was included but the
ddname was coded incorrectly.

System Action: The job is terminated.
(The return code is 16.)

Programmer Response: Probable user error.
Correct the SYSIN DD statement and
resubmit the job.

Problem Determination: Table I, items 1,
3, 15, 29.

IEH218I JOB TERMINATED. SIX INVALID PASSWORDS
WERE SUPPLIED

Explanation: A maximum of five invalid
passwords are allowed per job step.

System Action: The job step is
terminated. (Return code - 16.)

Programmer Response: Probable user error.
Resubmit the requests not satisfied and
supply valid passwords.

Problem Determination: Table I, items 1,
3, 15, 29. If attempting to add, replace,
or delete entries in the PASSWORD data
set, use the LIST utility statement to
list the entries associated with the
invalid passwords.

IEH219I I/O ERROR IN THE PASSWORD DATA SET

Explanation: An incorrectable
input/output error occurred while reading
or writing the PASSWORD data set.

System Action: The program is terminated.
(Return code - 12.)

Programmer Response: None.

Problem Determination: Table I, items 1,
3, 15, 29. Execute the IEHLIST utility
program to list the VTOC of the system
residence volume. Use the DUMP mode and
set DSNAME=PASSWORD. Have the resulting
listing available.

IEH220A job name, step name, 'utility statement
name,' REPLY WITH

```
('PASSWORD1')  
'PASSWORD2'  
'CPASSWORD')
```

Explanation: The specified password on
the utility statement is invalid or
missing and must be supplied by the
operator.

System Action: The program enters the
wait state until the operator responds.

IEH

Operator Response: Entry REPLY xx,'password,' where password is the password supplied by the programmer for the job, step, and utility statement named in the message. The password can consist of up to eight characters. If no password was supplied, enter blanks for the password or simply double quotes, as follows: REPLY xx,'''.

IEH221I THE PASSWORD DATA SET IS FULL

Explanation: Either the PASSWORD data set is too small to hold all necessary entries or it contains unused entries.

System Action: The request is ignored. (Return code - 8.)

Programmer Response: Probable user error. Either recreate the PASSWORD data set with a larger extent or delete unused entries.

Problem Determination: Table I, items 1, 3, 15, 29. Execute the IEHLIST utility program to list the VTOC of the system residence volume. Use the DUMP mode and set DSNNAME=PASSWORD. Have the resulting listing available.

IEH222I DATA SET PROTECTION STATUS NOT ALTERED

Explanation: The volume on which the specified data set resides cannot be accessed. The volume is not online, the volume information on the utility control statement is invalid or missing, or the data set was allocated in this job.

System Action: The PASSWORD data set is updated but the protection status of the data set in the data set control block (DSCB) is not altered. (Return code - 8.)

Programmer Response: Probable user error. Action is required only if the protection status in the DSCB is incorrect.

If protection is being added and the protection status of the data set was not specified when the data set was created, or if the protection status of a data set is being changed between read/write protection and read-without-password protection:

1. Provide a data definition statement that defines the mountable volume on which the data set resides.
2. Change the protection status in the DSCB using a REPLACE utility statement for the entry just added or changed in the PASSWORD data set. Supply the new protection status and make sure the volume information is correct.

If protection is being deleted and the data set has not been scratched:

1. Provide a data definition statement that defines the mountable volume on which the data set resides.
2. Add the entry just deleted to the PASSWORD data set using an ADD utility statement.

3. Scratch the data set if desired.
4. Delete the entry again from the PASSWORD data set using a DELETEP utility statement.

Problem Determination: Table I, items 1, 3, 15, 29.

IEH223I THE PASSWORD DATA SET DOES NOT EXIST

Explanation: The PASSWORD data set must reside on the system residence volume before using IEHPROGM to add, delete, or replace entries.

System Action: The request is ignored. (Return code - 8.)

Programmer Response: Probable user error. Allocate a PASSWORD data set and resubmit the job.

Problem Determination: Table I, items 1, 3, 15, 29. Execute the IEHLIST utility program to list the VTOC (FORMAT mode) of the system residence volume. Have the resulting listing available.

IEH224I WARNING UNABLE TO ALTER PROTECTION STATUS OF TAPE DATA SETS

Explanation: IEHPROGM cannot modify the label of a tape data set.

System Action: The PASSWORD data set is updated but the protection status of the data set in the tape label is not altered. (Return code - 8.)

Programmer Response: Action is required only if the protection status in the tape label is incorrect. If protection is being added, use job control language (LABEL parameter) to set the desired protection status in the tape label. If protection is being deleted, use the IEHINITP utility program to relabel the tape and delete protection.

IEH225I DUPLICATE ENTRY EXISTS IN THE PASSWORD DATA SET

Explanation: The password to be assigned has already been assigned to this data set.

System Action: The request is ignored. (Return code - 8.)

Programmer Response: Probable user error. Either select a new password or delete the previously assigned password before attempting to assign the same password.

Problem Determination: Table I, items 1, 3, 15, 29. Use the LIST utility statement to list the entry in the PASSWORD data set associated with this password and data set name.

IEH226I LOCATE MACRO FAILED. LOCATE RETURN CODE=xx. INDEXES SEARCHED=yy

Explanation: An error occurred during execution of the LOCATE macro issued to

search the catalog for a data-set name. The return code from the LOCATE macro is xx, and the number of indexes searched is yy.

System Action: The request is ignored. (Return code - 8.)

Programmer Response: Probable user error. (To interpret the return code, refer to the publication IBM System/360 Operating System: Data Management for System Programmers, GC28-6650.) Correct any errors and resubmit the ignored request.

Problem Determination: Table I, items 1, 3, 15, 25d, 29.

IEH227I OBTAIN MACRO FAILED. OBTAIN RETURN CODE=xx

Explanation: An error occurred during execution of the OBTAIN macro issued to search the VTOC for a DSCB. The return code from the OBTAIN macro is xx.

System Action: The request is ignored. (Return code - 8.)

Programmer Response: Probable user error. (To interpret the return code, refer to the publication IBM System/360 Operating System: Data Management for System Programmers, GC28-6650.) Correct any errors and resubmit the ignored request.

Problem Determination: Table I, items 1, 3, 15, 25b, 29.

IEH228I OPERATOR FAILED TO SUPPLY {PASSWORD1}
{PASSWORD2}

Explanation: More than two invalid passwords have been supplied for the specified password in the utility statement preceding this message.

System Action: The request is ignored. (Return code - 8.)

Programmer Response: Probable user error. Resubmit the ignored request and supply a valid password.

Problem Determination: 1, 2, 3, 15, 29. If attempting to add, delete, or replace an entry in the PASSWORD data set, use the LIST utility statement to list the entry in the PASSWORD data set.

IEH229I INVALID PARAMETER IN PARM FIELD OF EXEC CARD

Explanation: An invalid parameter was found either in the PARM field of the EXEC statement or in the PARAM field of the LINK or ATTACH macro.

System Action: Default values are assigned to the invalid parameters. Processing continues. (Return code - 4.)

Programmer Response: Probable user error. Correct any errors and rerun the job.

Problem Determination: 1, 3, 15, 29.

IEH230I VTOC NOT CONVERTED FROM DOS TO OS DATA SET NOT CATALOGED OR INDEX NOT BUILT ... UNUSUAL END

Explanation: The VTOC cannot be converted to OS format because one of the following conditions exists in the VTOC structure:

- A split cylinder extent resides on cylinder zero.
- A split cylinder extent resides on the same cylinder as the VTOC.
- A split cylinder extent resides on the same cylinder as a non-split cylinder extent.
- The VTOC begins on track zero of cylinder zero.

System Action: The request is ignored. (Return code - 8.)

Programmer Response: Probable user error. Correct the VTOC structure and rerun the job.

Problem Determination: Table I, items 1, 3, 15, 25c, 29.

IEHMOVE PROGRAM MESSAGES

IEH301I INCLUDE OP NOT VALID

Explanation: The INCLUDE statement preceding this message is not valid with the specified MOVE or COPY operation.

System Action: The MOVE/COPY request is ignored. (Return code - 8.)

Programmer Response: Probable user error. Correct the utility control statement.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH302I EXCLUDE OP NOT VALID

Explanation: The EXCLUDE statement preceding this message is not valid with the specified MOVE or COPY operation.

System Action: The MOVE/COPY operation is ignored. (Return code - 8.)

Programmer Response: Probable user error. Correct the utility control statements.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH303I REPLACE OP NOT VALID

Explanation: The REPLACE statement preceding this message is not valid with the specified MOVE or COPY operation.

System Action: The MOVE/COPY request is ignored. (Return code - 8.)

Programmer Response: Probable user error. Correct the utility control statements.

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Problem Determination: Table I, items 1, 13, 22, 29.

IEH304I SUBORDINATE REQ-SKIPPED

Explanation: One of the following conditions occurred:

- The INCLUDE, EXCLUDE, REPLACE, or SELECT statement preceding this message is not preceded by a MOVE or COPY statement.
- The MOVE/COPY request is being ignored for the reason given in the preceding message.
- The data set is being loaded for the reason given in the preceding message.

System Action: The MOVE/COPY request is ignored. (Return code - 8.)

Programmer Response: Insert a MOVE or COPY statement, or correct the reason for the MOVE or COPY statement's having been ignored.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH305I MULTIPLE KEYWORD ERROR

Explanation: In the statement preceding this message, duplicate or conflicting keywords are specified.

System Action: The MOVE/COPY request is ignored. (Return code - 8.)

Programmer Response: Probable user error. Correct the keywords on the preceding statement. If the problem preceding statement.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH306I MISPLACED KEYWORD ERROR

Explanation: A MOVE/COPY control statement contains a misplaced keyword.

System Action: The MOVE/COPY request is ignored. (The return code is 8.)

Programmer Response: Probable user error. Check the format of permissible keywords in the control statement.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH307I KEYWORD NOT PERMITTED

Explanation: In the statement preceding this message, a keyword is invalid.

System Action: The MOVE/COPY request is ignored. (Return code - 8.)

Programmer Response: Probable user error. Correct the invalid keyword on the preceding statement.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH308I INVALID PARAMETER ERROR

Explanation: In the statement preceding this message, a parameter is invalid.

System Action: The MOVE/COPY request is ignored. (Return code - 8.)

Programmer Response: Probable user error. Correct the invalid parameter on the preceding statement.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH309I SYNTAX ERROR

Explanation: The syntax of the statement preceding this message is invalid.

System Action: The MOVE/COPY operation is ignored. (Return code - 8.)

Programmer Response: Probable user error. Correct the syntax of the preceding statement.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH310I LENGTH ERROR

Explanation: In the statement preceding this message, a keyword value contains too many characters (for example, DSN=NAME=NINECHARS contains more than eight characters), or the EXPAND keyword does not specify a number in the decimal range 1-99.

System Action: The MOVE/COPY request is ignored. (Return code - 8.)

Programmer Response: Probable user error. Correct the length error in the preceding statement.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH311I INCOMPLETE REQUEST

Explanation: The statement preceding this message does not contain adequate information to perform the MOVE/COPY operation.

System Action: The MOVE/COPY request is ignored. (Return code - 8.)

Programmer Response: Probable user error. Include all required information on the preceding statement so that the MOVE/COPY operation can be performed.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH313I DATA SET dsn HAS INCORRECT FORMAT FOR UNLOADED DATA SET

Explanation: The format of unloaded data set dsn is incorrect; therefore, the data set cannot be moved or copied. The records are apparently out of sequence.

System Action: The MOVE/COPY request is ignored. (Return code - 8.)

Programmer Response: Make sure that the correct tape or direct access device is mounted, and that the data has not been altered.

Problem Determination: Table I, items 1, 13, 22, 29. Have the unloaded data set available.

IEH315I UNABLE TO FIND FROM VOLUME

Explanation: The 'FROM' volume cannot be located. Possibly, the FROM keyword was missing from the MOVE or COPY statement, or the CVOL keyword was specified but the data set was not cataloged.

System Action: The MOVE/COPY request is ignored. (Return code - 4.)

Programmer Response: If the data set is not cataloged, ensure that the FROM keyword is included on the MOVE or COPY statement. Also, make sure that a DD statement for the 'FROM' device exists and is compatible with the utility control information.

Problem Determination: Table I, items 1, 13, 22, 25d, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEH316I MODEL DSCB FOR GENERATION DATA GROUP CANNOT BE WRITTEN

Explanation: An error (possibly, a permanent input/output error) occurred during an attempt to create the model data set control block (DSCB) for a generation data group, or if there was no format 0 block available in the VTOC.

System Action: The MOVE/COPY request is ignored. (Return code - 8.)

Problem Determination: Table I, items 1, 13, 22, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEH319I MEMBER mem NOT MOVED/COPIED. DUPLICATE NAME IN OUTPUT DATA SET

Explanation: A member with the same name as member mem is contained in the output partitioned data set; therefore, the member is not moved or copied.

System Action: The MOVE/COPY request is ignored. (Return code - 4.)

Programmer Response: None.

IEH320I MEMBER mem NOT FOUND IN DATA SET dsn

Explanation: Member mem cannot be located in partitioned data set dsn.

System Action: The MOVE/COPY request is ignored. (Return code - 8.)

Programmer Response: Probable user error. Ensure that the data set name and member name are correct.

Problem Determination: Table I, items 1, 13, 22, 25c, 29.

IEH321I MEMBER mem NOT MOVED/COPIED. OUTPUT DIRECTORY IS FULL

Explanation: The directory of the output partitioned data set is full; therefore, member mem cannot be moved or copied.

System Action: The MOVE/COPY request is ignored. (Return code - 8.)

Programmer Response: Increase the size of the directory, and selectively MOVE or COPY the member.

Problem Determination: Table I, items 1, 13, 22, 25c, 29.

IEH322I I/O ERROR ENCOUNTERED IN MEMBER mem OF INPUT DATA SET dsn

Explanation: A permanent input/output error occurred while reading member mem of input data set dsn.

System Action: The MOVE/COPY request is ignored. (Return code - 8.)

Programmer Response: Ensure that the input data set is valid.

Problem Determination: Table I, items 1, 11, 22, 25ac, 29. Table II, Format 1: trace option - TRACE=SIO,IO. Have the failing data set available.

IEH323I I/O ERROR ENCOUNTERED IN MEMBER mem OF OUTPUT DATA SET dsn

Explanation: A permanent input/output error occurred while writing member mem of data set dsn.

System Action: The MOVE/COPY request is ignored. (Return code - 8.)

Programmer Response: None.

Problem Determination: Table I, items 1, 13, 22, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEH325I INVALID CATLG REQUEST IGNORED

Explanation: In the statement preceding this message, the receiving volume specified is not direct access.

System Action: The moved or copied data set is not cataloged on the specified volume. (Return code - 8.)

Programmer Response: Probable user error. Correct the preceding statement so that the receiving volume is direct access or delete the CATLG keyword. If the problem recurs, do the following

IEH326I I/O ERROR ENCOUNTERED IN OUTPUT DATA SET dsn

Explanation: A permanent input/output error occurred while writing data set dsn.

System Action: The MOVE/COPY request is ignored. (Return code - 8.)

Programmer Response: None.

Problem Determination: Table I, items 1, 13, 22, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEH327I A TTRN IN THE USER DATA FIELD OF THE DIRECTORY HAS NOT BEEN UPDATED

Explanation: A TTRN was not updated for the member named in the following message. A TTR in the source directory points to a record that is not in the member being copied.

System Action: The member is copied; however:

1. If copying from direct access to direct access the invalid TTR will be the same in the receiving directory as it was in the source directory.
2. If loading, the invalid TTR is zero in the receiving directory.

The program then attempts to copy the next member.

Programmer Response: Correct the invalid TTR. This may require that the proper TTR be placed in both the source and receiving directories or that the source member be recreated and recopied. Check for an end of file record embedded within the source member.

Problem Determination: Table I, items 1, 13, 22, 29.

Have an IEHLIST (LISTPDS) of both the source and receiving data sets as well as IEHLIST (LISTVTOC) in DUMP format of both the source and receiving volumes. Have an IEHDASDR dump to SYSPRINT of the source data set. Have an IEHDASDR dump to tape of the source data set.

IEH328I A TTR IN THE NOTELIST RECORD HAS NOT BEEN UPDATED

Explanation: A TTR in the notelist record for the member named in the message following this message was not updated. The TTR is either pointing to a record that is not within this member or to a record within the member that is after the notelist record.

System Action: The member is copied. However the invalid TTR will be the same in the receiving notelist as it was in the source notelist. The program then attempts to copy the next member.

Programmer Response: Correct the invalid TTR. This may require that the correct TTR be placed in both the source and receiving notelists or that the source be recreated and recopied.

Problem Determination: Table I, items 1, 13, 22, 29.

Have an IEHLIST (LISTPDS) of both the source and receiving data sets as well as an IEHLIST (LISTVTOC) in DUMP format of both the source and receiving volumes. Have an IEHDASDR dump to SYSPRINT of the source data set. Have an IEHDASDR dump to tape of the source data set.

IEH331I USER LABELS ARE NOT MOVED/COPIED. NO USER LABEL TRACK ALLOCATED FOR INPUT

Explanation: A preallocated data set did not provide a user label track.

System Action: User labels are ignored. Normal MOVE/COPY processing continues.

Programmer Response: For the COPY operation, if user label information is desired, scratch the data set on the receiving volume and preallocate the data set correctly. For the MOVE operation, if user label information is desired, rebuild the user labels.

Problem Determination: Table I, items 1, 3, 4, 22, 25b, 29.

IEH332I PERMANENT I/O ERROR WHILE READING USER INPUT HEADER LABELS. NO MORE LABELS WILL BE PROCESSED

Explanation: The Open routine encountered a permanent input/output error while attempting to read user input header labels.

System Action: The utility program returns to the user pointing him to the label in error, ignores the return code, and terminates the operation.

Programmer Response: If user label information is desired, rebuild the user labels.

Problem Determination: Table I, item 29. Table II, Format 1: trace option - TRACE=SIO,IO. Have the data set with the failing labels available.

IEH333I PERMANENT I/O ERROR WHILE READING USER INPUT TRAILER LABELS. NO MORE LABELS WILL BE PROCESSED

Explanation: The End-of-Volume routine encountered a permanent input/output error while attempting to read user input trailer labels.

System Action: The utility program returns to the user pointing him to the label in error, ignores the return code, and terminates the operation.

Programmer Response: If user label information is desired, rebuild the users labels.

Problem Determination: Table I, item 29. Table II, Format 1: trace option - TRACE=SIO,IO. Have the data set with the failing labels available.

IEH334I PERMANENT I/O ERROR WHILE WRITING USER OUTPUT HEADER LABELS. NO MORE LABELS WILL BE PROCESSED

Explanation: The Open routine encountered a permanent input/output error while attempting to write user output header labels.

System Action: The utility program returns to the user pointing him to the label in error, ignores the return code, and terminates the operation.

Programmer Response: If user label information is desired, rebuild the user labels.

Problem Determination: Table I, items 1, 29. Table II, Format 1: trace option - TRACE=SIO,IO. Have the data set with the failing user labels available.

IEH335I PERMANENT I/O ERROR WHILE WRITING USER OUTPUT TRAILER LABELS. NO MORE LABELS WILL BE PROCESSED

Explanation: The close routine encountered a permanent input/output error while attempting to write user output trailer labels.

System Action: The utility program returns to the user pointing him to the label in error, ignores the return code, and terminates the operation.

Programmer Response: If user label information is desired, rebuild the user labels.

Problem Determination: Table I, items 29. Table II, Format 1: trace option - TRACE=SIO,IO. Have the data set with the failing labels available.

IEH336I AN UNCORRECTABLE ERROR OCCURED WHILE READING DATA SET dsn

Explanation: The data event control block (DECB) for input data set dsn indicated that an error other than an input/output error or record length check occurred for the record just read.

System Action: The function is terminated. (Return code - 8.)

Programmer Response: Ensure that the input data set is specified correctly.

Problem Determination: Table I, items 1, 22, 29. Table II, Format 1: trace option - TRACE=SIO,IO. Have the failing data set available.

IEH339I I/O ERROR ENCOUNTERED IN INPUT DATA SET

Explanation: A permanent input/output error occurred while reading the input data set.

System Action: The MOVE/COPY request is ignored. (Return code - 8.)

Programmer Response: Ensure that the input data set is valid.

Problem Determination: Table I, items 1, 22, 29. Have the failing data set available.

IEH346I CATALOG CANNOT BE LOCATED, OR CONTROL VOLUMES ARE CONNECTED TO EACH OTHER

Explanation: In the statement preceding this message, no catalog exists on the specified control volume, or the control volumes are connected incorrectly to each other.

System Action: The MOVE/COPY request is ignored. (Return code - 8.)

Programmer Response: Make sure that there is a catalog on the specified volume, and that the control volumes are correctly connected to each other.

Problem Determination: Table I, items 1, 13, 22, 25d, 29.

IEH348I I/O ERROR ENCOUNTERED IN CATALOG

Explanation: A permanent input/output error occurred while reading or writing the catalog.

System Action: The MOVE/COPY request is ignored. (Return code - 8.)

Programmer Response: None.

Problem Determination: Table II, Format 1: trace option - TRACE=SIO,IO. Have the failing catalog data set available.

IEH349I UNABLE TO MOUNT VOLUME ser xxxx

Explanation: No device was allocated for the volume whose serial number is ser. In the message text, xxxx is the action taken.

System Action: The MOVE/COPY request is ignored. (Return code - 8.)

Programmer Response: Ensure that a DD statement for the device exists and is consistent with the utility control statements.

Problem Determination: Table I, items 1, 2, 13, 22, 29.

IEH351I DATA SET dsn NOT CATALOGED. SPACE NOT AVAILABLE IN THE CATALOG

Explanation: The catalog is full; therefore, data set dsn cannot be cataloged.

System Action: The data set is not cataloged. (Return code - 8.)

Programmer Response: Increase the size of the catalog and catalog the data set.

Problem Determination: Table I, items 1, 13, 22, 29. Execute the IEHDASDR utility

IEH

program to obtain a printed copy of the catalog and save the output.

IEH354I DATA SET dsn NOT CATALOGED. INDEX STRUCTURE INCONSISTENT

Explanation: Either the index structure is invalid or the catalog already has an entry for data set dsn. Therefore, the data set cannot be cataloged.

System Action: The data set is not cataloged. (Return code - 8.)

Programmer Response: Catalog the data set, if it is not already cataloged.

Problem Determination: Table I, items 1, 13, 22, 25d, 29.

IEH356I DATA SET dsn NOT CATALOGED. INVALID DATA SET NAME

Explanation: The data set name, dsn, is inappropriate for cataloging; therefore, the data set cannot be cataloged.

System Action: The data set is not cataloged. (Return code - 8.)

Programmer Response: Correct the data set name and catalog the data set.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH361I DATA SET dsn NOT MOVED/COPIED TO VOLUME(S)

Explanation: An abnormal condition (such as an input/output error) occurred; therefore, data set dsn could not be moved or copied.

System Action: The MOVE/COPY request is ignored. (Return code - 8.)

Programmer Response: Ensure that the input data set is valid.

Problem Determination: Table I, items 1, 13, 22, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEH362I DATA SET dsn MAY NOT BE SCRATCHED ON VOLUME(S)

Explanation: An abnormal condition (such as an input/output error) occurred; therefore, data set dsn could not be scratched.

System Action: Processing continues with the next function to be performed, if any. (Return code - 4.)

Programmer Response: Scratch the data set.

Problem Determination: Table I, items 1, 13, 22, 25a, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEH363I DATA SET JUST COPIED WAS NOT SUCCESSFULLY UNCATALOGED

Explanation: A permanent input/output error occurred during the uncatalog operation; therefore, the data set was copied but not uncataloged.

System Action: Processing continues with the next function to be performed, if any. (Return code - 4.)

Programmer Response: Uncatalog the data set.

Problem Determination: Table I, items 1, 13, 22, 25a, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEH364I THE DATA SET JUST COPIED WAS NOT SUCCESSFULLY CATALOGED

Explanation: The data set was copied but not cataloged on the 'TO' volume for one of the following reasons:

- The SYSCTLG data set does not exist on the specified volume.
- The existing index structure does not permit the cataloging of the data set.
- No space is available in the catalog.
- A permanent input/output error occurred during the catalog operation.
- The data set is already cataloged on the receiving volume.

System Action: Processing continues with the next function to be performed, if any. (Return code - 4.)

Programmer Response: Correct the application error.

Problem Determination: Table I, items 1, 13, 22, 25d, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEH365I DATA SET dsn MAY STILL EXIST ON VOLUME(S)

Explanation: An unusual condition (such as a permanent input/output error) occurred during the scratch operation; therefore, data set dsn was moved but not scratched from the source volume(s).

System Action: Processing continues with the next function to be performed, if any. (Return code - 4.)

Programmer Response: Scratch the data set, if required.

Problem Determination: Table I, items 1, 13, 22, 25a, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEH366I THE DATA SET JUST MOVED MAY EXIST WITH AN INTERNALLY GENERATED NAME ON VOLUME(S)

Explanation: An unusual condition (such as a permanent input/output error) occurred; therefore, a specified rename operation was not successful. An internally generated name may have been assigned to the moved data set.

System Action: Processing continues with the next function to be performed, if any. (Return code - 8.)

Programmer Response: Use the IEHLIST system utility program to determine the temporary name (the name beginning with **TEMP). Then, use the IEHPROGM system utility program to rename the data set from the temporary name to the required name.

Problem Determination: Table I, items 1, 13, 22, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEH367I THE DATA SET JUST MOVED WAS NOT SUCCESSFULLY UNCATALOGED

Explanation: A permanent input/output error occurred during the uncatalog operation; therefore, the data set was moved but not uncataloged.

System Action: Processing continues with the next function to be performed, if any. (Return code - 4.)

Programmer Response: Uncatalog the data set.

Problem Determination: Table I, items 1, 13, 22, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEH368I THE DATA SET JUST MOVED WAS NOT SUCCESSFULLY RECATALOGED

Explanation: Either an input/output error occurred during the catalog operation, or the existing index structure in the catalog does not permit the cataloging of the data set. Therefore, the data set was moved but the catalog was not updated.

System Action: Processing continues with the next function to be performed, if any. (Return code - 4.)

Programmer Response: Recatalog the data set.

Problem Determination: Table I, items 1, 13, 22, 25d, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEH372I I/O ERROR ENCOUNTERED IN WORK DATA SET

Explanation: A permanent input/output error occurred while reading or writing the work data set. Possibly secondary space was specified in the SYSUT1 DD statement.

System Action: The MOVE/COPY request is ignored. (Return code - 12.)

Programmer Response: Check the SYSUT1 DD statement. Leave out any space specification. Use the POWER parameter if necessary.

Problem Determination: Table I, items 1, 13, 22, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEH373I UNABLE TO MOUNT VOLUME ser. SOME INCLUDE OR REPLACE REQUESTS IGNORED

Explanation: The volume whose serial number is ser cannot be mounted.

System Action: The INCLUDE and REPLACE requests referring to the specified volume are ignored. (Return code - 8.)

Programmer Response: Ensure that a DD statement for the volume exists.

Problem Determination: Table I, items 1, 2, 13, 22, 29.

IEH374I DATA SET dsn NOT FOUND ON VOLUME ser. INCLUDE OR REPLACE REQUEST IGNORED

Explanation: Data set dsn does not reside on the volume whose serial number is ser.

System Action: The INCLUDE or REPLACE statements that refer to data set dsn are ignored. (Return code - 8.)

Programmer Response: Probable user error. Ensure that the DD statement for the indicated volume is correct.

Problem Determination: Table I, items 1, 13, 22, 25a, 29.

IEH375I DATA SET dsn IS NOT PARTITIONED. INCLUDE OR REPLACE REQUEST IGNORED

Explanation: Data set dsn is not partitioned.

System Action: The INCLUDE request or the 'including' part of the REPLACE request is ignored. (Return code - 8.)

Programmer Response: Ensure that the data set is valid.

Problem Determination: Table I, items 1, 13, 22, 25c, 29.

IEH376I RECORD CHARACTERISTICS NOT COMPATIBLE (xxx). INCLUDE OR REPLACE REQUEST IGNORED

Explanation: Attribute xxx of the output data set is not compatible with that of the input data set.

System Action: The INCLUDE request or the 'including' part of the REPLACE request is ignored. (Return code - 8.)

Programmer Response: Ensure that the record characteristics of the input and output data sets are compatible.

IEH380I MEMBER mem NOT FOUND IN DATA SET dsn. INCLUDE OR REPLACE REQUESTS IGNORED

Explanation: Member mem is not contained in partitioned data set dsn.

System Action: The INCLUDE request or the 'including' part of the REPLACE request is ignored. (Return code - 8.)

Programmer Response: Ensure that the control statements are correct.

Problem Determination: Table I, items 1, 13, 22, 25c, 29.

IEH381I ERROR ENCOUNTERED IN SCRATCHING WORK FILES

Explanation: Either a work file could not be located, or an input/output error occurred during the scratch operation. Therefore, the work file(s) could not be scratched.

System Action: The MOVE/COPY request is ignored. (Return code - 12.)

Programmer Response: Ensure that a SYSUT1 DD statement exists and specifies a sufficient amount of space. If the POWER=n parameter is used, ensure that the space is equivalent to 80xn tracks.

Problem Determination: Table I, items 1, 13, 22, 25a, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEH383I INVALID DEVICE NAME

Explanation: In the statement preceding this message, a device name is invalid.

System Action: The MOVE/COPY request is ignored. (Return code - 8.)

Programmer Response: Probable user error. Correct the device name on the preceding statement.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH384I GENERIC DEVICE NAME ERR

Explanation: In the statement preceding this message, a device name is invalid.

System Action: The MOVE/COPY request is ignored. (Return code - 8.)

Programmer Response: Probable user error. Correct the device name on the preceding statement.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH385I SELECT OP NOT VALID

Explanation: The SELECT statement preceding this message is not valid with the specified MOVE or COPY operation.

System Action: The MOVE/COPY request is ignored. (Return code - 8.)

Programmer Response: Probable user error. Correct the preceding control statement.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH388I UNABLE TO ALLOCATE IEHMOVE WORK FILES

Explanation: The IEHMOVE program was unable to allocate space for the work files. Either no SYSUT1 DD statement was included with the job step or there was insufficient space on the direct access volume assigned to the SYSUT1 DD statement.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Ensure that a SYSUT1 DD statement exists and contains the equivalent of 80 tracks on a 2311 device. (If the POWER=n parameter is used, ensure that the space is equivalent to 80xn tracks.)

Problem Determination: Table I, items 1, 13, 22, 25a, 29.

IEH389I I/O ERROR ENCOUNTERED IN INPUT DATA SET

Explanation: A permanent input/output error occurred while reading the input data set.

System Action: The MOVE/COPY request is ignored. (Return code - 8.)

Programmer Response: Ensure that the input data set is specified correctly.

Problem Determination: Table I, items 1, 13, 22, 29. Table II, Format 1: trace option - TRACE=SIO,IO. Have the input data set available.

IEH390I NON-ALPHABETIC FIRST CHAR IN RENAME

Explanation: In a utility control statement, the first character specified in a level in the RENAME keyword is not alphabetic.

System Action: Processing continues with the next function to be performed, if any. (Return code - 8.)

Programmer Response: Probable user error. Ensure that the first character specified in each level in the RENAME keyword parameter is either alphabetic or national.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH401I DATA SET dsn { UNLOADED } --xxxx
through { NOT MOVED/COPIED }
IEH429I

Explanation: Data set dsn was unloaded or was not moved or copied for the reason indicated by xxxx.

System Action: The data set is unloaded or the MOVE/COPY request is ignored, as applicable. (Return code - 4.)

Programmer Response: Correct the error indicated in the message text.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH433I DATA SET NOT MOVED/COPIED BECAUSE INCLUDE, EXCLUDE, SELECT, OR REPLACE REQUEST WHILE LOADING/UNLOADING

Explanation: INCLUDE, EXCLUDE, SELECT, or REPLACE requests cannot be processed while loading or unloading a data set.

System Action: The MOVE/COPY request is ignored. (Return code - 4.)

Programmer Response: Either correct the cause of the UNLOAD indicated by message IEH405I, or remove the INCLUDE, EXCLUDE, SELECT, or REPLACE requests following the IEHMOVE control statement.

Problem Determination: Table I, items 1, 13, 22, 29. 13, 22, 29.

IEH435I ERROR ENCOUNTERED WHILE ANALYZING THE SYSCTLG DATA SET

Explanation: One of the following conditions has occurred:

- An input/output error occurred while the system was reading the SYSCTLG data set.
- An invalid name was specified either as the name of an INCLUDE or EXCLUDE statement or as a value in the DSGROUP= or CATALOG= parameter. A name is invalid if it does not exist in the specified catalog, or if it contains syntax errors.
- An error occurred while the system was trying to obtain a model DSCB for a generation data group.
- A structural error exists in the catalog.

System Action: The MOVE/COPY request is ignored. (Return code - 8.)

Programmer Response: Make sure that the SYSCTLG data set is valid, and that the names specified in the CATALOG= and DSGROUP= parameters and the INCLUDE and EXCLUDE statements are correct. If the problem recurs, do the following before calling IBM for programming support:

Problem Determination: Table I, items 1, 13, 22, 25ad, 29. Table II, Format 1: trace option - TRACE=SIO,IO. Execute the IEHDASDR utility program to list the contents of the SYSCTLG data set.

IEH436I DATA SET dsn, VOLUME ser, NOT SCRATCHED DUE TO I/O ERROR

Explanation: An uncorrectable input/output error occurred in data set dsn on the volume whose serial number is ser.

System Action: The data set is moved, but not scratched. (Return code - 8.)

Programmer Response: Scratch the data set.

Problem Determination: Table I, items 1, 13, 22, 25a, 29. Table II, Format 1: trace option - TRACE=SIO,IO.

IEH440I RECFM AND BLKSIZE ARE INCONSISTENT.

Explanation: The record format (RECFM) and/or block size (BLKSIZE) specified for the unloaded data set are not the same as those specified for the receiving data set.

System Action: The MOVE/COPY request is ignored. The return code is 8.

Programmer Response: Make sure that the BLKSIZE and RECFM specified for the receiving data set are the same as those specified for the unloaded data set before it was unloaded. IEHMOVE will not reblock or change record format while performing a load or unload operation.

Problem Determination: Table I, items 1, 13, 22, 25a, 29. Execute the IEBPTPCH utility program to print the first block of the unloaded data set; save the output.

IEH450I REQUEST TERMINATED BECAUSE DATA SET SPANS MORE THAN 5 VOLUMES

Explanation: The data set extends over the maximum of 5 volumes; therefore, the data set is not moved or copied.

System Action: The MOVE/COPY request is ignored. (Return code - 8.)

Programmer Response: None.

Problem Determination: Table I, items 1, 13, 22, 25c, 29.

IEH451I TRACK OVERFLOW FEATURE REQUIRED ON DEVICE THAT DOES NOT HAVE TRACK OVERFLOW FEATURE

Explanation: A data set to be moved or copied was originally written with track overflow, but the source device does not support the track overflow feature.

System Action: The MOVE/COPY request is ignored. (Return code - 8.)

Programmer Response: Change the job control language to specify a device that supports track overflow.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH452I THE DATA SET BEING MOVED/COPIED IS MARKED UNMOVABLE. UNMOVABLE DATA MUST BE UPDATED BEFORE ITS NEXT USE

Explanation: A data set being moved or copied from one direct access device to another contains location dependent information; that is, the unmovable bit in the DSORG field of the data set control block (DSCB) is on.

System Action: The data set is moved, and processing continues normally.

Programmer Response: Update the location dependent information in the moved or copied version of the data set. (For example, use the IEHIOSUP system utility

IEH

program to update the TTR entries in the transfer control tables of the supervisor call library (SVC library) after the library has been moved.)

Problem Determination: Table I, items 1, 13, 25a, 29.

IEH460I INVALID DATA SET ORGANIZATION

Explanation: One of the following error conditions occurred:

- The source data set is not a partitioned, physical sequential, or direct access (BDAM) data set.
- While attempting to move or copy a catalog, the DSORG field indicates a partitioned, physical sequential, or direct access data set.

Therefore, the data set cannot be processed by the IEHMOVE program.

System Action: The MOVE/COPY request is ignored. (Return code - 12.)

Programmer Response: Correct the data set organization specified in the data set control block (DSCB).

Problem Determination: Table I, items 1, 13, 22, 25a, 29.

IEH461I UNABLE TO OPEN INPUT DATA SET SYSIN

Explanation: Either no DD statement was provided to define the input or SYSIN data set, or the block size specified for the data set is not a multiple of the logical record length.

System Action: The MOVE/COPY request is ignored. (Return code - 12.)

Programmer Response: Ensure that a DD statement exists for the data set and that the specified block size is correct.

Problem Determination: Table I, items 1, 13, 22, 29.

IEH462I NO RECORD FOUND OCCURRED READING DATA SET dsn

Explanation: One of the following conditions was encountered while reading a direct organization data set:

- The record format of the data set is fixed (F), and a track within the data set is not completely filled with records.
- The record format is variable (V) or undefined (U), and not all tracks were initialized when the data set was created.
- An uncorrectable error occurred.

System Action: Message IEH361I is also issued. (Return code - 8.)

Programmer Response: Ensure that the data set conforms to the standards of a direct organization data set.

Problem Determination: Table I, items 1, 13, 22, 29. Table II, Format 1: trace option - TRACE=SIO,IO. Have the data set available.

IEHINIT Program Messages

IEH601I INVALID CONTROL STATEMENT

Explanation: The construction of the control statement preceding this message is invalid.

System Action: Processing continues with the next INITT utility control statement. (Return code - 8.)

Programmer Response: Probable user error. Correct the construction of the preceding statement and rerun the job to label those tapes that were bypassed.

Problem Determination: Table I, items 1, 2, 3, 13, 29.

IEH602I INVALID KEYWORD

Explanation: In the control statement preceding this message, a keyword is incorrect.

System Action: Processing continues with the next INITT utility control statement. (Return code - 8.)

Programmer Response: Probable user error. Correct the keyword on the preceding statement and rerun the job to label those tapes that were bypassed.

Problem Determination: Table I, items 1, 2, 3, 13, 29.

IEH603I INVALID PARAMETER VALUE

Explanation: In the control statement preceding this message, a parameter is incorrect.

System Action: Processing continues with the next INITT utility control statement. (Return code - 8.)

Programmer Response: Probable user error. Correct the parameter on the preceding statement and rerun the job to label those tapes that were bypassed.

Problem Determination: Table I, items 1, 2, 3, 13, 29.

IEH604I OPERATOR SUPPRESSED VOLUME LABEL ser

Explanation: The tape that was to be labeled with serial number ser was not mounted by the operator.

System Action: The current serial number is reserved for the unmounted tape, and the next number is used for the next tape to be labeled.

Programmer Response: Probable user error. Find out why the tape was not mounted, and take any indicated action--checking the console log for additional background.

Problem Determination: Table I, items 1, 2, 3, 13, 29.

IEH605I INVALID DEVICE ALLOCATED ON ddd

Explanation: Device ddd was removed from operation -- that is, it is either unacceptable or not online.

System Action: The device is removed from the list of devices allocated to this job step by the associated DD statement. (Return code - 8.)

Programmer Response: Probable user error. Ensure that the parameters on the applicable DD statement are correct.

Problem Determination: Table I, items 1, 2, 3, 7c, 13, 29.

IEH606I PERMANENT I/O ERROR ON ddd

Explanation: A permanent input/output error was encountered on device ddd.

System Action: The device is removed from the list of devices allocated to this job step by the associated DD statement. (Return code - 8.)

Programmer Response: None.

Problem Determination: Table I, items 1, 2, 3, 7c, 13, 29.

IEH607I ALLOCATED DEVICES EXHAUSTED

Explanation: All devices allocated to this job step (specified in DD statement associated with the control statement being processed) have been eliminated as mountable devices.

System Action: Processing continues with the next INITT utility control statement. (Return code - 8.)

Programmer Response: Probable user error. If message IEH606I precedes this message, ensure that the parameters on the applicable DD statement are correct.

Problem Determination: Table I, items 1, 2, 3, 7c, 13, 29.

IEH608I I/O ERROR ON SYSIN. JOB TERMINATED

Explanation: A permanent input/output error was encountered while the SYSIN data set was either being opened or being read.

System Action: The job is terminated. (Return code - 16.)

Programmer Response: Probable user error. Ensure that the DCB parameters on the SYSIN DD statement are correct, particularly the BLOCKSIZE specification. If the DD statement is correct, the error

probably occurred when the data set was being read.

Problem Determination: Table I, items 1, 2, 3, 7c, 13, 29.

IEH609I INVALID DEVICE SPECIFIED FOR ASCII LABELING

Explanation: The tape to be initialized in ASCII code is not mounted on a 9-track unit.

System Action: Processing continues with the next INITT control statement. (The return code is 8.)

Programmer Response: Probable user error. Change the corresponding DD card to specify a 9-track unit.

Problem Determination: Table I, items 1, 2, 3, 13, 29.

IEH610I INVALID PARM OR PARM LIST PASSED TO IEHINITT

Explanation: An invalid parameter is coded in the EXEC statement or in the parameter list passed by a LINK or ATTACH macro.

System Action: The job is terminated. (The return code is 16.)

Programmer Response: Probable user error. Check the parameters passed to IEHINITT for validity.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH611I INVALID DENSITY SPECIFIED, DEFAULT VALUE USED

Explanation: The density specified in the DCB parameter of the DD statement is invalid for the unit requested.

System Action: The default density value for the unit requested is used.

Programmer Response: Probable user error. If the labels are to be written at a different density than the default value, change the density value in the DCB parameter and relabel the tape(s).

Problem Determination: Table I, items 1, 3, 13, 29.

IEHIOSUP Program Messages

IEH700I THE LOAD MODULES OF mod[,mod] HAVE NOT BEEN UPDATED

Explanation: Because of an unrecoverable error condition, modules mod have not been updated.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Either use the IBCRCVRP or IEHATLAS utility program to reconstruct the SYSUT1 data set or, if possible, use a backup copy of the data set.

Problem Determination: Table I, items 1, 3, 13, 14, 29.

IEH701I A PERMANENT I/O ERROR DETECTED ON A COMMAND CHAIN OF SEARCH ID=,TIC,READ DATA. MBBCCHHR=mbbcchhr

Explanation: A permanent input/output error occurred while searching for the member whose absolute address is mbbcchhr.

In the message, m is the extent number, bb is the bin number, cc is the cylinder number, hh is the head number, and r is the record number.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Either use the IBCRCVRP or IEHATLAS utility program to reconstruct the SYSUT1 data set or, if possible, use a backup copy of the data set.

Problem Determination: Table I, items 1, 3, 13, 14, 29.

IEH702I NO FOUND CONDITION SEARCHING FOR mem

Explanation: Member mem could not be found in the directory of the SYS1.SVCLIB data set.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Either use the IBCRCVRP or IEHATLAS utility program to reconstruct the SYSUT1 data set or, if possible, use a backup copy of the data set.

Problem Determination: Table I, items 1, 3, 13, 14, 29.

IEH703I A PERMANENT I/O ERROR DETECTED ON A COMMAND CHAIN OF SEARCH ID=,TIC,WRITE DATA. MBBCCHHR=mbbcchhr

Explanation: A permanent input/output error occurred while updating the member whose absolute address is mbbcchhr. In the message text, m is the extent number, bb is the bin number, cc is the cylinder number, hh is the head number, and r is the record number.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Either use the IBCRCVRP or IEHATLAS utility program to reconstruct the SYSUT1 data set or, if possible, use a backup copy of the data set.

Problem Determination: Table I, items 1, 3, 13, 14, 29.

IEH704I BLDL HAS DETECTED A PERMANENT I/O ERROR

Explanation: A permanent input/output error occurred during execution of a BLDL macro instruction.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Either use the IBCRCVRP or IEHATLAS utility program to reconstruct the SYSUT1 data set or, if possible, use a backup copy of the data set.

Problem Determination: Table I, items 1, 3, 13, 14, 29.

IEH705I ZERO LENGTH RECORD READ AT ADDRESS MBBCCHHR mbbcchhr

Explanation: An unexpected zero length record was found while updating the member whose absolute address is mbbcchhr.

In the message text, m is the extent number, bb is the bin number, cc is the cylinder number, hh is the head number, and r is the record number.

System Action: The program is terminated. (Return code - 12.)

Programmer Response: Either use the IBCRCVRP or IEHATLAS utility program to reconstruct the SYSUT1 data set or, if possible, use a backup copy of the data set.

Problem Determination: Table I, items 1, 3, 13, 14, 29.

IEH707I SYSUT1 DATA SET NOT OPENED

Explanation: IEHIOSUP was unable to open the data set specified in the SYSUT1 DD statement.

System Action: The job step is terminated; the return code is 12.

IEHDASDR Program Messages

IEH800I INVALID CONTROL STATEMENT. LAST COLUMN SCANNED=(decimal number 1 to 71)

Explanation: An IEHDASDR utility control statement is coded incorrectly (e.g., a syntax error was encountered). The column number of the last column scanned is included in the message.

System Action: Processing continues with the next IEHDASDR utility control statement. (The return code is 8.)

Programmer Response: Probable user error. Check for keypunch or format errors in the last column scanned as indicated above. Correct and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH801I INVALID COMMAND=(command)

Explanation: An IEHDASDR utility control statement contains an operation that is not valid; for example, RESTERE, rather than RESTORE.

System Action: Processing continues with the next IEHDASDR utility control statement. (The return code is 8.)

Programmer Response: Probable user error. Check for keypunch or format errors. Check the IEHDASDR specifications for acceptable control codes. Correct the statement and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH802I INVALID KEYWORD=(keyword)

Explanation: An IEHDASDR utility control statement contains an invalid keyword in the operand field; for example, CPYVULID=YES, rather than CPYVOLID=YES.

System Action: Processing continues with the next IEHDASDR utility control statement. (The return code is 8.)

Programmer Response: Probable user error. Check control statement for possible keypunch or format error. Consult IEHDASDR specifications for acceptable keywords. Correct the statement and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH803I INVALID PARAMETER=(parameter)

Explanation: An IEHDASDR utility control statement contains an invalid parameter value in the operand field; for example, CPYVOLID=YSE, rather than CPYVOLID=YES.

System Action: Processing continues with the next IEHDASDR utility control statement. (The return code is 8.)

Programmer Response: Probable user error. Consult the IEHDASDR specifications for required keywords and parameters. Correct the control statement and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH804I REQUIRED KEYWORD(S) MISSING

Explanation: A necessary keyword or keywords are omitted from an IEHDASDR utility control statement.

System Action: Processing continues with the next IEHDASDR utility control statement. (The return code is 8.)

Programmer Response: Probable user error. Consult the IEHDASDR specifications for required keywords and parameters. Correct the control statement and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH805I DDNAME=ddname CANNOT BE OPENED

Explanation: The named DD statement does not exist or is coded incorrectly.

System Action: Processing continues with the next IEHDASDR utility control statement. (The return code is 8.)

Programmer Response: Probable user error. Make sure that a DD statement is present and contains the correct DDNAME as specified in the related control statement. Rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH806I (RESTORE TO) DDNAME=ddname IS COMPLETE.
DUMP TO
LABEL OF
GETALT ON
FORMAT OF
ANALYSIS OF
[VOLUME SERIAL NO.=xxxxxx]

Explanation: The indicated function has completed successfully on the device specified on the indicated DD statement. If the "to" volume is a direct access volume, the volume serial number is indicated in the message.

System Action: Processing continues with the next IEHDASDR utility control statement.

Programmer Response: None.

IEH807D cuu (or cuu/b) HAS UNEXPIRED DATA SETS, serial, jobname, stepname.

Explanation: The user specified the PURGE keyword and the IEHDASDR program encountered one or more unexpired data sets on the indicated volume while attempting to perform an ANALYZE, FORMAT, DUMP, or RESTORE operation.

System Action: Processing continues according to the operator's response. If the operator responds with REPLY xx,'U' processing continues. If he replies with REPLY xx,'T' the operation is terminated and processing continues with the next function to be performed.

Operator Response: A response of REPLY xx,'U' will allow IEHDASDR to overwrite all existing data sets on the volume regardless of the expiration date specified in the VTOC. A response of REPLY xx,'T' will terminate the operation and continue processing with the next function.

IEH808I REPLY IN ERROR. REPLY WITH 'U' OR 'T', jobname, stepname.

Explanation: The operator issued an invalid reply to message IEH807A or IEH841A.

IEH

Operator Response: Enter the correct reply when message IEH807A or IEH841A is again issued.

IEH809I {R} cuu (or cuu/b), serial, jobname,
{N} stepname {,NOW OFFLINE}

Explanation: R indicates that the specified volume, cuu (or cuu/b for a 2321 volume), is to be demounted. The previous IEHDASDR operation resulted in identical serial numbers being placed on two or more direct access volumes. If the duplicate serial number was placed on a 2321 or a nondemountable volume, that volume is also placed offline. N indicates that the specified volume, cuu (or cuu/b for a 2321 volume), was assigned the indicated serial number.

Operator Response: R -- demount the specified volume. N -- no response necessary.

IEH810I TODD DDNAME=ddname IS NOT DIRECT ACCESS

Explanation: The device defined by the indicated DD statement is not a direct access device.

System Action: Processing continues with the next IEHDASDR utility control statement. (The return code is 8.)

Programmer Response: Probable user error. Correct the DD statement so that it describes a direct access device.

Problem Determination: Table I, items 1, 3, 13, 17a, 29.

IEH811I FROMDD DDNAME=ddname IS NOT A TAPE

Explanation: The device defined by the indicated DD statement is not a magnetic tape drive.

System Action: Processing continues with the next IEHDASDR utility control statement. (The return code is 8.)

Programmer Response: Probable user error. Correct the DD statement so that it describes a magnetic tape drive.

Problem Determination: Table I, items 1, 3, 13, 17a, 29.

IEH812I UNABLE TO MATCH DDNAME=ddname

Explanation: A ddname specified in an IEHDASDR utility control statement has no corresponding ddname in a DD statement. Either a necessary DD statement is missing or a ddname is misspelled in an existing DD statement.

System Action: Processing continues with the next IEHDASDR utility control statement. (The return code is 8.)

Programmer Response: Probable user error. Check the DD statement for correct DDNAME as specified in the related control

statement. Correct the statement and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 17a, 29.

IEH813I I/O ERROR ENCOUNTERED DURING SVC {82}
ddname {29}

or
I/O ERROR jobname, stepname, unit address, device type, ddname, operation attempted, error description, last seek address or block count, access method.

Explanation: Either an I/O error occurred during an SVC 29 or 82 (as indicated in the message) or an I/O error occurred while processing otherwise on the named device. If possible, error analysis information such as jobname, stepname, unit address, device type, etc., is included in the message.

System Action: Processing continues with the next IEHDASDR utility control statement. (The return code is 8.)

Programmer Response: For I/O errors on direct access TODD volume, the volume should be varied offline, and the full surface analysis performed using the ANALYZE function of the IEHDASDR utility program (Do not use PASSES=0). For I/O errors on a TODD tape volume, mount another tape or move the tape to another drive and/or clean the Read/Write heads. For an I/O error on a direct access FROMDD volume, move the volume to another drive (if possible) and rerun the operation.

NOTE: Do not move volume to more than one other drive. A bad volume may cause damage to other devices. If the I/O error is due to a data check or a missing address marker, run the IEHATLAS or IBCRCVRP utility program (RECOVER/REPLACE). For an I/O error on a FROMDD tape volume, move it to another drive, and/or clean the Read/Write heads.

Problem Determination: Table I, items 1, 3, 13, 14, 29.

IEH814I (GETALT ON) SYSTEM RESIDENCE IS NOT
(RESTORE TO)
(DUMP TO)
(ANALYSIS OF)
(FORMAT OF)
(LABEL OF)
ALLOWED. DDNAME= ddname

Explanation: One of the named functions is specified for the system residence volume. The ddname identifies the DD statement defining the system residence volume.

System Action: Processing continues with the next IEHDASDR utility control statement. (The return code is 8.)

Programmer Response: Probable user error. Correct the DD statement so it volume.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH815I INCORRECT DEVICE TYPE ON RESTORE.
DDNAME=ddname

Explanation: The device type of the direct access device being restored (ddname) does not match the device type from which the restore tape was created.

System Action: Processing continues with the next IEHDASDR utility control statement. (The return code is 8.)

Programmer Response: Probable user error. Mount the proper tape or direct access volume. Data dumped onto tape can only be restored to the device type from which it was dumped. Correct the DD statement to indicate the correct device type.

Problem Determination: Table I, items 1, 3, 13, 28, 29.

IEH816I NOT A RESTORE TAPE ON DDNAME=ddname

Explanation: The magnetic tape volume mounted on the device defined by the indicated DD statement is not a "restore" tape volume; that is, it does not contain dumped direct access data.

System Action: Processing continues with the next IEHDASDR utility control statement. (The return code is 8.)

Programmer Response: Probable user error. Mount the proper restore tape.

Problem Determination: Table I, items 1, 3, 13, 28, 29.

IEH817I FORMAT 5 DSCB IN VTOC FOUND TO BE
INCORRECT FOR FROMDD=ddname

Explanation: Prior to a DUMP operation, the entries in the Format 5 DSCB were found to be invalid on the source volume.

System Action: All tracks within the specified range of tracks are dumped, whether they are "owned" or not. Processing continues. (Return code - 4.)

Programmer Response: None.

Problem Determination: Table I, items 1, 3, 13, 25b, 29.

IEH818I MAIN STORAGE REQUIREMENTS NOT AVAILABLE
FOR THIS FUNCTION

Explanation: Insufficient main storage space was available for this function. The function was terminated.

System Action: Processing continues with the next IEHDASDR control statement. (The return code is 8.)

Programmer Response: Probable user error. Increase the partition or region and rerun the operation.

- Have the operator issue a "display

active" command as soon as the job is started.

Problem Determination: Table I, items 1, 2, 3, 13, 29.

IEH819I FROMDD=ddname IS NOT DIRECT ACCESS

Explanation: An attempt was made to dump a volume other than a direct access volume. The named DD statement defines the device containing the volume that was to be dumped.

System Action: Processing continues with the next IEHDASDR control statement. (The return code is 8.)

Programmer Response: Probable user error. Only direct access volumes may be dumped using the IEHDASDR utility program. Correct the DD statement and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 17a, 29.

IEH820I INVALID DUMP DEVICE SPECIFIED.
DDNAME=ddname

Explanation: A device other than an identical type direct access device, a magnetic tape drive, or a system output device was defined as the receiving device for a DUMP operation. The named DD statement defines the device that was to be the receiving device.

System Action: Processing continues with the next IEHDASDR control statement. (The return code is 8.)

Programmer Response: Probable user error. Correct the FROMDD or the TODD statement and rerun the job. Only tapes, system output devices or identical direct access devices may be dumped to.

Problem Determination: Table I, items 1, 3, 13, 17a, 29.

IEH821I INVALID COPY REQUEST. DDNAME=ddname

Explanation: An ANALYZE, FORMAT, DUMP, or RESTORE control statement defines multiple devices types and multiple copies when they are not permitted. The named DD statement defines the invalid device.

System Action: Processing continues. (The return code is 8.)

Programmer Response: Probable user error. Correct the TODD statement and rerun the operation.

Problem Determination: Table I, items 1, 3, 13, 17a, 29.

IEH822I INVALID TRACK ADDRESS SPECIFIED.
DDNAME=ddname

Explanation: An invalid track address has been specified on either a DUMP statement (BEGIN or END address) or a GETALT

statement (TRACK address). The named DD statement defines the device containing the volume to which the invalid track pertains.

System Action: Processing continues with the next IEHDASDR utility control statement. (The return code is 8.)

Programmer Response: Probable user error. Correct the track address on the control statement and rerun the operation.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH823I THE DEVICE SPECIFIED BY TODD=ddname IS A DRUM DEVICE. AN ALTERNATE TRACK MUST BE ASSIGNED MANUALLY.

Explanation: Either a defective track has been encountered on a drum device during processing of an ANALYZE statement, or the user has defined a drum device through the use of a GETALT statement. The ddname is that of the DD statement defining the drum device.

System Action: Processing continues with the next IEHDASDR utility control statement unless the operation is an ANALYZE operation, in which case processing continues with the same statement. (The return code is 4.)

Operator Response: Call IBM for hardware support to have a track manually assigned.

IEH824I ANALYZE TERMINATED. DEVICE NOT OFF-LINE AND CONFIRMED. TODD=cuu (or cuu/b for a 2321 volume).

Explanation: The function is not performed because the specified device was not placed offline prior to the execution of the job step and confirmed by the operator during the job step. TODD specifies the channel and unit address of the device containing the volume to be analyzed. The referenced UCB is not in the system.

System Action: Processing continues with the next IEHDASDR control statement. (The return code is 8.)

Programmer Response: Probable user error. Vary the device offline and ensure that the system has completed the request. Have the operator enter the response REPLY xx,'U' to the message IEH841D confirming the request.

Problem Determination: Table I, items 1, 2, 3, 13, 29.

IEH825I INVALID VTOC LIMITS SPECIFIED FOR TODD=ddname

Explanation: The VTOC=xxxxx keyword or EXTENT=xxxxx keyword in an ANALYZE or FORMAT control statement specifies an invalid starting address or extent. The indicated ddname is that of the DD

statement defining the device containing the volume to be analyzed or formatted.

System Action: Processing continues with the next IEHDASDR utility control statement. (The return code is 8.)

Programmer Response: Probable user error. Correct the VTOC or EXTENT parameter.

Problem Determination: Table I, items 1, 3, 13, 29.

NOTE: The VTOC cannot begin on track 0 (or on track 1 for a 2302 or for a 2311 with IPL text.) The VTOC cannot extend into the alternate track area or onto a second volume.

IEH826I IPL TEXT NOT FOUND OR APPLICABLE FOR TODD=ddname

Explanation: Either an attempt was made to supply IPL for a volume other than a 2301, 2303, 2311, 2314, or 2319 volume, or IPL text is to be written on a valid volume but the IEHDASDR program cannot locate the source copy of the IPL text. Also, the END card for IPL text may be missing or incorrect (not in columns 2, 3, or 4).

System Action: Processing continues with the next IEHDASDR utility control statement. (The return code is 8.)

Programmer Response: Probable user error. Correct the direct access DD statement referenced in the IPLDD keyword to point to the data set that contains the IPL text. Change the IPLDD keyword to point to the SYSIN data set. Follow the first control statement with the IPL TEXT control statement and the IPL text. Insure that the IPL text has an END card punched in columns 2, 3, and 4. Remove all references to IPL text.

Problem Determination: Table I, items 1, 3, 13, 17a, 29. If IPL text is in card forms, have the deck available.

IEH827I NO MORE ALTERNATE TRACKS AVAILABLE FOR TODD=ddname

Explanation: An attempt was made to assign an alternate track; however, there are no unassigned alternates available. The named DD statement defines the device containing the volume on which an alternate track was to be assigned.

System Action: Processing continues with the next IEHDASDR utility control statement. (The return code is 8.)

Programmer Response: ANALYZE the direct access device with FLAGTEST=NO. If this message was issued while running ANALYZE, the pack should be replaced.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH828I TRACK ZERO IS DEFECTIVE ON TODD=ddname.
THIS VOLUME IS NON-IPLABLE.

Explanation: Track 0 on a volume that is to be analyzed, dumped to, or restored to is defective. The volume cannot be "IPLed." The named DD statement defines the device containing the volume that has the defective track.

System Action: Processing continues with the next IEHDASDR utility control statement. (The return code is 4.)

Programmer Response: This pack cannot be used as an IPL volume. If IPL text is required, mount another pack and rerun the operation.

IEH829I HA-R0 AREA WAS DEFECTIVE. TODD=ddname

Explanation: During an ANALYZE or FORMAT operation, the home address/record zero area of a track was found defective. The named DD statement defines the device containing the volume that has the defective HA-R0 area on one of its tracks.

System Action: The action taken depends on the device type of the volume having the defective HA-R0 area:

2311 or 2302 -- The function is terminated. (The return code is 8.)

2314, 2319, or 2321 -- An attempt is made to move the HA-R0 area to another spot on the track. If the attempt is unsuccessful, a return code of 8 is issued.

Programmer Response: For a mountable volume, move it to another drive.

Caution: Defective volumes may cause damage to devices. Do not move volume more than once.

Problem Determination: Table I, items 28,30.

NOTE: Message IEH813I is issued to identify the defective track.

IEH830I THE VOLUME SPECIFIED BY TODD=ddname HAS BECOME UNUSABLE.

Explanation: GETALT has been specified for the VTOC area (all data on the specified track is lost), or an ANALYZE, FORMAT, RESTORE, or DUMP operation has not completed successfully, thus leaving the volume in an unusable condition. For a direct access volume, the named DD statement defines the device containing the volume that has become unusable. For a tape volume, the named DD statement defines the device containing the volume that has become unusable as a restore tape.

System Action: Processing continues with the next IEHDASDR control statement. (The return code is 8.)

Programmer Response: If the TODD volume is a direct access volume, the volume should be analyzed offline. If the TODD is a tape, mount another tape and rerun the job.

Problem Determination: Table I, items 1, 2, 3, 13, 29.

IEH831I DEFECTIVE TRACK ON TODD=ddname WAS cccchhhh

Explanation: This message lists the track address (ccccchhhh) of a track found defective during an ANALYZE or FORMAT operation or a track specified on a GETALT statement. The named DD statement defines the device containing the volume that has the defective track.

System Action: Processing continues.

Operator Response: None.

IEH832I ALTERNATE TRACK ASSIGNED ON TODD=ddname IS {ccccchhhh}
{N/A}

Explanation: This message lists the alternate track address of a track assigned for a track found defective during an ANALYZE or FORMAT operation or for a track specified in a GETALT statement. The named DD statement defines the device containing the volume on which the alternate is assigned. If N/A appears in the message, no alternate track was assigned because the defective track is in the alternate area.

System Action: Processing continues.

Response: None.

IEH833I 3 BLANK TRACKS { ON HEAD CHECK.
ON CYLINDER CHECK.
ON STRIP CHECK.
ON SUBCELL CHECK. }

TRK=ccccchhhh, ddname

Explanation: This message is issued during an ANALYZE operation on a 2321 volume for one of the following reasons:

1. 3 BLANK TRACKS ON HEAD CHECK -- Three blank tracks were encountered during an analysis or address compare test on each track of a cylinder.
2. 3 BLANK TRACKS ON CYLINDER CHECK -- Three blank tracks were encountered during an address compare test of the first track of each cylinder on a strip.
3. 3 BLANK TRACKS ON STRIP CHECK -- Three blank tracks were encountered during an address compare test of the first track on each strip of a subcell.
4. 3 BLANK TRACKS ON SUBCELL CHECK -- Three blank tracks were encountered during an address compare test of the first track of each subcell of a cell.

Note: This message usually indicates that a 2321 has failed to "pick" a strip.

System Action: Processing continues with the next IEHDASDR control statement. (The return code is 8.)

Programmer Response: Probable hardware error. Rerun the program.

Problem Determination: Table I, items 1, 2, 3, 13.

IEH834I DIRECT ACCESS DEVICE NOT SUPPORTED.
DDNAME=ddname

Explanation: A direct access device type other than a supported device type has been specified. The named DD statement defines the invalid device.

System Action: Processing continues with the next IEHDASDR control statement. (The return code is 8.)

Programmer Response: Probable user error. Correct the DD statement referenced to reflect a supported device type and try the job again.

Problem Determination: Table I, items 1, 17a, 29.

IEH835I TAPE DD STATEMENT DOES NOT SPECIFY CORRECT LABEL INFORMATION FOR SECURITY PROTECTION

Explanation: A DUMP operation from direct access to tape involved password protected data sets; however, one or more of the following error conditions exists in the DD statement defining the magnetic tape volume:

- The LABEL parameter specifies a label other than a standard label.
- The PASSWORD subparameter is omitted from the LABEL parameter.
- The LABEL parameter specifies a file number other than 1.

System Action: The DUMP operation is terminated. Processing continues with the next IEHDASDR utility control statement. (The return code is 8.)

Programmer Response: Probable user error. Correct the DD statement, the LABEL parameter, or the PASSWORD subparameter, and rerun the operation.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH836I INCORRECT PASSWORD WAS GIVEN FOR A DATA SET ON DDNAME=ddname

Explanation: The operator did not provide the correct password for a password protected data set on the specified volume.

System Action: Processing continues with the next IEHDASDR utility control statement. (The return code is 8.)

Programmer Response: Provide the operator with a list of data set names and the corresponding passwords. Rerun the operation.

Problem Determination: Table I, items 1, 2, 3, 13, 29.

IEH837I UNEXPIRED DATA SET(S) NOT CONFIRMED ON TODD DDNAME=ddname

Explanation: The IEHDASDR program encountered one or more unexpired data sets on a direct access volume. Either the user did not code the PURGE keyword or the operator did not respond with REPLY xx, 'U' after message IEH807A was issued.

System Action: The operation is terminated. Processing continues with the next IEHDASDR utility control statement. (The return code is 8.)

Programmer Response: Probable user error. Mount the proper direct access volume. Code PURGE=YES on the utility control statement and respond REPLY xx, 'U' after message IFH807D.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH838I INVALID BLOCK SIZE SPECIFIED.
DDNAME={SYSIN
 {SYSPRINT}}

Explanation: The block size specified on the indicated DD statement is not a multiple of the logical record length (LRECL). SYSIN block size must be a multiple of 80; SYSPRINT block size should be a multiple of 121.

System Action: If an invalid block size is specified for the SYSIN data set, the IEHDASDR program is terminated. (The return code is 16.)

If an invalid block size is specified for the SYSPRINT data set, a default block size of 121 is assigned. (The return code is 4.)

Programmer Response: Probable user error. Correct the blocksize on the DD statement and rerun the operation. If the problem recurs, do the following before calling IBM for programming

Problem Determination: Table I, items 1, 3, 13, 29.

IEH839I HIGHEST RETURN CODE ENCOUNTERED WAS xx

Explanation: The IEHDASDR program has completed operation. The highest return code encountered was xx.

Programmer Response: If the return code was other than 00 check the output listing for possible incomplete operations. Refer to actual error message for corrective action.

IEH840I NO DD CARD PROVIDED FOR SECURITY DATA SET
ON FROMDD=ddname

Explanation: The user has failed to provide a DD statement defining a security protected data set on the named device.

System Action: Processing continues with the next IEHDASDR utility control statement. (The return code is 8.)

Programmer Response: Probable user error. Provide a DD statement for each security protected data set on the volume, and rerun the operation.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH841D cuu (or cuu/b for a 2321 volume) CONFIRM
REQUEST TO INITIALIZE LABEL
(or cuu/b for a 2321 volume)

Explanation: A volume is to be initialized or labeled offline and the operator is requested to verify that the desired volume is mounted on the specified offline device (cuu or cuu/b).

System Action: Processing continues according to the operator's response.

Operator Response: To continue processing, respond REPLY xx,'U'. To terminate the operation and continue with the next function, respond REPLY xx,'T'.

IEH842I DATA CHECK IN KEY FIELD ON
TRK=cccchhh,ddname (Followed by defective record.)

Explanation: When dumping to SYSOUT, the DUMP function was unable to read the specified field without a data check. If there is a data check in both the key and data fields, this message appears twice before it is followed by the defective record.

System Action: The system output device contains the record as read. Processing continues. If data check is in count field on a 2301, the operator terminates.

Programmer Response: Use the IEHATLAS utility to assign an alternate to the defective track, copy and correct the

Problem Determination: Table I, items 1, 2, 3, 13, 29.

IEH843I DATA CHECK IN COUNT FIELD AND POSSIBLY IN
KEY AND DATA FIELDS ON TRK=cccchhh,ddname
(Followed by the defective record and the remainder of the track.)

Explanation: When dumping to SYSOUT, the DUMP function was unable to read the count field without a data check. Using the key and data lengths from this count, DUMP was unable to read the key and/or data fields without a data check. The original data check may have been in the length fields of the count, or there may actually be a data check in the key and/or data fields.

System Action: The system output device contains the record as read and the remainder of the track (as if one record). Processing continues.

Programmer Response: Use the IEHATLAS utility to assign an alternate for the defective track, copy and correct the defective data.

Problem Determination: Table I, items 1, 2, 3, 13, 29.

IEH844I MISSING ADDRESS MARKER
ONTRK=cccchhh,ddname (Followed, if possible, by the defective record and the remainder of the track.)

Explanation: When dumping to SYSOUT, the DUMP function was unable to read the specified track without encountering a missing address marker.

System Action: The system output device contains the last record as read and the remainder of the track (as if one record). Processing continues.

Programmer Response: Use the IEHATLAS utility program to assign an alternate for the defective track, and copy and correct the defective data.

Problem Determination: Table I, items 1, 2, 3, 13, 14, 29.

IEH845I DEVICE NOT SUPPORTED FOR OFFLINE QUICK
DASDI FEATURE. TODD=cuu.

Explanation: The function is not performed because the specified offline device was other than a 2314 volume.

System Action: Processing continues with the next IEHDASDR utility control statement. (The return code is 08.)

Programmer Response: Probable user error. Vary the device online, changing the TODD keyword to indicate a DDNAME. Remove the PASSES=0 keyword from the control statement and request full surface analysis by the ANALYZE function.

Problem Determination: Table I, items 1, 2, 3, 13, 29.

IEH846I INVALID REQUEST FOR OFFLINE QUICK DASDI
FUNCTION. TODD=cuu.

Explanation: The "QUICK DASDI" feature of the IEHDASDR ANALYZE function could successfully read the volume label of the specified offline 2314 or 2319 volume.

System Action: Processing continues with the next IEHDASDR utility control statement. (The return code is 08.)

Programmer Response: Vary the 2314/2319 volume online, changing the TODD keyword to indicate a ddname, and rerun the operation. You may also wish to add the operation.

IEH

Problem Determination: Table I, items 1, 2, 3, 13, 29.

IEH847I INVALID PARAMETER IN EXEC CARD

Explanation: The LINECNT= and/or N= subparameter in the PARM field of the EXEC statement has been incorrectly specified.

System Action: The job is terminated.

Programmer Response: Make sure that the value in the LINECNT= subparameter is a two-digit decimal number from 01 to 99, and that the value in the N= subparameter is a decimal number from 1 to 6. Check for keypunch or spelling errors. Correct any errors and resubmit the job. If the problem recurs, call IBM for programming support.

IEH848D IS ANOTHER TAPE REQUIRED FOR THIS RESTORE JOB. REPLY Y OR N.

Explanation: During execution of a multi-volume RESTORE job, the system requires that a continuation tape volume be mounted.

System Action: The task waits for the operator to reply.

Operator Response: Meter REPLY xx,'Y' if a continuation tape volume is available and has been mounted. Enter REPLY xx'N' if a continuation tape volume is not available or cannot be mounted. If the volume cannot be mounted and the problem recurs, call IBM for programming support.

IEH849I RESTORE TERMINATED. ADDITIONAL TAPE REQUIRED.

Explanation: The system requires a multi-volume RESTORE tape, but an additional volume either is not available or cannot be mounted.

System Action: The job is terminated.

Programmer Response: Make sure that all tape volumes required by the job have been submitted with the job, and that their volume serial numbers have been specified in the DD statement. If the problem recurs, call IBM for programming support.

IEHATLAS Program Messages

IEH900I SUCCESSFUL COMPLETION. AN ALTERNATE TRACK HAS BEEN ASSIGNED. COMPLETION CODE=00

Explanation: An alternate track has been assigned and data has been transferred from the bad track to the alternate.

System Action: The job step is terminated.

Programmer Response: None.

IEH901I SUCCESSFUL COMPLETION. NO ALTERNATE TRACK ASSIGNED. COMPLETION CODE=00

Explanation: The utility successfully rewrote the record in error.

System Action: The job step is terminated.

Programmer Response: None.

IEH902I I/O ERROR IN ALTERNATE TRACK ASSIGNMENT. COMPLETION CODE=16

Explanation: Input/output errors occurred while attempting to assign an alternate track; therefore, no alternate track was assigned. The number of attempts at assigning the alternate track is equal to the number of alternate tracks available at the time the ATLAS SVC was called, or 10% of the number of assigned alternate tracks, whichever is less.

System Action: The program is terminated. (Return code = 16.)

Programmer Response: Use the IEHDASDR utility program to analyze the volume.

IEH903I REQUIRED DD CARD MISSION. COMPLETION CODE=16

Explanation: Either the SYSUT1 or SYSIN data set could not be opened. The DD statement defining the data set was not included in the input stream.

System Action: The job step is terminated.

Programmer Response: Probable user error. Insert the required DD statement and rerun the job.

Problem Determination: Table I, items 1, 2, 3, 13, 29.

IEH904I INVALID DCB PARAMETERS FOR SYSIN. COMPLETION CODE=16

Explanation: SYSIN DCB blocksize was not a multiple of LRECL (80 bytes).

System Action: The job step is terminated.

Programmer Response: Probable user error. Correct the blocksize for the SYSIN DD statement (must be a multiple of 80) and rerun the job.

Problem Determination: Table I, items 1, 2, 3, 13, 29.

IEH905I INVALID OR MISSION CONTROL CARD KEYWORD. COMPLETION CODE=16

Explanation: The control card keyword is missing or is invalid as it appears. The entire control card may be missing. Check for a misspelled keyword or a character in column 1.

System Action: The job step is terminated.

Programmer Response: Probable user error. Check for keypunch or format errors. Column 1 must be blank on the control statement. Correct and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH906I INVALID CHARACTER IN USER-INPUT RECORD. COMPLETION CODE=16

Explanation: A character in the user input record cannot be translated into valid internal code (i.e., the character is other than 0-9 or A-F).

System Action: The job step is terminated.

Programmer Response: Probable user error. Examine the TRACK or VTOC utility control statement for 10 bytes of hexadecimal information. Check the input record for valid hexadecimal information. Correct and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH907I DEVICE DOES NOT HAVE SOFTWARE ASSIGNABLE ALTERNATES. COMPLETION CODE=16.

Explanation: The unit type specified in the UCB is other than a 2302, 2311, 2314, 2319, or 2321. It has no software assignable alternates.

System Action: The job step is terminated.

Programmer Response: If device is a 2301 or a 2303 the alternate must be assigned manually. Call IBM for hardware support.

IEH908I ALL ALTERNATE TRACKS FOR THIS DEVICE HAVE BEEN ASSIGNED. COMPLETION CODE=16

Explanation: The format 4 DSCB shows that this device has no alternate tracks available for assignment.

System Action: The job step is terminated.

Programmer Response: Call IBM for hardware support.

IEH909I REQUESTED STORAGE IS NOT AVAILABLE. COMPLETION CODE=16

Explanation: Necessary core for a work area was not available at the time the GETMAIN was issued.

System Action: The job step is terminated.

Programmer Response: Probable user error. Increase the partition or region size and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH910I MESSAGE TEXT PROVIDED BY SYNADAF MACRO - I/O ERROR. COMPLETION CODE=16

Explanation: A permanent error was detected while reading the SYSIN data set.

System Action: The job step is terminated.

Programmer Response: Correct the error condition indicated in the message text. Ensure that the DCB parameters on the SYSIN DD statement are correct.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH911I TRACK ADDRESS PROVIDED DOES NOT BELONG TO DATA SET. COMPLETION CODE=16

Explanation: The address of the record provided on the control card does not belong to the specified data set.

System Action: The job step is terminated.

Programmer Response: Probable user error. Examine the utility control statement to insure that the cylinder and track address is within the extents of the SYSUT1 data set. If in doubt, use the IEHLIST utility program to list the VTOC, which will give you the extents of the data set.

Problem Determination: Table I, items 1, 3, 13, 14, 29.

IEH912I INCORRECT NUMBER OF CHARACTERS IN USER-INPUT RECORD. COMPLETION CODE=16

Explanation: Too few or too many data cards are in the input stream. Check for incorrect record length.

System Action: The job step is terminated.

Programmer Response: Probable user error. Check the data statements for the accurate number of hexadecimal characters. The input record must be the same length as the record being replaced.

Problem Determination: Table I, items 1, 3, 15, 29.

Have documentation showing the original record before failure (back-up data) available.

IEH913I CONDITION OTHER THAN DATA CHECK OR MISSING ADDRESS MARKER. COMPLETION CODE=16

Explanation: An invalid sense byte indication has been detected for the user's channel program or for another channel program to process data on the bad track. IEHATLAS cannot handle the error condition.

System Action: The job step is terminated.

Problem Determination: Table I, items 30.

IEH

IEH914I FORMAT 4 DSCB CANNOT BE READ. COMPLETION CODE=16

Explanation: A permanent I/O error was detected when reading the format 4 DSCB. Information concerning the number of alternates available or the address of the next available alternate cannot be retrieved.

System Action: The job step is terminated.

Programmer Response: Re-initialize the volume using either the IEHDASDR or IBCDASDI utility program.

Problem Determination: Table I, items 1, 3, 13, 29.

IEH915I RECORD IN ERROR IS FORMAT 4 DSCB. COMPLETION CODE=16

Explanation: The IEHATLAS program could not successfully rewrite the format 4 data set control block (DSCB) record. No alternate track information is available.

System Action: The job step is terminated.

Programmer Response: Re-initialize the volume using either the IEHDASDR or IBCDASDI utility programs.

Problem Determination: Table I, items 1, 3, 13, 28, 29.

IEH916I ERROR FOUND IN COUNT FIELD OF LAST RECORD ON TRACK. COMPLETION CODE=16

Explanation: Count field information cannot be recovered for the last record on a track unless that record is the error record input to the utility or the CCHHRKDD has been passed to the ATLAS SVC (86). IEHATLAS also requires information regarding track overflow records.

System Action: The job step is terminated.

Programmer Response: Either IEHATLAS or the ATLAS SVC (86) should be given as input to the CCHHRKDD of the last record. Track overflow information is also required if the last record is part of a track overflow data set.

IEH917I HA OR R0 ERRORS. COMPLETION CODE=16

Explanation: The ATLAS SVC (86) will not accept an R0 error record unless the SVC has been entered via the utility. An I/O error in HA or R0 prevents further use of the track on which the error exists.

System Action: The job step is terminated.

Programmer Response: Re-initialize the volume using either the IEHDASDR or IBCDASDI utility programs.

IEH918I ERROR/ERRORS ENCOUNTERED ALTERNATE ASSIGNED. COMPLETION CODE=16

Explanation: An error or errors was/were encountered while transferring the data from the bad track to the alternate. Such a condition will not prevent assignment of an alternate.

System Action: The job step is terminated.

Programmer Response: Use the IEHDASDR utility program to dump the alternate track and check for data validity.

Problem Determination: Table I, items 1, 3, 14, 15, 29.

IEH919I ALTERNATE TRACK ASSIGNED. I/O ERROR IN RE-EXECUTING USER CHANNEL PROGRAM COMPLETION CODE=16

Explanation: An alternate track has been assigned but because the user's channel program could not be re-executed, the error condition still exists for the original record in error.

System Action: The job step is terminated.

Programmer Response: Execute the IMASPZAP service aid program to dump the data set to check data validity on the alternate track. Execute the IEHATLAS utility program if necessary, to update in place the defective record if the user's channel program cannot be successfully re-executed.

Problem Determination: Table I, items 1, 3, 13, 14, 29.

IEH920I THE SYSTEM DOES NOT SUPPORT TRACK OVERFLOW. COMPLETION CODE=16

Explanation: Track overflow support was not included in the system at system generation time.

System Action: The job step is terminated.

Programmer Response: There is a track overflow indication in the DCB, but the UCB indicates that the device does not support track overflow.

Problem Determination: Table I, items 1, 13, 17a, 29.

IEH921I NO ERROR IN SPECIFIED VTOC RECORD. COMPLETION CODE=00

Explanation: User's VTOC record has been read without error. No alternate track has been assigned.

System Action: The job step is terminated.

User Response: None.

IEH922I ERROR/ERRORS ENCOUNTERED CANNOT BE HANDLED. NO ALTERNATE ASSIGNED. COMPLETION CODE=16

Explanation: The conditions which produce this message are: (1) Count field errors on more than three records. (2) Error on an EOF record when it is not the record specified by the utility. (3) An error in the KDD of the count field of a record other than the specified error record.

System Action: The job step is terminated.

Programmer Response: Check the return parameter list to determine the record numbers of error records. The last record indicated in the list is the record which caused the unrecoverable condition. If three error records have been listed, then the possibility exists that a fourth read count error was also encountered. Move the volume to another drive and rerun the job. If the problem still exists, the data cannot be recovered and the volume should be restored.

Problem Determination: Table I, items 1, 3, 13, 29.

NOTE: Do not move direct access volumes to more than one other device. Bad volumes may cause damage to devices.

IEH923I NO ERRORS FOUND ON TRACK. NO ALTERNATE ASSIGNED. COMPLETION CODE=16

Explanation: The ATLAS SVC successfully read the indicated error track and therefore did not assign an alternate.

System Action: The job step is terminated.

Programmer Response: Probable user error. The cylinder and track address passed to the ATLAS SVC must specify a track containing an error record.

Problem Determination: Table I, items 1, 15, 29. Have the assembly listing of the program that calls SVC 86 available.

IEH

System Generation Messages (IEI)

Component Name	IEI
Program Producing Message	Assembler program during expansion of system generation macro instructions.
Audience and Where Produced	For system programmer: assembler listing in SYSPRINT data set.
Message Format	<pre>s,* * * IEIaaaann text s Severity code: 0 Warning message; the condition indicated may cause errors in new system. 5 Error message; error is in coding of a system generation macro instruction. 7 Error message; message is produced by GENERATE macro instruction. aaa Indication of system generation macro instruction at which error was detected: AGL AGLLIB GJC GJOBCTL RPG RPG ALG ALGOL GPH GRAPHICS SCH SCHEDULR ASM ASSEMBLR IOC IOCONTRL SCN SECONSLE CEN CENPROCS IOD IODEVICE SEC SECMODS CHA CHANNEL LDR LOADER SOL SORTLIB CKP CKPTREST LNK LINKLIB SOR SORTMERG CKR CHECKER COB COBOL MAL MACLIB SUP SUPRVSOR COL COBLIB PLL PL1LIB SVC SVCTABLE CTR CTRLPROG PL1 PL1 SVL SVCLIB DAT DATAMGT POP PTOP SYS SYSUTILS EDT EDITOR PRL PROCLIB TEL TELCMLIB EMU EMULATOR FOL FORTLIB PRM PARMLIB FTC FORTRAN PTN PARTITNS UCS UCS GEN GENERATE RES RESMODS UNI UNITNAME nnn Message serial number. text Message text.</pre>
Comments	None.
Associated Publications	<u>IBM System/360 Operating System:</u> <u>System Generation, GC28-6554</u>
Problem Determination	Refer to the fold-out in part VI of this publication for problem determination instructions.



IEIaaaann text

Explanation: Error: The error indicated by the message text is a coding error in the system generation macro instruction, aaa. The message serial number, nnn, identifies the message.

For the CHANNEL, IOCONTRL, and IODEVICE macro instructions, the message text begins with either the name field of the macro instruction or, if the name field was omitted, the

sequential identification number provided by the system.

Examples of these messages are:

- ```
5,* * * IEICEN104 INSTSET VALUE NOT
SPECIFIED
5,* * * IEICHA102 CHANNEL2-ADDRESS
VALUE NOT SPECIFIED
5,* * * IEICHA102 CHAN#2-ADDRESS VALUE
NOT SPECIFIED
```

The second example illustrates a message for a CHANNEL macro instruction. "CHANNEL2" is the name field of the macro instruction. The third example illustrates the same message, but in this case the name field of the macro instruction was omitted and "CHAN#2" was supplied by the system.

System Action: The assembler program did not produce a job stream in the SYSPUNCH data set. The program analyzed all remaining system generation macro instructions and printed any other required messages. Either message IEIGEN113 or IEIGEN116 was printed, followed by the message: GENERATION TERMINATED. Then the system generation process was abnormally terminated.

Severity Code: 5

Programmer Response: Probable user error. Correct the error or errors indicated and begin the system generation process from the start of Stage I.

Problem Determination: Table I, items 17a, 29. Have the hardware configuration available.

IEIaaannn text

Explanation: Warning: The message text indicates a hardware condition that may cause errors in the new system. For example:

0,\* \* \* IEIIOC114 PREVIOUS CONTROL  
UNIT HAS NO DEVICES

System Action: The job stream is produced.

Severity Code: 0

Programmer Response: Determine if the condition indicated is a problem. If necessary, correct the condition indicated and begin the system generation process from the start of Stage I.

Problem Determination: Table I, items 17a, 29.

IEIGEN113 QUIT SWITCH ON BEFORE GENERATE MACRO

Explanation: One or more errors, indicated by severity code 5 messages, were detected before the GENERATE macro instruction was expanded.

Severity Code: 7

IEIGEN116 QUIT SWITCH SET IN GENERATE MACRO

Explanation: One or more errors were detected during expansion of the GENERATE macro instruction.

Severity Code: 7

## FORTRAN IV H Messages (IEK)

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component Name              | IEK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Program Producing Message   | FORTRAN IV H compiler.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Audience and Where Produced | For programmer: SYSPRINT data set following the source module listing and the object module name table.                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Message Format              | <p>ISN a IEKnnnI text<br/>           LABEL b<br/>           NAME c</p> <p>a<br/>           Internal statement number of statement in error or statement following last previous executable statement.</p> <p>b<br/>           Source label (statement number).</p> <p>c<br/>           Variable name.</p> <p>nnn<br/>           Message serial number.</p> <p>text<br/>           Message text.</p>                                                                                                                                                                               |
| Comments                    | <p>IEK messages are not included in this publication. They are documented in the publication <u>IBM System/360 Operating System: FORTRAN IV (G and H) Programmer's Guide</u>, GC28-6817. If your installation uses FORTRAN IV H frequently, you may prefer to have the IEK messages in this publication; the index tab on this page is provided so that you can remove the IEK messages from the Programmer's Guide and insert them here.</p> <p>For routing and descriptor codes of IEK messages, see Table 8 in Part V of this publication: "Routing and Descriptor Codes."</p> |
| Associated Publications     | <p><u>IBM System/360 Operating System:</u><br/> <u>FORTRAN IV (G and H) Programmer's Guide</u>, GC28-6817<br/> <u>IBM System/360 FORTRAN IV Language</u>, GC28-6515</p>                                                                                                                                                                                                                                                                                                                                                                                                           |





## PL/I F Messages (IEM)

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component Name              | IEM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Program Producing Message   | PL/I F compiler.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Audience and Where Produced | For programmer: SYSPRINT data set either directly or following PL/I source program listing and any other listings (specified in PARM of EXEC statement).<br><br>For operator: console.                                                                                                                                                                                                                                                                                                                                                                      |
| Message Format              | IEMnnnnI text (in SYSPRINT)<br>xx IEMnnnnI text (on console)<br><br>nnnn Message serial number.<br>text Message text.<br>xx Message reply identification (absent, if operator reply not required).                                                                                                                                                                                                                                                                                                                                                          |
| Comments                    | IEM messages are not included in this publication. They are documented in the publication <u>IBM System/360 Operating System: PL/I (F) Programmer's Guide, GC28-6594</u> . If your installation uses PL/I (F) frequently, you may prefer to have the IEM messages in this publication; the index tab on this page is provided so that you can remove the IEM messages from the Programmer's Guide and insert them here.<br><br>For routing and descriptor codes of IEM messages, see Table 9 in Part V of this publication: "Routing and Descriptor Codes." |
| Associated Publications     | <u>IBM System/360 Operating System:</u><br><u>PL/I (F) Programmer's Guide, GC28-6594</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |



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## COBOL E Messages (IEP)

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component Name              | IEP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Program Producing Message   | COBOL E compiler and COBOL E debug packet.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Audience and Where Produced | For programmer: SYSPRINT data set and console.<br>For operator: console.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Message Format              | <p>YYY-w IEPnnnIx clause text <span style="float: right;">(in SYSPRINT)</span><br/> xx IEPnnns text <span style="float: right;">(on console)</span><br/> IEPnnnI sentence1. sentence2.</p> <p>YYY-w<br/> Line number and element position of verb where error was detected. If element cannot be located, only line number appears. If SEQUENCE NUMBER 0-0 is printed, message refers to an entire section.</p> <p>nnn<br/> Message serial number.</p> <p>x<br/> Severity code indicating effect of error on execution of program being compiled:</p> <p>W Warning message; successful execution is probable.<br/> C Conditional message; erroneous statement was not compiled or corrective action was taken; compilation was continued to permit debugging; execution may fail.<br/> E Error message; successful execution is improbable; execution should not be attempted.</p> <p>clause<br/> Clause being processed when message produced, or basic area involved, such as ALIGNMENT, I/O CONTROL.</p> <p>text<br/> Message text.</p> <p>xx<br/> Message reply identification (absent, if operator reply not required).</p> <p>s<br/> Type code:</p> <p>A Action; operator must perform a specific action.<br/> D Decision; operator must choose an alternative.<br/> I Information; no operator action is required.</p> <p>sentence1.<br/> Message text describing the error.<br/> sentence2.<br/> Message text describing action as a result of the error.</p> |
| Comments                    | <p>IEP messages are not included in this publication. They are documented in the publication <u>IBM System/360 Operating System: COBOL E Programmer's Guide</u>, GC24-5029. If your installation uses COBOL E frequently, you may prefer to have the IEP messages in this publication; the index tab on this page is provided so that you can remove the IEP messages from the Programmer's Guide and insert them here.</p> <p>For routing and descriptor codes of IEP messages, see Table 10 in Part V of this publication: "Routing and Descriptor Codes."</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Associated Publications     | <u>IBM System/360 Operating System:</u><br><u>COBOL E Programmer's Guide</u> , GC24-5029<br><u>COBOL Language</u> , GC28-6516                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |



## Sort/Merge Messages (IER)

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component Name              | IER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Program Producing Message   | Sort/merge program.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Audience and Where Produced | For programmer: SYSPRINT data set or console (system generation option).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Message Format              | <p>IERnnns - text</p> <p>nnn<br/>    Message serial number.</p> <p>s<br/>    Severity code:</p> <p>    A Error message; programmer action is required.<br/>    I Information message; no programmer action is required.</p> <p>text<br/>    Message text.</p>                                                                                                                                                                                                                                                                                           |
| Comments                    | <p>IER messages are not included in this publication. They are documented in the publication <u>IBM System/360 Operating System: Sort/Merge</u>, GC28-6543. If your installation uses Sort/Merge frequently, you may prefer to have the IER messages in this publication; the index tab on this page is provided so that you can remove the IER messages from the Sort/Merge publication and insert them here.</p> <p>For routing and descriptor codes of IER messages, see Table 12 in Part V of this publication: "Routing and Descriptor Codes."</p> |
| Associated Publications     | <u>IBM System/360 Operating System: Sort/Merge</u> , GC28-6543                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |



## Report Program Generator (RPG) Messages (IES)

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component Name              | IES                                                                                                                                                                                                                                                                                                                                                                                                             |
| Program Producing Message   | Report program generator (RPG).                                                                                                                                                                                                                                                                                                                                                                                 |
| Audience and Where Produced | For programmer: SYSPRINT data set.                                                                                                                                                                                                                                                                                                                                                                              |
| Message Format              | IESnnnI text<br><br>nnn<br>Message serial number.<br>text<br>Message text.                                                                                                                                                                                                                                                                                                                                      |
| Comments                    | IES messages are not included in this publication. They are documented in the publication <u>IBM System/360 Operating System: RPG Language Specifications</u> , GC24-3337. If your installation uses RPG frequently, you may prefer to have the IES messages in this publication; the index tab on this page is provided so that you can remove the IES messages from the RPG publication and insert them here. |
| Associated Publications     | <u>IBM System/360 Operating System:</u><br><u>RPG Language Specifications</u> , GC24-3337                                                                                                                                                                                                                                                                                                                       |



## Assembler F Messages (IEU)

IEU

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component Name              | IEU                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Program Producing Message   | Assembler F program during assembly of assembler instructions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Audience and Where Produced | For programmer: assembler listing in SYSPRINT data set.<br>For operator: console.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Message Format              | <pre> ***IEUnnn text           (in SYSPRINT) IEUnnnIttext           (on console) nnn     Message serial number. text     Message text. </pre>                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Comments                    | <p>IEU messages are not included in this publication. They are documented in the publication <u>IBM System/360 Operating System: Assembler (F) Programmer's Guide</u>, GC26-3756. If your installation uses Assembler (F) frequently, you may prefer to have the IEU messages in this publication; the index tab on this page is provided so that you can remove the IEU messages from the Programmer's Guide and insert them here.</p> <p>For routing and descriptor codes of IEU messages, see Table 13 in Part V of this publication: "Routing and Descriptor Codes."</p> |
| Associated Publications     | <p><u>IBM System/360 Operating System:</u><br/> <u>Assembler (F) Programmer's Guide</u>, GC26-3756<br/> <u>Assembler Language</u>, GC28-6514</p>                                                                                                                                                                                                                                                                                                                                                                                                                             |



## Loader and Linkage Editor Messages (IEW)

IEW

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component Name              | IEW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Program Producing Message   | Loader program and linkage editor F program.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Audience and Where Produced | For programmer: diagnostic output listing in SYSPRINT data set.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Message Format              | <p>IEWnnns xxx - text</p> <p>nnn<br/>             Message serial number, which is coded to indicate the program:</p> <p>    0nn Linkage editor program<br/>             1nn Loader program</p> <p>s<br/>             Severity code (linkage editor program):</p> <p>    0 Informational message; appears when control statement is printed as result of LIST option.<br/>             1 Warning message; condition may cause error during execution of output module; output module is marked executable.<br/>             2 Error message; condition may make execution of output module impossible; output module is marked not executable, unless LET option was specified; module processing is continued.<br/>             3 Error message; condition will make execution of output module impossible; output module is marked not executable; module processing is continued.<br/>             4 Error message; no recovery from error condition is possible; output module is not produced; module processing is terminated; only output is diagnostic messages.</p> <p>    Code (loader program severity code):</p> <p>    0 Condition that will not cause an error during execution of the loaded module.<br/>             1 Condition that may cause an error during execution of the loaded module.<br/>             2 Error that could make execution of the loaded module impossible. Processing continues.<br/>             3 Error that will make execution of the loaded module impossible. Processing continues.<br/>             4 Error condition from which no recovery is possible. Processing continues.<br/>             I Information: No operator is required.</p> <p>    xxx<br/>             WARNING or ERROR to indicate nature of message.</p> <p>    text<br/>             Message text.</p> |
| Comments                    | None.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Associated Publications     | <u>IBM System/360 Operating System:</u><br><u>Linkage Editor and Loader, GC28-6538</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Problem Determination       | Refer to the fold-out in part VI of this publication for problem determination instructions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

### Linkage Editor Program Messages

IEW0000 (control statement)

Explanation: The control statement is printed as a result of the LIST option.

Explanation: A relocatable A-type or V-type address constant of less than three bytes has been found in the input.

System Action: The constant is not relocated.

IEW0012 ERROR - INPUT CONTAINS INVALID TWO-BYTE RELOCATABLE ADDRESS CONSTANT, CONSTANT HAS NOT BEEN RELOCATED.

Programmer Response: Probable user error. Check assembler language input for Y-type address constants, which cannot be relocated. Delete or correct the invalid address constant.

Problem Determination: Table I, items 6bf, 9a, 13, 29. Save the object module input.

IEW0022 ERROR - INPUT CONTAINS INVALID V-TYPE ADDRESS CONSTANT, CONSTANT HAS NOT BEEN RELOCATED.

Explanation: A V-type address constant of less than four bytes has been found in the overlay structure.

System action: The constant is not relocated.

Programmer Response: Probable user error. Either (1) specify a length of four bytes for all V-type address constants; or (2) if a 3-byte V-type address constant refers to a symbol within its overlay segment, you can assemble it as an A-type address constant with an EXTRN statement. One method of isolating an invalid address constant is (1) linkage edit with OVLY and XREF options specified; (2) link edit again without the OVLY option; (3) compare the external reference lists. Any reference appearing in the second run and not the first is invalid in an overlay structure.

Problem Determination: Table I, items 6bf, 22, 23, 29. Have the output used to isolate the address constant available.

IEW0033 ERROR - INVALID ENTRY POINT FROM END CARD, NO ENTRY POINT ASSIGNED.

Explanation: The entry point for the program was specified as a relative address in an END card. The entry point that was specified appeared to be valid when the END card was processed, however, the entry point was found to be invalid when the entry point of the load module was being determined.

System Action: No entry point is assigned.

Programmer Response: Check object module input for completeness. Then either specify an entry point name on the ENTRY control statement, or, if entry points were specified at compilation or assembly, make sure the object module containing the desired entry point precedes all other object modules with assembled or compiled entry points.

Problem Determination: Table I, items 6bf, 9a, 13, 29. Save the object module input.

IEW0043 ERROR - INPUT CONTAINS INVALID EXTERNAL SYMBOL ID. problem determination instructions. mispunched.

System Action: The invalid item is ignored.

Programmer Response: Probable user error. Check the input object modules for completeness and proper sequence. If necessary, either (1) recreate any module

which has been in card form, or (2) isolate the incorrect module by executing the linkage editor with the NCAL option specified, using the NAME control statement for each input module. Diagnostic IEW0043 should recur and isolate the incorrect module. Recreate the module and rerun the step.

Problem Determination: Table I, items 6bf, 9ab, 29. Have available the output used to isolate the module as described above.

IEW0053 ERROR - ENTRY STATEMENT SYMBOL PRINTED IS INVALID (NOT AN EXTERNAL NAME), NO ENTRY POINT ASSIGNED.

Explanation: The symbolic entry point specified in an ENTRY statement is not a control section or entry name.

System Action: No entry point is assigned.

Programmer Response: Probable user error. Correct the ENTRY control statement, or make sure that the control section containing the entry point is included in the input and has not been accidentally deleted or redefined by a REPLACE or CHANGE control statement.

Problem Determination: Table I, items 6bf, 9a, 13, 29. Save the object module input.

IEW0063 ERROR - END CARD SYMBOL PRINTED IS INVALID (NOT AN EXTERNAL NAME), NO ENTRY POINT ASSIGNED.

Explanation: The symbolic entry point specified in an END statement is not a control section or entry name.

System Action: No entry point is assigned.

Programmer Response: Check that the entry point control section or entry name has not been accidentally deleted or redefined by a REPLACE or CHANGE control statement. Check the module containing the entry point for completeness.

Problem Determination: Table I, items 6bf, 9a, 13, 29. Save the object module input.

IEW0073 ERROR - ENTRY STATEMENT SYMBOL PRINTED IS NOT IN ROOT SEGMENT OF OVERLAY STRUCTURE, NO ENTRY POINT ASSIGNED.

Explanation: The entry point specified by the programmer is in a segment other than the root segment. Either, (1) the module containing the entry point was placed in a segment other than the root segment by means of the INSERT statement, or (2) the entry point is incorrectly specified on the ENTRY statement.

System Action: No entry point is assigned.

Programmer Response: Probable user error. Either correct the ENTRY control statement, or move the module containing the entry point to the root segment.

Problem Determination: Table I, items 6bf, 9a, 13, 29. Save the object module input.

IEW0083 ERROR - END CARD SYMBOL PRINTED IS NOT IN ROOT SEGMENT OF OVERLAY STRUCTURE, NO ENTRY POINT ASSIGNED.

Explanation: The entry point is in a segment other than the root segment. Either, (1) the INSERT statement was used to place the control section containing the entry point in another segment, or (2) the symbol specified on the END statement is incorrect.

System Action: No entry point is assigned.

Programmer Response: Probable user error. Move the object module containing the entry point to the root segment, or specify an entry point in the root segment using the ENTRY control statement.

Problem Determination: Table I, items 6bf, 9a, 13, 29. Save the object module input.

IEW0093 ERROR - END CARD ENTRY POINT ADDRESS PRINTED IS NOT IN ROOT SEGMENT OF OVERLAY STRUCTURE, NO ENTRY POINT ASSIGNED.

Explanation: The entry point is in a segment other than the root segment. Either, (1) the INSERT statement was used to place the control section containing the entry point in another segment, or (2) the address specified on the END statement is incorrect.

System Action: No entry point is assigned.

Programmer Response: Probable user error. Move the object module containing the entry point to the root segment, or specify an entry point in the root segment using the ENTRY control statement.

Problem Determination: Table I, items 6bf, 9a, 13, 29. Save the object module input.

IEW0102 ERROR - INVALID ENTRY POINT ON END CARD, ENTRY POINT IGNORED.

Explanation: A possible entry point for the program was specified as a relative address in an END card. When the END card was processed, the control section identification of the specified entry point was found to be invalid.

System Action: The entry point is ignored. The first valid entry point encountered is used; if there is none, no entry point is assigned.

Programmer Response: Probable user error. Check the input object modules for completeness and proper sequence. If necessary, either (1) recreate any module which has been in card form, or (2) isolate the incorrect module by executing the linkage editor with the NCAL option specified, using the NAME control statement for each input object module. Diagnostic IEW0102 should recur and isolate the incorrect module. Recreate the module and rerun the step.

Problem Determination: Table I, items 3, 6bf, 9a, 13, 29. Have available the output used to isolate the module.

IEW0113 ERROR - OUTPUT MODULE CONTAINS NO CONTROL SECTIONS IN ROOT SEGMENT OF OVERLAY STRUCTURE, NO ENTRY POINT ASSIGNED.

Explanation: There are no control sections in the root segment. Either (1) all control sections originally in the root segment have been deleted, or (2) there were no control sections originally in the root segment, or (3) an OVERLAY statement preceded the input.

System Action: No entry point is assigned.

Programmer Response: Probable user error. Place at least one control section in the root segment.

Problem Determination: Table I, items 6bf, 9b, 29. Save a root segment module and its associated listings.

IEW0123 ERROR - NO ESD ENTRIES, EXECUTION IMPOSSIBLE.

Explanation: There are no external symbol dictionary entries. There are no control sections in the output.

System Action: Processing is terminated.

Programming Response: Probable user error. Check other messages issued for cause of error (i.e. invalid input from object module.) Insure that at least one control section appears in the input and is not deleted by the REPLACE control statement.

Problem Determination: Table I, items 1, 3, 6bf, 9a, 13, 22, 23, 29.

IEW0132 ERROR - SYMBOL PRINTED IS AN UNRESOLVED EXTERNAL REFERENCE.

Explanation: An external reference is unresolved at the end of input processing. None of the following is specified: restricted no-call, never-call, or NCAL.

System Action: The module is marked not executable unless LET is specified.

Programmer Response: Probable user error. Check that the reference is valid and not the result of a keypunch or programming error. If the reference is valid, add the

needed module or alias to one of the input data sets. Make sure the SYSLIB data set DD statement has been specified, if needed. If resolution is not desired, specify NCAL, never-call, or restricted no-call.

Problem Determination: Table I, items 1, 6bf, 9b, 13, 22, 23, 25c, 29.

IEW0143 ERROR - NO TEXT.

Explanation: No text remains in the output module. Either, (1) all the control sections originally in the input are deleted, or (2) there are no control sections that originally contained text.

System Action: Processing is terminated.

Programmer Response: Probable user error. Check other messages issued for cause of error (i.e., invalid input from object module.) Insure that at least one control section contains text and is not deleted by the REPLACE control statement or by automatic replacement.

Problem Determination: Table I, items 1, 6bf, 9ab, 13, 29. Save a module containing text.

IEW0152 ERROR - INVALID OVERLAY STRUCTURE, NO CALLS OR BRANCHES MADE FROM ROOT SEGMENT.

Explanation: There are no calls or branches from the root segment to a segment lower in the tree structure. Other segments cannot be loaded.

System Action: The module is marked not executable unless LET is specified.

Programmer Response: Probable user error. Make sure the root segment contains a control section that refers to at least one other segment in the overlay structure by means of a V-type address constant.

Problem Determination: Table I, items 1, 6bf, 9b, 13, 29. Have a root segment module which calls another segment available with its associated listing.

IEW0161 WARNING - EXCLUSIVE CALL FROM SEGMENT NUMBER PRINTED TO SYMBOL PRINTED -- XCAL WAS SPECIFIED.

Explanation: There is a valid exclusive branch-type reference; the XCAL option is specified for this job step.

System Action: Processing continues.

Programmer Response: No response is necessary normally. You can check that the printed branch-type references between exclusive segments are correct according to your overlay structure.

Problem Determination: If you suspect that the message fails to appear when it should or appears incorrectly, see Table

I, items 6bf, 9b, 29. Have modules that contain the calls and symbol available with associated source listings.

IEW0172 ERROR - EXCLUSIVE CALL FROM SEGMENT NUMBER PRINTED TO SYMBOL PRINTED.

Explanation: A valid branch-type reference is made from a segment to an exclusive segment; the XCAL option is not specified.

System Action: The module is marked not executable unless the LET option is specified.

Programmer Response: Probable user error. Either (1) rearrange the overlay structure to place both segments in the same path or (2) specify the XCAL option.

Problem Determination: Table I, items 6bf, 9b, 13, 29. Have the modules containing the symbol and the calls to it available with associated listings.

IEW0182 ERROR - INVALID EXCLUSIVE CALL FROM SEGMENT NUMBER PRINTED TO SYMBOL PRINTED.

Explanation: There is an invalid exclusive branch-type reference from a segment to a symbol in an exclusive segment.

System Action: The module is marked not executable unless the LET option is specified.

Programmer Response: Probable user error. Either, (1) place the segments in the same path, or (2) place a V-type address constant in a common segment.

Problem Determination: Table I, items 6bf, 9b, 13, 29. Have the modules containing the symbol and the calls to it available with associated listings.

IEW0191 WARNING - MAIN STORAGE REQUIREMENTS FOR OUTPUT LOAD MODULE HAVE EXCEEDED 512K BYTES.

Explanation: With MFT, a request block (RB) will not accommodate an address greater than 524,287.

System Action: Processing continues. The output load module will run only under MVT.

Programmer Response: Probable user error. If the program is to be run under MFT, divide the load module into several load modules that are dynamically loaded by assembler language macro instructions.

Problem Determination: Table I, items 6bf, 13, 29.

IEW0201 WARNING - OVERLAY STRUCTURE CONTAINS ONLY ONE SEGMENT -- OVERLAY OPTION CANCELLED.

Explanation: There are no OVERLAY statements in the input.

System Action: The overlay option is canceled.

Programmer Response: Probable user error. Either place OVERLAY statements in the input, or remove the OVLY option from the EXEC statement.

Problem Determination: Table I, items 1, 3, 6bf, 9b, 13, 29.

IEW0212 ERROR - EXPECTED CONTINUATION CARD NOT FOUND.

Explanation: A linkage editor control statement specifying a continuation (nonblank in column 72) is not followed by a continuation card.

System Action: The card is not processed as a continuation, but as normal input.

Programmer Response: Probable user error. Either remove the nonblank character in column 72 or insert the necessary continuation record.

Problem Determination: Table I, items 6bf, 13, 29.

IEW0222 ERROR - CARD PRINTED CONTAINS INVALID INPUT FROM OBJECT MODULE.

Explanation: A control statement may have been placed within an object module, or a record that is not an object module record contains a non-blank character in column 1.

System Action: The questionable record is ignored and processing continues.

Programmer Response: Probable user error. Check object module input for invalid records. Column 1 should contain a 12-2-9 punch. Columns 2-4 should contain a TXT, RLD, ESD, END, or SYM identifier. Because any record with a non-blank punch is taken as an object module record, this error message can also occur when a control statement is erroneously begun in column 1. Remove incorrect records or recreate the module, and rerun the job.

Problem Determination: Table I, items 6bf, 22, 29.

IEW0232 ERROR - INPUT FROM LOAD MODULE IS INVALID.

Explanation: An unrecognizable record type was found while reading a load module.

System Action: The questionable record is ignored and processing continues.

Programmer Response: Probable user error. (1) Check that all input data sets are specified correctly on DD statements. (2) If load module input occurs in the primary input, rerun the step with the NCAL option specified. If error message IEW0232 recurs, the incorrect load module is in primary input. Otherwise it is in SYSLIB input. (3) Isolate the incorrect load

module by executing the linkage editor with the NCAL option specified, using the INCLUDE and NAME statements for each suspect load module. When the incorrect load module is isolated, recreate it and rerun the job step.

If CSECT Identification (IDR) records are included in the input, verify that the linkage editor used contains the appropriate support. The Release 21 version of the linkage editor F is the minimum required. To use an earlier version of the linkage editor to process input containing identification records, specify the LET option in the PARM field of the EXEC job control statement, and rerun the job step. The identification records are ignored.

Problem Determination: Table I, items 6bf, 13, 29. If an incorrect load module was created, execute the IMBLIST service aid program, using the OUTPUT=MODLIST option of the LISTLOAD function, and save the resulting listing.

IEW0241 WARNING - EXTERNAL SYMBOL PRINTED IS DOUBLY DEFINED -- ESD TYPE DEFINITIONS CONFLICT.

Explanation: Two identical external names have been found in the input. (1) The invalid match involves a label reference (LR) or label definition (LD) matching an existing section definition (SD), common (CM), or label reference (LR). The section definition for the input LR or LD must be marked delete in order for this not to be an error. (2) It is always invalid for a CM to match an existing LR.

System Action: References to the name are resolved with respect to the first occurrence of the name.

Programmer Response: Probable user error. Correct the existing symbol conflict. To isolate the problem, load module symbols can be printed using the LISTLOAD function of the IMBLIST service aid program, specifying the OUTPUT=XREF option. Object module symbols can be printed using the LISTOBJ function of the IMBLIST service aid program.

Problem Determination: Table I, items 6bf, 14, 22, 29.

IEW0254 ERROR - TABLE OVERFLOW -- TOO MANY EXTERNAL SYMBOLS IN ESD.

Explanation: There are too many external symbols or control statement operands in the problem program.

System Action: Processing is terminated.

Programmer Response: Probable user error. Check that no unnecessary modules or control statements are included in the input. Then, either (1) increase the linkage editor's table space by increasing value<sub>1</sub> (or decreasing value<sub>2</sub>) of the SIZE parameter, making sure the region or

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partition size is also increased, if necessary; or (2) reduce the number of external symbols in the input (control sections, entry points, and named common areas).

Problem Determination: Table I, items 6bf, 29.

IEW0264 ERROR - TABLE OVERFLOW -- INPUT MODULE CONTAINS TOO MANY EXTERNAL SYMBOLS IN ESD.

Explanation: Either, (1) an input module contains too many external symbols in the ESD, or (2) an ESD card is mispunched.

System Action: Processing is terminated.

Programmer Response: Probable user error. Check that input object modules are complete and not mispunched. Then either (1) break down any large input module into a number of smaller modules, or (2) increase the linkage editor's table space by increasing value<sub>1</sub> (or decreasing value<sub>2</sub>) of the SIZE parameter making sure the region or partition size is also increased, if necessary.

Problem Determination: Table I, items 6bf, 9a, 29.

IEW0272 ERROR - LOAD MODULE FROM LIBRARY SPECIFIED UNACCEPTABLE TO LEVEL x.

Explanation: In the message text, x is either E for the level E linkage editor or F for the level F linkage editor.

When the load module was created, it was marked not editable, or, for the level E, the downward compatible attribute was not specified.

System Action: The load module was not accepted as input.

Programmer Response: Probable user error. If the module is unacceptable because it is marked not-editable, it must be recreated before it can be input to either linkage editor. If the module is unacceptable because it has not been marked downward-compatible, either recreate the module or rerun the step using the Level F linkage editor.

Problem Determination: Table I, items 6bf, 29. Execute the IEHLIST utility program, using the LISTPDS function with the FORMAT option, to print out the module's directory entry and show the not-editable and downward-compatible indicators.

IEW0284 ERROR - DDNAME PRINTED CANNOT BE OPENED.

Explanation: The specified data set cannot be opened. The DD statement defining the data set is missing.

System Action: Processing is terminated.

Programmer Response: Probable user error. Either (1) supply the missing DD statement, or (2) correct erroneous information on the DD statement. If the linkage editor was invoked by a macro instruction such as LINK rather than through the EXEC statement, make sure the ddname list, if passed, was correct.

Problem Determination: Table I, items 1, 3, 13, 25b, 29.

IEW0294 ERROR - DDNAME PRINTED HAD SYNCHRONOUS ERROR.

Explanation: Either (1) a physical uncorrectable I/O error occurred, or (2) an object module is missing an END card as the last card, or (3) if the data definition name that was printed is for a DD statement that defines a blocked input data set of fixed format, an input record larger than the specified block size or logical record length was found.

System Action: Processing was terminated. The data definition name in the name field of the DD statement for the input data set was printed after the message code. If an input/output error occurred, the information provided by the SYNADAF macro instruction was printed after the message code in the following format: SYNAD EXIT, jobname, stepname, unit address, device type, ddname, operation attempted, error description, block count or BBCCHHR, access method.

Programmer Response: For any fixed format, specify the correct block size. If the block size was correct and the data set was an input data set, recreate or restore the data set.

Problem Determination: Table I, items 1, 3, 13, 25b, 29.

IEW0302 ERROR - INVALID STATEMENT -- SCAN TERMINATED.

Explanation: Either (1) there is an error on a linkage editor control statement, or (2) an OVERLAY control statement was encountered and the OVLY attribute was not specified on the EXEC statement, or (3) a HIARCHY control statement was encountered and the HIAR attribute was not specified on the EXEC statement.

System Action: A statement in error is accepted as input up to the point of the error; the OVERLAY statements are ignored and the module is not in overlay format.

Programmer Response: Probable user error. Either (1) correct the error, if necessary, or (2) specify OVLY on the EXEC statement, or (3) specify HIAR on the EXEC statement.

Problem Determination: Table I, items 1, 6bf, 3, 13, 29.



IEW0314 ERROR - MAXIMUM NUMBER OF REGIONS (four) EXCEEDED.

Explanation: There are five or more regions specified in this overlay structure.

System Action: Processing is terminated.

Programmer Response: Probable user error. Reduce the number of regions in the overlay structure to four.

Problem Determination: Table I, items 6bf, 29.

Problem Determination: Table I, items 1, 3, 6bf, 13, 25b, 29.

IEW0354 ERROR - TABLE OVERFLOW -- TOO MANY CALLS BETWEEN CONTROL SECTIONS.

Explanation: There are too many V-type address constants referring to external symbols in a program that is being structured in overlay. The table recording these V-type address constants has overflowed.

System Action: Processing is terminated.

Programmer Response: Probable user error. Either (1) increase the linkage editor's table space by increasing value<sub>1</sub> (or decreasing value<sub>2</sub>) of the SIZE parameter, making sure the region or partition size is also increased, if necessary; Or, (2) reduce the number of V-type address constants by combining control sections; or (3) change V-type address constants that do not refer across segments to A-type address constants with EXTRN statements.

Problem Determination: Table I, items 1, 3, 6bf, 13, 29.

IEW0324 ERROR - MAXIMUM NUMBER OF SEGMENTS EXCEEDED.

Explanation: Either (1) the number of segments exceeded 256; or (2) the number of segments, although less than 256, could not be handled in existing table and buffer space.

System Action: Processing is terminated.

Programmer Response: Probable user error. If the number of segments in the overlay structure exceeded 256, reduce it to 256. Otherwise, increase linkage editor table and buffer space by increasing value<sub>1</sub> of the SIZE parameter. Be sure to increase region or partition size also, if necessary.

Problem Determination: Table I, items 1, 3, 6bf, 13, 29.

IEW0364 ERROR - TABLE OVERFLOW -- INPUT TEXT EXCEEDED MAXIMUM OR TOO MANY CHANGES OF ORIGIN IN INPUT.

Explanation: There are too many discontinuities in the input addresses of text or too much text for the linkage editor to handle in existing table space.

System Action: Processing is terminated.

Programmer Response: Probable user error. (1) Increase the linkage editor's table space by increasing value<sub>1</sub> (or decreasing value<sub>2</sub>) of the SIZE parameter making sure the region or partition size is also increased if necessary. If this fails, (2) increase the linkage editor's buffer space by increasing both value<sub>1</sub> and value<sub>2</sub> of the SIZE parameter, making sure the region or partition size is increased proportionately; or (3) reduce the number of ORG statements specified in assembler language routines; or (4) break down the step into a number of link edits, performing only part of the necessary linkage function in each successive step; or (5) if the SYSLMOD data set is new (DISP=NEW), make sure that the block size is valid.

Problem Determination: Table I, items 1, 3, 6bf, 13, 29.

IEW0332 ERROR - MAXIMUM NUMBER OF ALIASES EXCEEDED, EXCESS IGNORED.

Explanation: More than sixteen aliases were specified for the output load module.

System Action: The excess aliases are ignored.

Programmer Response: Probable user error. Either (1) reduce the number of aliases, or (2) create a second copy of the module under a different name with the additional aliases specified.

Problem Determination: Table I, items 6b, 25b, 29.

IEW0342 ERROR - LIBRARY SPECIFIED DOES NOT CONTAIN MODULE.

Explanation: The module or alias name specified on an INCLUDE or LIBRARY control statement was not found in the specified library.

System Action: Any references to the module are not resolved. The output load module is marked not-executable unless the LET option has been specified.

Programmer Response: Probable user error. Correct the library or module name on the DD, INCLUDE or LIBRARY control statement.

IEW0374 ERROR - TABLE OVERFLOW -- INPUT CONTAINS TOO MANY RELOCATABLE ADDRESS CONSTANTS OR TOO MANY CONTROL SECTIONS CONTAINING SUCH CONSTANTS.

Explanation: Either (1) there are too many control sections with relocation dictionaries, or (2) there are too many relocatable address constants.

System Action: Processing is terminated.

Programmer Response: Probable user error. Either (1) increase the linkage editor's table space by increasing value<sub>1</sub> (or decreasing value<sub>2</sub>) of the SIZE parameter making sure the region or partition size is also increased, if necessary; or (2) reduce the number of relocatable address constants in the input. (One method is to assemble the coding of two or more control sections into one control section.)

Problem Determination: Table I, items 1, 3, 6bf, 13, 29.

IEW0382 ERROR - TEXT RECORD ID IS INVALID, CARD IGNORED.

Explanation: The ID of the text record refers to an invalid external symbol dictionary entry; i.e., it does not refer to a section definition entry or a private code entry. The input deck may be out of sequence or incomplete.

System Action: The record is ignored. Processing continues.

Programmer Response: Probable user error. Check the input object modules for completeness and proper sequence. If necessary, either (1) recreate any module which has been in card form, or (2) isolate the incorrect module by executing the linkage editor with the NCAL option specified, using the NAME control statement for each input module. Diagnostic IEW0382 should recur and isolate the incorrect module. Recreate the module and rerun the step.

Problem Determination: Table I, items 6bf, 9ab, 13, 29. Have available the output used to isolate the module as indicated above.

IEW0394 ERROR - MEMBER NOT STORED IN LIBRARY -- PERMANENT DEVICE ERROR.

Explanation: This is either an input/output error or no space was allocated for the library directory.

System Action: Processing terminates.

Programmer Response: Check the SYSLMOD data set to make sure it is a partitioned data set with space allocated for a directory. If necessary, restore the library to a different volume, and rerun the job.

Problem Determination: Table I, items 1, 3, 13, 29. Execute the IEHLIST utility program, using the LISTVTOC function to print out the data set control block for the SYSLMOD data set. Have the output from a run with the library on a different volume available.

IEW0404 ERROR - MEMBER NOT STORED IN LIBRARY -- NO SPACE LEFT IN DIRECTORY.

Explanation: All the directory blocks allocated when the output data set was created have been used.

Programmer Response: Probable user error. Either (1) reprocess, placing the output module in a new library; when the original library is used as input, concatenate the new one with it; or (2) use a utility program to copy the library, allowing for more directory entries. Edit the member into the new library.

Problem Determination: Table I, items 1, 3, 6b, 13, 29. Execute the IEHLIST utility program, using the LISTVTOC and LISTPDS statements to print out the Data Set Control Block and directory entries for the SYSLMOD data set.

IEW0412 ERROR - ALIAS NOT STORED IN LIBRARY -- NO SPACE LEFT IN DIRECTORY.

Explanation: All directory blocks allocated when the output data set was created have been used.

System Action: The ALIAS is not stored in the specified library; however, the member can be referred to by the member name.

Programmer Response: Probable user error. Either (1) reprocess, placing the output module in a new library; when the original library is used as input, concatenate the new one with it, or (2) use a utility program to copy the entire library (except the member whose alias was not stored), and allow for more directory entries. Edit the member into the new library.

Problem Determination: Table I, items 1, 3, 6b, 13, 29. Execute the IEHLIST utility program, using the LISTVTOC and LISTPDS statements to print out the Data Set Control Block and directory entries for the SYSLMOD data set.

IEW0421 WARNING - IDENTICAL NAME IN DIRECTORY, WILL TRY TO STORE UNDER 'TEMPNAME'.

Explanation: The output module name has been used previously in the library. The replace function is not specified.

System Action: An attempt is made to store the output module into the library under the name TEMPNAME.

Programmer Response: Probable user error. Either, (1) reprocess, using a different name in the SYSLMOD DD statement or NAME statement, or (2) reprocess, and specify the replacement function for the name originally specified in the SYSLMOD DD statement or the NAME statement.

Problem Determination: Table I, items 1, 3, 6b, 13, 29. Execute the IEHLIST utility program, using the LISTPDS statement to print out the directory entries for the SYSLMOD data set.

IEW0432 ERROR - LIBRARY NAME PRINTED CANNOT BE OPENED, DD CARD MAY BE MISSING.

Explanation: The DD statement that defines the library is probably missing. This message also results when a sequential data set (encountered in the processing of an INCLUDE statement) cannot be opened.

System Action: Processing continues without input from the specified library.

Programmer Response: Probable user error. Either supply the missing DD statement, or correct erroneous information on the DD statement.

Problem Determination: Table I, items 1, 3, 6b, 13, 29. Execute the IEHLIST utility program using the LISTVTOC statement to print out the Data Set Control Block for the data set that can't be opened.

IEW0444 ERROR - TABLE OVERFLOW -- TOO MANY DOWNWARD CALLS.

Explanation: There are too many V-type address constants that refer to segments lower in the tree structure.

System Action: Processing is terminated.

Programmer Response: Probable user error. Either (1) increase the linkage editor's table space by increasing value<sub>1</sub> (or decreasing value<sub>2</sub>) of the SIZE parameter, making sure the region or partition size is also increased if necessary; or (2) use an overlay structure with fewer segments.

Problem Determination: Table I, items 1, 3, 6bf, 13, 29.

IEW0454 ERROR - TABLE OVERFLOW -- SEGMENT CONTAINS TOO MANY DOWNWARD CALLS.

Explanation: One segment in the overlay structure contains too many V-type address constants that refer to segments lower in the tree structure. The maximum is determined by the size of an output load module record.

System Action: Processing is terminated.

Programmer Response: Probable user error. Either (1) increase the size of an output load module record by specifying SYSIMOD as a library with a larger blocksize, (2) incorporate some of the called control sections in the requesting segment or (3) divide the requesting segment into two or more segments.

Problem Determination: Table I, items 1, 3, 6bf, 13, 29.

IEW0461 WARNING - SYMBOL PRINTED IS AN UNRESOLVED EXTERNAL REFERENCE, NCAL WAS SPECIFIED.

Explanation: The NCAL option, restricted no-call, or never-call function was specified for the external reference.

System Action: The automatic library call mechanism does not attempt to resolve the external reference.

Programmer Response: No response is necessary normally. Check that the reference is valid and not the result of a keypunch or programming error. If you wish the reference resolved, either (1) add the needed module to the primary or included input data sets; (2) remove the NCAL option, if specified; (3) remove the LIBRARY statement specifying restricted no-call or never-call; or (4) if an input load module contained a never-call reference, recreate the load module without specifying never-call.

Problem Determination: Table I, items 1,3, 6bf, 9, 13, 29. Have available each object module that contains a call to the reference, and the associated source listing.

IEW0472 ERROR - INVALID ALIAS ENTRY POINT IN OVERLAY STRUCTURE.

Explanation: The specified alias entry point is not in the root segment.

System Action: The entry point for the member name is used.

Programmer Response: Probable user error. Respecify the alias, entry point, or overlay structure.

Problem Determination: Table I, items 6bf, 9, 29. Have the module containing the alias entry point and its associated listing available.

IEW0484 ERROR - TABLE OVERFLOW -- TOO MANY EXTERNAL SYMBOLS AFFECTED BY RELOCATION.

Explanation: There are too many symbols being relocated.

System Action: Processing is terminated.

Programmer Response: Probable user error. Either (1) increase the linkage editor's table space by increasing value (or decreasing value<sub>2</sub>) of the SIZE parameter making sure the region or partition size is also increased if necessary; or (2) break down the step into a number of link edits, performing only part of the necessary editing function in each successive step.

Problem Determination: Table I, items 1, 3, 6bf, 13, 29.

IEW0492 ERROR - NAME CARD FOUND IN LIBRARY, CARD IGNORED.

Explanation: A NAME statement has been encountered in an included data set or an automatic call library. NAME statements may be placed only in the primary input.

System Action: The record is ignored. Processing continues.

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Programmer Response: Remove the NAME statement from the library or sequential data set. Reprocess if the load module is incorrect.

Problem Determination: Table I, items 1, 3, 6b, 13, 29. Execute the IEBPTPCH utility program to print out all included and automatic call library modules.

IEW0502 ERROR - ALIAS NOT STORED IN LIBRARY -- PERMANENT DEVICE ERROR.

Explanation: The alias could not be stored in the library directory because of an input/output error.

System Action: The load module has already been stored.

Programmer Response: Execution of the module is possible using the member name or aliases already stored. The module can be link edited again with the new alias specified. If message IEW0502 appears again, restore the library to a different volume and rerun.

Problem Determination: Table I, items 1, 3, 6b, 13, 29. Have the output from a run with the library on a different volume available. Execute the IEHLIST utility program, using the LISTVTOC and LISTPDS statements to print out the data set control block and directory entries for the SYSLMOD data set.

IEW0512 ERROR - INCLUDE STATEMENT SYNTAX CONFLICTS WITH RECORD FORMAT OF SPECIFIED DATA SET -- DDNAME PRINTED.

Explanation: The INCLUDE statement syntax conflicts with the characteristics of the data set specified on the DD statement.

System Action: The specified module is ignored.

Programmer Response: Probable user error. Either (1) specify a member name on the INCLUDE or DD statement if the data set is partitioned; or (2) remove all member names from the INCLUDE statement if the data set is not partitioned.

Problem Determination: Table I, items 1, 3, 6b, 13, 29. Execute the IEHLIST utility program using the LISTVTOC statement to print out the data set control block for the specified data set.

IEW0522 ERROR - SPECIFIED DATA SET HAS UNACCEPTABLE RECORD FORMAT --DDNAME PRINTED.

Explanation: The record format of the specified data set is not type U or F and cannot be processed by the linkage editor.

System Action: The data set is not processed.

Programmer Response: Probable user error. Correct the data set specification.

Problem Determination: Table I, items 1, 3, 13, 29. Execute the IEHLIST utility program, using the LISTVTOC statement to print out the data set control block for the rejected data set.

IEW0532 ERROR - BLOCKSIZE OF LIBRARY DATA SET EXCEEDED MAXIMUM -- DDNAME PRINTED.

Explanation: The blocksize of the specified library data set cannot be handled by the linkage editor.

System Action: The data set is not processed.

Programmer Response: Probable user error. Either (1) decrease the blocksize of the data set, or (2) increase value<sub>2</sub> of the SIZE parameter to allow for larger buffers, and increase value<sub>1</sub> accordingly, if necessary.

Problem Determination: Table I, items 1, 3, 13, 29. Execute the IEHLIST utility program, using the LISTVTOC statement to print out the data set control block for the specified data set.

IEW0543 ERROR - IDENTICAL NAME IN DIRECTORY

Explanation: The member name already exists in the directory. In the case of a member, an attempt was made to store under TEMPNAME; however, TEMPNAME was also found in the directory.

System Action: The output module is not stored under this member name.

Programmer Response: Probable user error. Either (1) specify a unique member name for the module on the NAME control statement or the SYSLMOD DD statement, or (2) specify the replace function on the NAME statement.

Problem Determination: Table I, items 1, 3, 6b, 13, 29. Execute the IEHLIST utility program, using the LISTPDS statement to print out the directory entries for the SYSLMOD data set.

IEW0552 ERROR - COMMON PRINTED EXCEEDED SIZE OF CONTROL SECTION WITH IDENTICAL NAME

Explanation: A named common area has been encountered which is larger than a control section with the same name.

System Action: The linkage editor uses the longest length specified for the name at the time it encounters the control section. Processing continues.

Programmer Response: Ensure that no named common area is larger than the control section initializing it. FORTRAN programmers should make sure that any named COMMON in a BLOCK DATA subprogram is at least as large as any named COMMON with the same name in any other FORTRAN program or subprogram with which the BLOCK DATA subprogram is to be link edited. To isolate the problem, you can run the step

with the NCAL option specified. If the error recurs, the long common occurs in the primary data set or an included data set. Otherwise it occurs in a module from the automatic call library. In either case, execute the LISTOBJ function of the IMBLIST service aid program to list all object module symbols, and execute the LISTLOAD function of IMBLIST with the OUTPUT=XREF option to list all load module symbols in the appropriate input data sets. Check the listings for all modules which contain the named common in question and correct the lengths.

Problem Determination: Table I, items 6bf, 14, 29.

IEW0572 ERROR - COMMON PRINTED AND SUBROUTINE HAVE IDENTICAL NAME.

Explanation: This message appears only when the linkage editor is processing an object program originally written in FORTRAN. It is issued when a common defined in the program has the same name as a subprogram.

System Action: Processing continues. The output module is marked not executable unless the LET option is specified.

User Response: Change the name of either the common or the subprogram so that the names are no longer the same. Compile and link edit the program again.

Problem Determination: Table I, items 3, 6bf, 13, 29. Save the linkage editor output listing.

IEW0594 INPUT DATA SET BLKSIZE IS INVALID

Explanation: The blocksize for the primary input data set (SYSLIN) is not an even multiple of the logical record length, or exceeds the allowable maximum.

System Action: Linkage editor processing terminates.

Programmer Response: Probable user error. Determine whether the values specified in the SIZE parameter are sufficient to accommodate the blocking factor of the primary input data set (SYSLIN). Blocking factors are discussed in the "SIZE Option" section of Linkage Editor and Loader, GC28-6538. If the SIZE values are not large enough, increase them and execute the linkage editor step again. In an MVT system, the region for the job step must be large enough to allow the SIZE values specified, as described in "EXEC Statement -- REGION Parameter," in the linkage editor manual. If the region is not large enough, increase the REGION parameter before executing the linkage editor step again.

If the blocking factor is greater than 40 to 1 or is not a multiple of the logical record length, correct the BLKSIZE field, or re-create the data set, or both. Execute the linkage editor step again.

Problem Determination: Table I, items 1, 3, 13, 29. If possible, execute the IEHLIST utility program, using the LISTVTOC statement to print out the Data Set Control Block for the specified data set.

IEW0602 ERROR - INPUT FROM OBJECT MODULE IS INVALID, END CARD MISSING.

Explanation: The END card of an object module being processed by the linkage editor is missing.

System Action: Linkage editor processing continues. The load module produced is marked not executable unless the LET option has been specified.

Programmer Response: If input to the linkage editor was in the form of an object deck, verify that the last card is an END card (END in columns 2, 3, and 4). If the card is not an END card, recompile or reassemble the source program. If input to the linkage editor was not in the form of an object deck, recompile or reassemble the source program with the DECK option specified.

In either case, verify that the last card is an END card. Rerun the linkage editor step using the object deck.

Problem Determination: Table I, items 1, 3, 13, 22, 23, 29. Execute the IMBLIST service aid program, using the LISTOBJ function and save the resulting listing of the questionable object module.

IEW0614 LENGTH NOT SPECIFIED FOR EXTERNAL SYMBOL PRINTED.

Explanation: An object module contained a control section that had a length field containing zero in its external symbol dictionary (ESD) entry, and either (1) the control section was not last in the object module or (2) the length was not specified on the END card.

System Action: The module was not processed, and the linkage editor terminated processing.

Programmer Response: Probable user error. Check the input object modules for completeness and proper sequence. If necessary, either (1) recreate any module which has been in card form, or (2) isolate the incorrect module by executing the linkage editor with the NCAL option specified, using the NAME control statement for each input object module. Diagnostic IEW0614 should recur and isolate the incorrect module. Recreate the module and rerun the step.

Problem Determination: Table I, items 3, 6bf, 9, 13, 22, 23, 29.

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IEW0630 DDNAME PRINTED HAD SYNCHRONOUS ERROR - XREF ABORTED.

Explanation: A permanent input/output error occurred while attempting to produce a cross-reference table. The output module was successfully edited.

System Action: The information provided by the SYNADAF macro instruction was printed after the message code in the following format: SYNAD EXIT ,jobname, stepname,unit address,device type, ddname,operation attempted,error description,block count or BBCCHHR, access method.

Programmer Response: Rerun the linkage editor step.

Problem Determination: Table I, items 1, 3, 13, 29. Save the output from the SYNADAF macro instruction. If possible, execute the IEHLIST utility program using the LISTVTOC function to print out the data set control block for the data set specified in the SYNAD output.

IEW0661 CONTROL STATEMENT IGNORED

Explanation: A control statement, used to specify functions not available under the IBM System/360 Operating System was found in the input to the linkage editor.

System Action: The statement is ignored. Linkage editor processing continues.

Programmer Response: If the output load module is to be run under an operating system with page alignment and/or control section sequencing, execute the linkage editor step again using the appropriate linkage editor, which includes support for the specified control statements. If the output load module is to be executed under the IBM System/360 Operating System, ignore the message.

Problem Determination: Table I, items 3, 6bf, 13, 29.

IEW0670 THE SPECIFIED IDENTIFY DATA HAS BEEN ADDED TO THE IDR FOR THE CONTROL SECTION NAME PRINTED

Explanation: The linkage editor has added the data specified on the IDENTIFY control statement to the IDR record for the control section indicated.

System Action: Processing continues.

Programmer Response: None. This message is for information only.

IEW0682 ERROR - CONTROL SECTION NAME ON AN IDENTIFY CONTROL STATEMENT IS INCORRECT OR THE STATEMENT IS MISPLACED -- IDENTIFY DATA IGNORED

Explanation: The control section on the IDENTIFY control statement either (1) does not exist in the load module or (2) had

not been read in by the linkage editor by the time it encountered the IDENTIFY statement.

System Action: The data specified on the IDENTIFY statement is ignored. Linkage editor processing continues.

Programmer Response: Probable user error. Check the IDENTIFY statement to verify that the control section name has been specified correctly and that the IDENTIFY statement has been placed correctly in the input. Verify that the required control section has been included in the input to the linkage editor step. Correct the input and rerun the linkage editor step.

Problem Determination: Table I, items 1, 3, 6abf, 13, 29.

IEW0694 ERROR - TABLE OVERFLOW - SIZE VALUE SPECIFIED NOT LARGE ENOUGH FOR CSECT IDR INPUT -- LINKAGE EDITOR PROCESSING TERMINATED

Explanation: The space available for CSECT identification records was insufficient for the actual input.

System Action: Linkage editor processing terminates.

Programmer Response: Probable user error. Increase the space available to the linkage editor by increasing value<sup>1</sup> (or decreasing value<sup>2</sup>) of the SIZE option, making sure that the region or partition size is also increased correspondingly, if necessary. Rerun the linkage editor step.

Problem Determination: Table I, items 1, 6bf, 29.

IEW0704 UNRECOVERABLE ERROR DETECTED IN CSECT IDR INPUT -- LINKAGE EDITOR PROCESSING TERMINATED

Explanation: An unrecoverable error was detected while processing an input module containing CSECT Identification (IDR) records. The cause of the error was a load module IDR record that contained an invalid code in its subtype field (the third byte of the record).

System Action: Linkage editor processing terminates.

Programmer Response: Probable user error. Examine all data sets containing input load modules. Check all secondary input sources (either defined by the SYSLIB DD statement or specified on an INCLUDE statement). If any user modifications were made to any record other than text in any of these modules, re-create any affected modules from the source or object level and execute the linkage editor step again.

Problem Determination: Table I, items 1, 3, 6b, 13, 22, 29. Execute the LISTLOAD function of the IMBLIST service aid program specifying the OUTPUT=BOTH option

to list all load modules in the input to the linkage editor. Execute the IMBLIST service aid program with the LISTIDR function to list CSECT IDR records for all members of the SYS1.LINKLIB data set which was cataloged on the system at the time of the error.

IEW0714 ERROR -- MEMBER NOT STORED IN LIBRARY -- STOW WORKSPACE UNAVAILABLE

Explanation: The conditional GETMAIN macro instruction issued by the STOW routine to obtain work space in main storage was unsuccessful (that is, not enough contiguous main storage was available).

System Action: The member is not stored in the specified library; linkage editor processing is terminated.

Programmer Response: Rerun the linkage editor job step. The error may be a temporary one caused by fragmentation of main storage. If the problem persists, check for user-written programs or user-written SVC (supervisor call) routines that may be executing concurrently with the linkage editor and causing main storage fragmentation, as would occur when a GETMAIN macro is issued without a FREEMAIN in an uncontrolled loop.

Problem Determination: Table I, items 1, 2, 3, 13, 29.

IEW0984 ERROR-SPRINT BLOCKSIZE EXCEEDS MAXIMUM -- LINKEDIT PROCESSING TERMINATED

Explanation: The block size specified for the SYSPRINT data set cannot be handled by the linkage editor.

System Action: The data set is not opened. Linkage editor processing terminates.

Programmer Response: Probable user error. Either (1) decrease the block size of the data set, or (2) increase value<sup>2</sup> of the SIZE option to allow for larger buffers, and increase value<sup>1</sup> accordingly, if necessary. Increase the region or partition size correspondingly, if necessary. Rerun the linkage editor step.

Problem Determination: Table I, items 1, 3, 13, 29. Execute the IEHLIST utility program, using the LISTVTOC statement to print out the Data Set Control Block for the SYSPRINT data set.

IEW0994 ERROR -- SYSPRINT DD CARD MISSING - LINKAGE EDITOR PROCESSING TERMINATED

Explanation: The SYSPRINT data set cannot be opened.

System Action: Linkage editor processing terminates.

Programmer Response: Probable user error. The SYSPRINT DD statement is probably missing. Supply the missing SYSPRINT DD statement, and execute the job step again.

Problem Determination: Table I, items 1, 3, 7a, 9b (SYS1.LINKLIB), 13, 29.

#### Loader Program Messages

IEW1001 WARNING-UNRESOLVED EXTERNAL REFERENCE (NOCALL SPECIFIED)

Explanation: The NCAL, NOCALL, or NORES option or never-call function was specified for the external reference.

System Action: The SYSLIB data set is not searched if the NCAL or NOCALL option has been specified. The Link Pack Area queue is not searched if the NORES option has been specified. Neither the SYSLIB data set nor the Link Pack Area queue are searched if the ER is mark 'never-call' from a previous Linkage Editor run.

Programmer Response: No response is necessary normally. If you wish the reference resolved, either (1) add the needed module to the SYSLIN input data set; (2) remove the NOCALL, NCAL, or NORES option, if specified; or (3) if an input load module contained a never-call reference, recreate the load module without specifying never-call.

Problem Determination: Table I, items 6a, 9b, 13, 23, 29. Run the failing step using the linkage editor instead of the loader and save the resulting output. Have available each object module that contains a call to the reference.

IEW1012 ERROR - UNRESOLVED EXTERNAL REFERENCE

Explanation: The external reference was not found on the SYSLIB defined data set or in the Link Pack Area.

System Action: No attempt is made to execute the module unless the LET option is specified.

Programmer Response: Probable user error. Make sure that the reference is valid and not the result of a keypunch or programming error. If the reference is valid, add the needed module or alias to either (1) the SYSLIB data set, (2) the link pack area, or (3) the SYSLIN input data set. Make sure the SYSLIB DD statement has been specified if needed.

Problem Determination: Table I, items 1, 3, 6a, 9b, 13, 22, 23, 29. If the needed module is in a SYSLIB or SYSLIN partitioned data set, execute the IEHLIST utility program using the LISTPDS statement to print out the data set directory. Execute the failing job step using the linkage editor instead of the loader and save the resulting output.

IEW1024 ERROR - DDNAME CANNOT BE OPENED.

Explanation: The SYSLIN data set cannot be opened. The DD statement defining the data set is missing or incorrect.

System Action: Processing terminates. The Loader returns to the caller with a condition code of 16.

Programmer Response: Probable user error. Either (1) supply a missing SYSLIN DD statement, (2) correct erroneous information on the SYSLIN DD statement, or (3) make sure the correct DDNAME has been specified for the SYSLIN data set. If the loader was invoked by a macro instruction such as LINK rather than through the EXEC statement, make sure that the SYSLIN ddname, if passed, is correct.

Problem Determination: Table I, items 1, 29. Either have the output of the SYSGEN of the loader available, or execute the IMASPZAP service aid program with the DUMPT IEWLOADR IEWLDDDEF statement and save the resulting dump of the loader default ddnames.

IEW1034 ERROR - DDNAME HAD SYNCHRONOUS ERROR.

Explanation: A physical uncorrectable input/output error occurred. If it occurred on a blocked data set, the block size may have been specified incorrectly.

System Action: The message supplied by the SYNADAF macro was printed Processing was terminated.

Programmer Response: For any fixed format, specify the correct block size. If the block size was correct and the data set was an input data set, recreate or restore the data set.

Problem Determination: Table I, items 1, 29. Execute the failing step using the linkage editor instead of the loader and save the resulting output.

IEW1044 ERROR - UNACCEPTABLE RECORD FORMAT (VARIABLE ON INPUT)

Explanation: Only object module (FIXED record format) and load module (UNDEFINED record format) data sets are accepted by the loader.

System Action: Processing was terminated. The loader returns to caller with a condition code of 16.

Programmer Response: Probable user error. (1) Make sure that the record format specification is correct. The record format may have been misspelled. (2) Make sure that the correct data set has been specified.

Problem Determination: Table I, items 1, 6a, 29. Execute the IEHLIST utility program using the LISTVTOC statement to print out the data set control blocks for the input data sets, and save the

resulting output. Execute the failing step using the linkage editor instead of the loader and save the resulting output.

IEW1053 ERROR - I/O ERROR WHILE SEARCHING LIBRARY DIRECTORY.

Explanation: A permanent I/O error occurred while attempting a BLDL.

System Action: Automatic library call processing is terminated.

Programmer Response: Insure that the SYSLIB defined data set is partitioned. If it is, recreate or restore the data set and rerun the job step.

Problem Determination: Table I, items 1, 6a, 25c, 29. Execute the failing step using the linkage editor instead of the loader and save the resulting output.

IEW1072 ERROR - BLKSIZE IS INVALID

Explanation: In the specified data set, the BLKSIZE was not an integral multiple of LRECL.

System Action: BLKSIZE was rounded up to the next higher multiple of LRECL and processing continued.

Programmer Response: Probable user error. Change BLKSIZE to be an integral multiple of LRECL.

Problem Determination: Table I, items 1, 29. If the data set was an input data set, execute the IEHLIST utility program using the LISTVTOC statement to print out the data set control block, and save the resulting output.

IEW1082 ERROR - INVALID LENGTH SPECIFIED

Explanation: The length of a control section in an object module was not specified in either its ESD entry or on the END record, and text was received for the control section.

System Action: The total length of the text received was used.

Programmer Response: Check if an END record in any input object module is missing or has been replaced. If so, recreate the object module and rerun.

Problem Determination: Table I, items 6a, 13, 22, 23, 29. Execute the failing step using the linkage editor instead of the loader and save the resulting output.

IEW1093 ERROR - NO TEXT RECEIVED.

Explanation: No valid text has been received for the loaded module.

System Action: The loader returns to the caller with a condition code of 12.

Programmer Response: Probable user error. (1) Make sure that the SYSLIN data was specified correctly. (2) Check other error messages issued for cause of error (e.g., invalid record). Correct the error and rerun the job step.

IEW1123 ERROR - INVALID RECORD FROM LOAD MODULE.

Explanation: An unrecognizable type record was found while reading a load module.

Problem Determination: Table I, items 1, 6a, 29. Execute the IMBLIST service aid program, using the LISTOBJ function and save the resulting listing of the questionable input module. Have all SYSLIN input available. Execute the failing step using the linkage editor instead of the loader and save the resulting output.

System Action: The record was ignored and processing continued.

Programmer Response: (1) Check that all input data sets are specified correctly on DD statements. (2) If load module input occurs in the SYSLIN data set, rerun the step with the NOCALL option specified. If error message IEW1123 recurs, the incorrect load module is in SYSLIN input. Otherwise, it is in SYSLIB input. (3) Isolate the incorrect load module by executing the linkage editor with the NCAL option specified, using the INCLUDE and NAME statements for each suspect load module. When the incorrect load module is isolated, recreate it and rerun the job step.

IEW

IEW1102 ERROR - DOUBLY DEFINED ESD

Explanation: Two identical external names have been found in the input. (1) The invalid match involves a label reference (LR) or label definition (LD) matching an existing section definition (SD), common (CM), or label reference (LR). The section definition for the input LR or LD must be marked delete in order for this not to be an error. (2) It is always invalid for a CM to match an existing LR.

Problem Determination: Table I, items 9b, 29. Execute the failing step using the linkage editor instead of the loader and save the resulting output.

System Action: References to the name are resolved with respect to the first occurrence of the name.

IEW1132 ERROR - INVALID ID RECEIVED.

Explanation: Input contains an invalid external symbol ID.

This error is the result of the following conditions:

1. The SD for an LD does not appear in the input module.
2. Text is received before the ESD defining it is received.
3. An RLD is received before the ESDs to which it pertains.
4. The ID defining the entry point on the END card is not a defined SD, PC, or LR ESD type.

Programmer Response: Probable user error. Correct the existing symbol conflict. To isolate the problem, execute the LISTOBJ function of the IMBLIST service aid program to list all object module symbols, and execute the LISTLOAD function of IMBLIST with the OUTPUT=XREF option to list all load module symbols. Object module symbols can be printed using the IEBTPCH utility program with the PRINT statement.

System Action: The invalid item is ignored.

Problem Determination: Table I, items 6a, 29. Have all object and load module input available. Execute the failing step using the linkage editor instead of the loader and save the resulting output.

Programmer Response: (1) Check that input object modules are complete and that assembly or compilation errors did not occur when object modules were generated. (2) Rerun the step with the NOCALL option specified. If error message IEW1132 recurs, the incorrect module is in SYSLIN input. Otherwise, it is in SYSLIB input. (3) Isolate the incorrect module by executing the linkage editor with the NCAL option specified, using the INCLUDE and NAME statements for each suspect module. When the incorrect module is isolated, recreate it and rerun the step.

IEW1112 ERROR - INVALID 2-BYTE ADCON.

Explanation: A relocatable A-type or V-type address constant of less than three bytes has been found in the input.

System Action: The constant is not relocated.

Programmer Response: Probable user error. Check assembler language input for Y-type address constants, which can't be relocated. Delete or correct the invalid address constant.

Problem Determination: Table I, items 9b, 29. If an incorrect object module was created, have the module and its associated listing available. Run the failing step using the linkage editor instead of the loader, and save the resulting output.

Problem Determination: Table I, items 6a, 9a, 29. Have object module input and associated listings available. Rerun the step using the linkage editor instead of the loader, and save the resulting output.

IEW1141 WARNING - CARD RECEIVED NOT AN OBJECT RECORD.

Explanation: The card read has a blank in column one.

System Action: The card is ignored.

Programmer Response: Probable user error. Check input for a blank card or linkage editor control card. If other errors occur, recreate all object modules which have been in card form.

Problem Determination: Table I, items 1, 3, 6a, 13, 29. Rerun the step using the linkage editor instead of the loader, and save the resulting output.

IEW1152 ERROR - INVALID RECORD FROM OBJECT MODULE.

Explanation: An unrecognizable record type was received while reading an object module.

System Action: The card is ignored.

Programmer Response: Probable user error. Check object module input for invalid records. Column 1 should contain a 12-2-9 punch. Columns 2-4 should contain a TXT, RLD, ESD, END, or SYM identifier. Remove incorrect records or recreate the module, and rerun.

Problem Determination: Table I, items 9a, 29. Have object module input available. Rerun the step using the linkage editor instead of the loader, and save the resulting output.

IEW1161 WARNING - NO ENTRY POINT RECEIVED.

Explanation: No entry point was specified in the parameter field or END card. The END card entry point specification could be incorrect (i.e., invalid ID, bad column alignment, etc). The parameter field specification could also be incorrect.

System Action: The first assigned address is used as the entry point.

Programmer Response: Probable user error. (1) Specify the entry point name in the loader parameter list, EP=. If the entry point occurs in load module input, this parameter must be specified. (2) If you cannot use the EP= parameter and the entry point occurs in an object module, make sure that the module is included in the SYSLIN or SYSLIB input and that an entry point was specified during compilation or assembly.

Problem Determination: Table I, items 6a, 29. Have the module containing the entry point and its associated listing available. Rerun the step using the linkage editor instead of the loader, and save the resulting output.

IEW1173 ERROR - ENTRY POINT RECEIVED BUT NOT MATCHED.

Explanation: The entry point name specified in the parameter field or on an END card was not matched to an incoming LR, SD, or PC.

System Action: The first assigned address is used as the entry point address.

Programmer Response: Probable user error. (1) Check to see if the EP= parameter was specified correctly. (2) Check to see if the module containing the entry point is included in either the SYSLIN or SYSLIB input. (3) Check other messages issued for the cause of error (i.e., invalid record).

Problem Determination: Table I, items 6a, 9ab, 29. Rerun the step using the linkage editor instead of the loader, and save the output.

IEW1182 WARNING - NO END CARD RECEIVED.

Explanation: An END card is missing for an input object module.

System Action: Processing continues.

Programmer Response: Probable user error. Check input object modules. The last record of each should have a 12-2-9 punch in column 1 and the END identifier in columns 2-4. If an END record is missing, recreate the module and rerun.

Problem Determination: Table I, items 6a, 9a, 29. Have object module input available. Rerun the step using the linkage editor instead of the loader, and save the resulting output.

IEW1194 ERROR - AVAILABLE STORAGE EXCEEDED

Explanation: The amount of core storage available to the loader is insufficient to allow construction of the required tables and loaded program.

System Action: The loader returns to caller with a completion code of 16.

Programmer Response: Probable user error. (1) Increase the SIZE parameter, or (2) make sure the REGION specification is sufficient, or (3) make sure that sufficient main storage is available to satisfy the SIZE specification.

Problem Determination: Table I, items 1, 6a, 13, 29. Either have the output of the SYSGEN of the loader available or execute the IMASPZAP service aid program with the DUMPT IEWLOADR IEWLDFEF statement, and save the resulting dump of the loader's default SIZE value.

IEW1204 ERROR - TOO MANY EXTERNAL NAMES IN INPUT MODULE.

Explanation: The external symbol ID is too large to fit in the translation table.

System Action: Processing is terminated. The loader returns to the caller with a completion code of 16.

Programmer Response: If the program is large and/or complex, either (1) run the step using the linkage editor, or (2) break down the large program module into a number of smaller routines. If the program is not particularly large or complex, check other messages issued for the cause of error. Object module input may be incomplete or misspelled. Recreate object modules and rerun.

Problem Determination: Table I, items 6a, 9ab, 13, 29.

IEW1214 ERROR - IDENTIFICATION FAILED - DUPLICATE PROGRAM NAME FOUND.

Explanation: When trying to identify the loaded program to the system, the IDENTIFY routine found a duplicate program name in the user's region or partition or in the link pack area.

System Action: Processing is terminated. The loader returns to the caller with a completion code of 16.

Programmer Response: Probable user error. Specify a unique program name using the NAME option or let the loader default the name to \*\*GO. Rerun the job.

Problem Determination: Table I, items 3, 13, 29. Execute the IEBTPCH utility program to obtain a listing of the SYS1.PARMLIB data set. Save the output.

IEW1224 ERROR - IDENTIFICATION FAILED.

Explanation: The IDENTIFY routine located an error in the parameter list passed to it by the loader. In a MFT environment, the name IEWLOAD may have been used to invoke the loader. In an MVT environment,

the appropriate IDENTIFY macro instruction support may not be included in the operating system.

System Action: Processing is terminated. The loader returns to caller with a completion code of 16.

Programmer Response: If IEWLOAD was used to invoke the loader in a MFT environment, specify IEWLOADR instead. Rerun the job.

In an MVT environment, verify that the appropriate IDENTIFY macro instruction support is included in the system. The release level of the IDENTIFY macro instruction should be the same as the release level of the loader.

Problem Determination: Table I, items 3, 13, 29.

IEW199I ERROR - USER PROGRAM HAS ABNORMALLY TERMINATED

Explanation: This message is issued by the loader when it determines that the loaded program has terminated abnormally. This message occurs only under MVT.

System Action: Loaded program execution is terminated abnormally, and control is returned to the loader. (Unless the user has included a SYSUDUMP DD statement for the loaded program, this message is the only indication that the program has terminated abnormally.)

Operator Response: None.

Programmer Response: To obtain a dump to aid in determining the cause of the abnormal termination, include a SYSUDUMP DD statement for the loaded program and rerun the job.

Problem Determination: Table I, items 3, 13, 29.

IEW



## ALGOL Messages (IEX)

IEX

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component Name              | IEX                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Program Producing Message   | ALGOL compiler.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Audience and Where Produced | For programmer: SYSPRINT data set.<br>For operator: console.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Message Format              | <p>IEXnnnI s nnnnn text</p> <p>nnn<br/>Message serial number.</p> <p>s<br/>Severity code:</p> <p>W Warning; the compiler internally modifies the program being compiled and continues processing; the modification may or may not correct the program, but it allows compilation to continue.</p> <p>S Serious; the compiler attempts to modify the program internally, including skipping or changing parts of it; generation of the object module is stopped, but syntax checking continues.</p> <p>T Compilation is terminated.</p> <p>nnnnn<br/>Semicolon number, right-adjusted and in decimal; if the error cannot be related directly to a point in the program, nnnnn is blank.</p> <p>text<br/>Message text.</p> |
| Comments                    | <p>IEX messages are not included in this publication. They are documented in the publication <u>IBM System/360 Operating System: ALGOL Programmer's Guide</u>, GC33-4000. If your installation uses ALGOL frequently, you may prefer to have the IEX messages in this publication; the index tab on this page is provided so that you can remove the IEX messages from the Programmer's Guide and insert them here.</p> <p>For routing and descriptor codes of IEX messages, see Table 14 in Part V of this publication: "Routing and Descriptor Codes."</p>                                                                                                                                                              |
| Associated Publications     | <p><u>IBM System/360 Operating System:</u><br/> <u>ALGOL Language</u>, GC28-6615<br/> <u>ALGOL Programmer's Guide</u>, GC33-4000</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |



## FORTRAN IV G Messages (IEY)

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component Name              | IEY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Program Producing Message   | FORTRAN IV G compiler                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Audience and Where Produced | For programmer: SYSPRINT data set.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Message Format              | <p>x) IEYnnnI text</p> <p>x           Position of error on card in source program input.</p> <p>nnn         Message serial number.</p> <p>text         Message text.</p>                                                                                                                                                                                                                                                                                                                                                                                                           |
| Comments                    | <p>IEY messages are not included in this publication. They are documented in the publication <u>IBM System/360 Operating System: FORTRAN IV (G and H) Programmer's Guide</u>, GC28-6817. If your installation uses FORTRAN IV G frequently, you may prefer to have the IEY messages in this publication: the index tab on this page is provided so that you can remove the IEY messages from the Programmer's Guide and insert them here.</p> <p>For routing and descriptor codes of IEY messages, see Table 15 in Part V of this publication: "Routine and Descriptor Codes."</p> |
| Associated Publications     | <p><u>IBM System/360 Operating System:</u><br/> <u>FORTRAN IV (G and H) Programmer's Guide</u>, GC28-6817<br/> <u>IBM System/360 FORTRAN IV Language</u>, GC28-6515</p>                                                                                                                                                                                                                                                                                                                                                                                                            |

IEY



## SMF Dump Program Messages (IFA)

|                             |                                                                                                             |
|-----------------------------|-------------------------------------------------------------------------------------------------------------|
| Component Name              | IFA                                                                                                         |
| Program Producing Message   | SMF Dump Program IFASMFDP                                                                                   |
| Audience and Where Produced | For Programmer: SYSPRINT                                                                                    |
| Message Format              | IFAnnnI<br>nnn message serial number<br>text message text<br>I Information; no operator action is required. |
| Associated Publications     | IBM System/360 Operating System: System Management Facilities,<br>GC28-6712                                 |
| Problem Determination       | Refer to the fold-out in part VI of this publication for problem determination instructions.                |

IFA

IFA001I DD CARD REQUIRED FOR DUMPIN MISSING

Explanation: The user has failed to provide a DD statement for the data set containing records produced by System Management Facilities.

System Action: The operation is terminated.

Programmer Response: Probable user error. Provide a DD statement for the input data set.

IFA002I DD CARD REQUIRED FOR DUMPOUT MISSING

Explanation: The user has failed to provide a DD statement for the data set to which the SMF records are to be dumped.

System Action: The operation is terminated.

Programmer Response: Probable user error. Provide a DD statement for the output data set.

IFA003I NO RECORD LENGTH WAS GIVEN FOR DUMPIN

Explanation: Both the logical record length and blocksize for the input data set are zero.

System Action: The operation is terminated.

Programmer Response: Probable user error. Make sure the input data set has a DCB parameter specifying blocked, variable length records.

IFA004I OUTPUT BLOCKSIZE IS SMALLER THAN INPUT

Explanation: The blocksize of the input data set is greater than the blocksize of the output data set.

System Action: The operation is terminated.

Programmer Response: Make sure the output blocksize is not smaller than the input blocksize.

IFA005I PERMANENT I/O ERROR DIAGNOSIS error description

Explanation: A permanent I/O error has occurred on the dumpin or dumpout data set. The error descriptor portion is error diagnosis produced by the SYNADAF error analysis routine.

System Action: The operation is terminated.

Programmer Response: Correct the error condition indicated in the message text.

Problem Determination: Table I, items 1, 13, 23, 29.

IFA006A REQUEST MADE TO DUMP ACTIVE SMF DATA SET - REPLY CANCEL

Explanation: The SMF dump program is attempting to dump the active SMF data set. This request is invalid and must be cancelled or SMF records will be lost.

System Action: The SMF dump program enters a wait pending the operator's reply.

Operator Response: Enter REPLY xx, 'CANCEL' to acknowledge the cancellation of the SMF dump program. If the wrong SMF data set was specified in the dump program, enter the program to dump the correct data set. To dump the active data set, issue the HALT EOD or SWITCH SMF command from the console. Either command will activate the alternate SMF data set and free the current one for dumping. If the alternate SMF data set is full, it must be dumped prior to issuing the above commands.

Problem Determination: Table I, items 2, 29. Have copies of the SMF dump procedures and a listing of the program IFASMFDP available.

IFA007I SMF DUMP CANCELLED

Explanation: This message is issued to notify the operator that a program

attempting to dump the SMF data set has been cancelled.

System Action: The program IFASMFDP is cancelled.

Operator Response: Enter the SMF dump program to dump the correct SMF data set. If a dump of the active SMF data set is desired first issue a HALT EOD or SWITCH SMF command from the console. Either command will activate the alternate SMF data set and free the current one for dumping via the SMF dump program IFASMFDP. If the alternate SMF data set is full, it must be dumped prior to issuing the above commands.

Problem Determination: Table I, items 2, 29. Have copies of the SMF dump procedures and a listing of program IFASMFDP available.

## Environment Recording Messages (IFB)

|                             |                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component Name              | IFB                                                                                                                                                                                                                                                                                                                                                                                                 |
| Program Producing Message   | Input/output environment recording routines OBR and SDR, and system environment recording routines SER0 and SER1.                                                                                                                                                                                                                                                                                   |
| Audience and Where Produced | For operator: console.                                                                                                                                                                                                                                                                                                                                                                              |
| Message Format              | xx IFBnnns text<br>xx IFBFnns text<br><br>xx<br>Message reply identification (absent, if operator reply not required).<br>nnn or nn<br>Message serial number.<br>s<br>Type code:<br><br>I Information; no operator action is required.<br>S Stop; hardware error cannot be corrected by retry.<br>W Wait; processing stopped until action is determined and performed.<br><br>text<br>Message text. |
| Comments                    | The first format of the message is used for I/O routines; the second format is used for the system routines.                                                                                                                                                                                                                                                                                        |
| Problem Determination       | Refer to the fold-out in part VI of this publication for problem determination instructions.                                                                                                                                                                                                                                                                                                        |

IFB

IFB001I I/O ERROR DURING OBR/SDR

Explanation: An uncorrectable input/output error occurred while input/output environment recording routine OBR or SDR was recording an input/output error in the SYS1.LOGREC data set.

System Action: The routine will not attempt to record the error again; however, the routine will attempt to record subsequent errors.

Operator Response: Execute the IFCEREPO service aid to dump the SYS1.LOGREC data set; then execute the IFCDIP00 service aid to reinitialize the data set.

Problem Determination: Table I, items 2, 14, 29.

IFB002I CHANNEL DETECTED ERROR ON ddd  
RECORDED,xxxx,op,stat,hh.mm.ss

Explanation: A channel-detected error occurred during the operation of device ddd and has been recorded on the SYS1.LOGREC data set by input/output environment recording routine OBR. The message applies to both recovered and permanent channel-detected errors for which error records have been created.

In the message text, the fields are:

xxxx  
     error source:  
     CU control unit  
     CHAN channel  
     PROC processor (CPU)  
     SCU storage control unit  
     STOR storage

op  
     failing command code

stat  
     channel and unit status from command status word (CSW)

hh.mm.ss  
     time in hours, minutes, and seconds

System Action: None.

Operator Response: Probable hardware error. Log the error in the operator's log. If this message is repeated frequently, execute the IFCEREPO service aid to dump the SYS1.LOGREC data set. If Alternate Path Retry (APR) is included in the system, consider VARYing the path offline. If the system is a Model 65 Multiprocessing system, consider VARYing the channel offline.

Problem Determination: Table I, items 2, 14, 30.

IFB003I OBR/SDR RECORDING AREA FULL

Explanation: When input/output environment recording routine OBR or SDR attempted to record an input/output error in the SYS1.LOGREC data set, the routine found the data set to be full.

System Action: The routine did not record the error and will not record any subsequent errors. Otherwise, the system will continue processing.

Operator Response: Execute the IFCEREPO service aid to dump the SYS1.LOGREC data set.

IFB004I OBR/SDR DISK AREA FORMAT ERROR

Explanation: Input/output environment recording routine OBR or SDR found that the performatted area of the SYS1.LOGREC data set is incorrect.

System Action: The system will proceed normally except that further errors will not be recorded.

Operator Response: Execute the IFCEREPO service aid to dump SYS1.LOGREC data set; then execute the IFCDIP00 service aid to reinitialize the data set.

Problem Determination: Table I, items 29. Execute the IMASPZAP service aid program to dump the SYS1.LOGREC data set. Specify DSN=SYS1.LOGREC in the SYSLIB DD statement, and include an ABDUMP ALL control statement after the SYSIN DD statement.

IFB010D ENTER 'IPL REASON, SUBSYSTEM ID' OR 'U'

Explanation: This message requests the operator to provide:

- The reason for the IPL.
- The device or program (subsystem) responsible for the IPL restart.  
or
- U - to continue operation with default values.

System Action: RDE waits pending the operator's reply.

Operator Response: Enter a reply in the format REPLY xx,'rr,ss' where xx is the reply ID, rr is the RDE IPL reason code, and ss is the subsystem ID code. For further information on the reason code and subsystem ID codes see: IBM System/360 Operating System: RDE Guide, GC28-6747.

IFB020I INVALID REPLY TO IFB010D

Explanation: The reply to message IFB010D is incorrect.

System Action: Message IFB010D is reissued to allow the operator to reenter his reply.

Operator Response: Either enter the IPL reason code and subsystem ID code in the proper format or reply 'U' to select default values, in response to message IFB010D.

IFB030I SYS1.LOGREC I/O ACCESS ERROR

Explanation: SYS1.LOGREC was accessed for either a read or write operation, and an incorrectable input/output error occurred. This may occur during the updating of SDR external counters.

System Action: For updating of SDR counters the routine will not attempt re-try of the access that failed, but will attempt subsequent access requests.

Operator Response: Execute the IFCEREPO service aid to dump SYS1.LOGREC data set; then execute the IFCDIP00 service aid program.

IFB040I SYS1.LOGREC AREA IS FULL

Explanation: The SYS1.LOGREC data set is full and cannot contain further environment records. At least one record has been lost.

System Action: Processing continues, but further environment records will be lost.

Operator Response: Execute the IFCEREPO program to dump the SYS1.LOGREC data set.

IFB060E SYS1.LOGREC NEAR FULL

Explanation: The SYS1.LOGREC data set has reached 90% of its capacity for data.

System Action: Processing continues.

Operator Response: Execute the IFCEREPO service aid to dump the SYS1.LOGREC data set; for, continued processing, without the data set being dumped, may cause the data set to become full. To compile a history of hardware failures, do the following:

- Save the IFCEREPO output.
- Save the master console listing.

IFBF05W { CPU ERROR } RELOAD OS/360, hh.mm.ss  
{ CHAN x ERROR }

Explanation: The system environment recording routine SER0 or SER1 wrote an environment record about a machine malfunction that caused an unrecoverable error. In the first case of the message text, the detected error was localized in the CPU; in the second case, the error was localized in the channel indicated by x.

System Action: The routine attempted to ring the console alarm and then placed the system in wait state.

Operator Response: Probable hardware error. Restart the system.

Problem Determination: Table I, items 2, 18, 30.

IFBF06W { CPU ERROR } RELOAD OS/360, hh.mm.ss  
{ CHAN x ERROR }

Explanation: A second-check interruption occurred while the system environment recording routine SER0 or SER1 was writing an environment record about a prior machine malfunction. The record was written. In the first case of the message text, the error was localized in the CPU; in the second case, the error was localized in channel x.

System Action: The routine attempted to ring the console alarm and then placed the system in wait state.

Operator Response: Probable hardware error. Restart the system.

Problem Determination: Table I, items 2, 18, 30.

IFBF07S { CPU ERROR } EXECUTE SEREP, hh.mm.ss  
{ CHAN x ERROR }

Explanation: Machine-check interruptions are occurring so frequently that the system environment recording routine SER0 cannot write a meaningful environment record. In the first case of the message text, the error was localized in the CPU; in the second case, the error was localized in channel x.

System Action: The routine attempted to ring the console alarm and then placed the system in wait state.

Operator Response: Probable hardware error. Execute the System Environment Recording, Editing, and Printing (SEREP) program to record the machine environment and restart the system.

Problem Determination: Table I, items 2, 14, 30.

IFBF08S { CPU ERROR } EXECUTE SEREP, hh.mm.ss  
{ CHAN x ERROR }

Explanation: System environment recording routine SER0 could not write an environment record in the SYS1.LOGREC data set because of an uncorrectable input/output error. In the first case of the message text, the source of the machine-check was the CPU; in the second case, the source of the machine-check was the channel indicated by x.

System Action: The routine attempted to ring the console alarm and then placed the system in wait state.

Operator Response: Probable hardware error. Execute the System Environment Recording, Editing, and Printing (SEREP) program to record the machine environment and restart the system.

Problem Determination: Table I, items 2, 14, 30.

IFBF09S { CPU ERROR } EXECUTE SEREP, hh.mm.ss  
{ CHAN x ERROR }

Explanation: System Environment recording routine SER0 or SER1 could not write an environment record in the SYS1.LOGREC data set for one of the following reasons:

- The SYS1.LOGREC data set is full.
- An error exists in the header record.

In the first case of the message text, the machine-check occurred in the CPU; in the second case, the machine-check occurred in the channel indicated by x.

System Action: The routine attempted to ring the console alarm and then placed the system in wait state.

Operator Response: Probable hardware error.

Problem Determination: Table I, items 2, 12, 14, 30.

IFBF0AS { - CPU ERROR } EXECUTE SEREP  
{ CHAN x ERROR }

Explanation: The resident module of system environment recording routine SER0 could not load the nonresident module because an uncorrectable input/output error occurred in reading the linkage library (SYS1.LINKLIB) data set. In the first case of the message text, the machine-check occurred in the CPU; in the second case, the machine-check occurred in channel x.

System Action: The routine attempted to ring the console alarm and then placed the system in wait state.

Operator Response: Probable hardware error. Execute the System Environment Recording, Editing, and Printing (SEREP) program to record the machine environment and restart the system.

Problem Determination: Table I, items 2, 14, 30.

IFBF0BI CPU ERROR, hh.mm.ss

Explanation: System environment recording routine SER1 wrote an environment record about a machine malfunction. The routine is terminating the current job step in order to continue the operating system.

Operator Response: Probable hardware error.

Problem Determination: Table I, items 2, 18, 30.

IFBF0CI { CPU ERROR } , LOGREC FULL, hh.mm.ss  
{ CHAN x ERROR }

Explanation: System environment recording routine SER1 could not write an environment record in the SYS1.LOGREC data set because the data set is full. The routine is terminating the current job step in order to continue the operating

system. In the first case of the message text, the detected machine-check occurred in the CPU; in the second case, the detected machine-check occurred in channel x.

Operator Response: Probable hardware error.

Problem Determination: Table I, items 2, 18, 30.

IFBF0DS { CPU ERROR } ,EXECUTE SEREP,hh.mm.ss  
{ CHAN x ERROR }

Explanation: System environment recording routine SER1 encountered an uncorrectable input/output error or a central processing unit (CPU) error or both while attempting to write an environment record in the SYS1.LOGREC data set. The environment record was not written. In the first case of the message text, the machine-check occurred in the CPU; in the second case, the machine-check occurred in the channel indicated by x.

System Action: The routine attempted to ring the console alarm and then placed the system in wait state.

Operator Response: Probable hardware error. Execute the System Environment Recording, Editing, and Printing (SEREP) program to record the machine environment and restart the system.

Problem Determination: Table I, items 2, 14, 30.

IFBF0EI { CPU ERROR } RECORD LOST,hh.mm.ss  
{ CHAN x ERROR }

Explanation: One of the following conditions occurred:

- System environment recording routine SER1 encountered an uncorrectable output error while attempting to write in the SYS1.LOGREC data set.
- SER1 was entered when input/output environment recording routine OBR or SDR was in control.

In the first case of the message text, the machine-check occurred in the CPU; in the second case, the machine-check occurred in the channel indicated by x.

System Action: Processing continues. The environment record is not recorded.

Operator Response: Probable hardware error.

Problem Determination: Table I, items 2, 14, 30.

IFBF0FW CPU ERROR. RELOAD OS/360,hh.mm.ss

Explanation: The system environment recording program (MODEL 195 SER1) wrote an environment record about a machine malfunction. All high speed buffer segments were disabled (see message IFBF0FI).

System Action: The routine attempted to ring the console alarm and place the system in a wait state.

Operator Response: Probable hardware error. Execute the System Environment Recording, Editing, and Printing (SEREP) program to record the machine environment, and restart the system.

Problem Determination: Table I, items 2, 14, 30.

IFBF0FI MACHINE ERROR. BFR SEG x DSBL

Explanation: The system environment recording program (Model 195 SER1) wrote an environment record about a machine malfunction. The program is terminating the current job step in order to continue with system operation. In the message text, x is the number of the high speed buffer segment that has been disabled due to a permanent buffer segment failure. The buffer segment will be enabled again when the system is restarted.

System Action: Processing continues. The current task is abnormally terminated and buffer segment x is disabled.

Operator Response: None.

## Service Aids Messages (IFC)

|                             |                                                                                                                                                                                                                                                                                           |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component Name              | IFC                                                                                                                                                                                                                                                                                       |
| Program Producing Message   | Service aids: IFCEREPO, IFCDIP00.                                                                                                                                                                                                                                                         |
| Audience and Where Produced | For programmer (IFCEREPO program): SYSPRINT data set.<br>For operator (IFCDIP00 program): console.                                                                                                                                                                                        |
| Message Format              | IFCnnnI text <span style="float: right;">(in SYSPRINT)</span><br>xx IFCnnnI text <span style="float: right;">(on console)</span><br><br>nnn      Message serial number.<br>text     Message text.<br><br>xx        Message reply identification (absent, if operator reply not required). |
| Comments                    | None.                                                                                                                                                                                                                                                                                     |
| Associated Publications     | <u>IBM System/360 Operating System:</u><br><u>Service Aids, GC28-6719</u>                                                                                                                                                                                                                 |
| Problem Determination       | Refer to the fold-out in part VI of this publication for problem determination instructions.                                                                                                                                                                                              |

### IFCDIP00 Program Messages

IFC001I D=ddd N=x F=trck\* L=trck\* S=recd\*\* DIP COMPLETE

Explanation: Produced by the IFCDIP00 program during the initialization of the SYS1.LOGREC data set, this message describes the limits of the data set.

In the message text, ddd is the device type containing the SYS1.LOGREC data set; x is the hexadecimal representation of the device type code; in F=trck, trck is the address of the first track of the extent; in L=trck, trck is the address of the last track of the extent; and recd is the starting address of the record entry area within the data set. One asterisk indicates that hexadecimal representation causes 8-character printout, and two asterisks indicate that hexadecimal representation causes 10-character printout.

Operator Response: None.

IFC002I INVALID INPUT

Explanation: In the DD statement, the DD name is misspelled.

Operator Response: Probable user error. Correct the DD statement. Then execute the IFCDIP00 program again.

Problem Determination: Table I, items 2, 29. Execute the IMASPZAP service aid program to dump the SYS1.LOGREC data set. Specify DSN=SYS1.LOGREC in the SYSLIB DD statement, and include an ABSDUMP control statement, specifying the extents of the data set, after the SYSIN DD statement.

IFC003I I/O ERRORS IN FORMATTING DISK

Explanation: An uncorrectable input/output error occurred while the IFCDIP00 program was formatting the SYS1.LOGREC data set.

System Action: IFCDIP00 program execution is terminated.

Operator Response: Execute the IFCDIP00 program again.

Problem Determination: Table I, items 2, 29. Execute the IMASPZAP service aid program to dump the SYS1.LOGREC data set. Specify DSN=SYS1.LOGREC in the SYSLIB DD statement and include an ABSDUMP control statement, specifying the extents of the data set, after the SYSIN DD statement.



IFC004I END OF DATA SET BEFORE PROGRAM COMPLETE

Explanation: During formatting of the SYS1.LOGREC data set, the IFCDIP00 program found that the data set is not large enough for the parameters specified in the EXEC statement.

Probably, the number of tracks previously allocated to the SYS1.LOGREC data set is too small for the number of uniquely addressable input/output devices specified in the EXEC statement.

Operator Response: Probable user error. Correct the EXEC or DD statement. (See message IFC001I for correct values for the EXEC statement parameters.) Then execute the IFCDIP00 program again.

Problem Determination: Table I, items 2, 29. Execute the IMASPZAP service aid program to dump the SYS1.LOGREC data set. Specify DSN=SYS1.LOGREC in the SYSLIB DD statement, and include an ABSDUMP control statement, specifying the extents of the data set, after the SYSIN DD statement.

#### IFCEREPO Program Messages

IFC005I I/O ERROR ON OUTPUT DEVICE

Explanation: A permanent error has occurred on the output device.

System Action: The program is terminated. (No return code is provided.)

Operator Response: Execute the job again. If the problem recurs, do the following

Problem Determination: Table I, items 2, 29.

IFC006I HEADER RECORD INCORRECT

Explanation: A validity check of the SYS1.LOGREC data set has uncovered an error in the header record.

System Action: If possible, the IFCEREPO program resumes processing. The program does not clear selected records to zeros in the SYS1.LOGREC data set. If the program is unable to resume processing, it is terminated. (No return code is provided.)

Operator Response: Execute the IFCDIP00 program to initialize the SYS1.LOGREC data set. Execute the IFCEREPO program again.

Problem Determination: Table I, items 2, 29. Execute the IMASPZAP service aid program to dump the SYS1.LOGREC data set. Specify DSN=SYS1.LOGREC on the SYSLIB DD statement after the SYSIN DD statement.

IFC007I END OF DATA SET BEFORE PROGRAM COMPLETE

Explanation: The IFCEREPO program referred to a disk address that was not within the SYS1.LOGREC data set.

System Action: The program is terminated. (No return code is provided.)

Programmer Response: Execute the IFCDIP00 program to initialize the SYS1.LOGREC data set. Execute the IFCEREPO program again.

Problem Determination: Table I, items 2, 29. Execute the IMASPZAP service aid program to dump the SYS1.LOGREC DATA SET. Specify DSN=SYS1.LOGREC on the SYSLIB DD statement and include an ABSDUMP control statement, specifying the extents of the data set, after the SYSIN DD statement.

IFC008I READ DISK FAILURE

Explanation: An uncorrectable input/output failure has occurred while reading a record from the SYS1.LOGREC data set. If the record is the header record, message IFC006I is also printed.

System Action: The record that was being read when the failure occurred is skipped. The program attempts to resume processing with the next record.

Operator Response: Execute the IFCDIP00 program. Execute the IFCEREPO program again.

Problem Determination: Table I, items 29. Execute the IMASPZAP service aid program to dump the SYS1.LOGREC data set. Specify DSN=SYS1.LOGREC in the SYSLIB DD statement and include an ABSDUMP control statement, specifying the extents of the data set, after the SYSIN DD statement.

IFC009I WRITE DISK FAILURE

Explanation: An uncorrectable input/output failure has occurred while the program was attempting to clear a record to zeros.

System Action: IFCEREPO continues processing further records without clearing them to zero.

Operator Response: Execute the IFCDIP00 program. Execute the IFCEREPO program again.

Problem Determination: Execute the IMASPZAP service program to dump the SYS1.LOGREC data set. Specify DSN=SYS1.LOGREC on the SYSLIB DD statement and include an ABSDUMP control statement, specifying the extents of the data set, after the SYSIN DD statement.

IFC00AI PARAMETER FIELD ERROR

Explanation: The PARM parameter in the EXEC statement was specified incorrectly.

System Action: The program is terminated. (No return code is provided.)

Operator Response: Probable user error. Correct the PARM parameter and execute the job again.

Problem Determination: Table I, items 2, 4, 29.

IFC00BI STAT RECORD KEY DIFFERS FROM THE EXPECTED  
-- EXPCD xxx REC xxx

Explanation: A statistical count record is out of sequence. The message identifies the expected record (EXPCD xxx) and the received record (REC xxx).

System Action: Processing continues.

Operator Response: None.

Problem Determination: Table I, items 2, 29. Execute the IMASPZAP service aid program to dump the SYS1.LOGREC data set. Specify DSN=SYS1.LOGREC in the SYSLIB DD statement and include an ABDUMP control statement, specifying the extents of the data set, after the SYSIN DD statement.

IFC00CI INPUT NOT ACCUMULATIVE DATA SET

Explanation: The input data set is specified as being a history data set; however, it is not a history data set.

System Action: The job step is terminated

Operator Response: Mount the correct volume and rerun the job step.

IFC00DI ACCUMULATION OUTPUT TERMINATED - ERROR

Explanation: An unrecoverable write error occurred while writing into an accumulated data set.

System Action: No additional accumulation is performed. The job step is terminated unless an additional function or functions (e.g., summarization or full record printing) are specified.

Operator Response: None.

Problem Determination: Table I, items 2, 4, 29.

IFC00EI JOB TERMINATED DUE TO INPUT ERRORS

Explanation: Unrecoverable I/O errors occurred while reading an input history data set. This message is generated when at least 40 records have been read and the number of input errors exceeds 12.5% of the total number of records read.

System Action: The job step is terminated.

Operator Response: None.

Problem Determination: Table I, items 2, 4, 29.

IFC00FI ddname DD STATEMENT INCORRECT STEP TERM

Explanation: The named DD statement is coded incorrectly or is missing from the input stream.

System Action: The job step is terminated.

Operator Response: Probable user error. Correct the invalid DD statement or insert the missing statement. Execute the job step again.

Problem Determination: Table I, items 2, 4, 29.

IFC010I ddname FAILED TO OPEN

Explanation: The DD statement whose ddname is specified in the message text is coded incorrectly or is missing. The input data set could not be opened.

System Action: The job step is terminated with a return code of 4.

Programmer Response: Probable user error. Correct or include the named DD statement and execute the job step again.

Problem Determination: Table I, items 2, 4, 29.

IFC011I HEADER RECORD READ ERROR

Explanation: The header record on the SYS1.LOGREC data set could not be read.

System Action: The job step is terminated with a return code of 4.

Programmer Response: Execute the IMASPZAP service aid program to obtain a dump of the SYS1.LOGREC data set. Then execute the IFCDIP00 program to reinitialize the SYS1.LOGREC data set.

Problem Determination: Table I, items 2, 4, 14, 29.

IFC012I HEADER RECORD INVALID

Explanation: A validity check of the header record on the SYS1.LOGREC data set has uncovered an error.

System Action: The IFCEREP0 program will attempt to continue processing the data set.

Programmer Response: Execute the IMASPZAP service aid program to obtain a dump of the SYS1.LOGREC data set to verify the output of the IFCEREP0 program. Then execute the IFCDIP00 program to reinitialize the SYS1.LOGREC data set.

Problem Determination: Table I, items 2, 4, 14, 29.

IFC013I ddname INPUT ERROR

Explanation: An uncorrectable input error has occurred on the data set whose ddname is specified in the message text.

System Action: The program will continue processing. The record which caused the input error is ignored. No more records will be zeroed.

Programmer Response: Execute the IMASPZAP service aid program to obtain a dump of the data set on which the input error occurred. Move or copy the data set to a like device to determine if the problem was caused by a hardware malfunction. If the message does not recur there is a probable hardware error on the device originally used. Otherwise, a probable programming error exists. If the error occurred on the SYS1.LOGREC data set, execute the IFCDIP00 program to reinitialize the data set.

Problem Determination: Table I, items 2, 4, 14, 29.

IFC014I HEADER RECORD WRITE ERROR

Explanation: The header record of the SYS1.LOGREC data set cannot be updated because of an uncorrectable output error.

System Action: The program will terminate normally.

Programmer Response: Execute the IFCDIP00 program to reinitialize the SYS1.LOGREC data set.

Problem Determination: Table I, items 2, 4, 29.

IFC015I ddname OUTPUT ERROR

Explanation: An uncorrectable output error has occurred on the data set whose ddname is specified in the message text.

System Action: The system action depends on the data set on which the error occurred.

- If ddname is EREPTT, the job step is terminated.
- If ddname is MEASURE, records are not zeroed but processing continues without further measurement.
- If ddname is ACCDEV, records are not zeroed but processing continues without further accumulation.

Programmer Response: Probable hardware error. Execute the job again after changing the device or the recording medium which caused the error.

Problem Determination: Table I, items 2, 4, 30.

IFC016I I/O ERROR WHILE ZEROING RECORD

Explanation: An output error on the SYS1.LOGREC data set was encountered when a zeroed record was being written.

System Action: The program will continue processing the selected records but no more records will be zeroed.

Programmer Response: Execute the IFCDIP00 program to reinitialize the SYS1.LOGREC data set.

Problem Determination: Table I, items 2, 4, 29.

IFC017I INPUT ERRORS HAVE EXCEEDED MAX

Explanation: More than 16 input errors have occurred during this execution of the IFCEREPO program.

System Action: The job step is terminated with a return code of 4.

Programmer Response: Execute the IMASPZAP service aid program to obtain a dump of the SYS1.LOGREC data set. Then execute the IFCDIP00 program to reinitialize the SYS1.LOGREC data set.

Problem Determination: Table I, items 2, 4, 14, 29.

IFC018I ddname END OF DATA BEFORE PROGRAM END

Explanation: The IFCEREPO program found the end of data on the data set associated with ddname before the program was complete. The problem probably resulted from an input/output error.

System Action: The job step is terminated with a return code of 4.

Programmer Response: Execute the IMASPZAP service aid program to obtain a dump of the SYS1.LOGREC data set. Then execute the IFCDIP00 program to reinitialize the SYS1.LOGREC data set.

Problem Determination: Table I, items 2, 4, 14, 29.

IFC019I PARAMETER FIELD SYNTAX ERROR

Explanation: A keyword or operand in the PARM field of the EXEC statement for IFCEREPO is coded incorrectly.

System Action: The job step is terminated with a return code of 4.

Programmer Response: Probable user error. Correct the parameter and execute the job step again.

Problem Determination: Table I, items 2, 4, 29.

IFC01AI PARAMETER CONFLICT

Explanation: Two of the parameters of the EXEC statement for IFCEREPO would endanger the data if the job step were to continue executing. Example: (ZERO=Y, PRSNT=NO). The records would be lost without being either edited or accumulated.

System Action: The job step is terminated with a return code of 4.

Programmer Response: Probable user error. Eliminate the conflicting parameters in the EXEC statement for IFCEREPO and execute the job step again.

Problem Determination: Table I, items 2, 4, 29.

IFC01BI DUPLICATE KEYWORDS FOUND

Explanation: Two identical keywords were specified in the PARM field of the EXEC statement for IFCEREP0.

System Action: The job step is terminated with a return code of 4.

Programmer Response: Probable user error. Eliminate one of the duplicate keywords and execute the job step again.

Problem Determination: Table I, items 2, 4, 29.

IFC01CI STAT RECORD KEYS OUT OF SEQUENCE EXPCD yyy  
FND xxx

Explanation: The key of a statistical record (SDR) is out of sequence. In the message text, yyy is the key which the IFCEREP0 program expected (EXPCD) to find, and xxx is the key which was found (FND).

System Action: The IFCEREP0 program stops processing the SDR records only. No more records are zeroed.

Programmer Response: Execute the IMASPZAP service aid program to obtain a dump of the SYS1.LOGREC data set. Then execute the IFCDIP00 program to reinitialize the SYS1.LOGREC data set.

Problem Determination: Table I, items 2, 4, 29.

IFC020I ENCOUNTERED MORE THAN 16 SEQ ERRORS STOP  
RUN

Explanation: The input measurement data set contains 16 or more consecutive records which are out of sequence. The RDE summary program is unable to handle sequence errors of this severity. Sequence errors normally result from a failure to accumulate the measurement data set in time order sequence.

System Action: The IPL report will report on system initializations up to the point of the error but will not print the clusters or mean IPL time. The hardware error report will not be generated. The RDE summary program will be terminated.

Programmer Response: None.

IFC021I INVALID START DATE; CORRECT AND RESTART  
JOB

Explanation: The report starting date specified on the control card was either non-numeric or was before January 1, 1960. In order to obtain valid output the start date must be within 30 days of the first date on the first record of the measurement data set.

System Action: The job is terminated.

Programmer Response: Correct the start date and resubmit the job.

IFC022I INVALID END DATE CORRECT AND RESTART THE  
JOB

Explanation: The end date of the report as specified on the control card was either not completely numeric or blank. This date must be greater than or equal to the start date.

System Action: The job is terminated.

Programmer Response: Correct the end date in the control card and resubmit the job.

IFC023I INVALID CLUSTER VALUE; CORRECT AND RERUN  
JOB

Explanation: The IPL clustering time interval specified on the control card was not completely numeric or blank.

System Action: The job is terminated.

Programmer Response: Correct the control card's IPL clustering time interval or leave it blank and resubmit the job.

IFC024I SUPPLY AN RDE CONTROL CARD AND RERUN THE  
JOB

Explanation: A control card must be present in order to run the RDE summary program. This control card must at least specify the start date for the report.

System Action: The job is terminated.

Programmer Response: Fill out the control card correctly and resubmit the job.

IFC025I NO IPL RECORDS PROCESSED

Explanation: No IPL records were encountered in the measurement data set.

System Action: Processing continues.

Programmer Response: Insure that the proper measurement tape was mounted.

IFC



## Online Test Executive Program Messages (IFD)

|                             |                                                                                                                                                                                                                                                                                                                           |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component Name              | IFD                                                                                                                                                                                                                                                                                                                       |
| Program Producing Message   | Online test executive program.                                                                                                                                                                                                                                                                                            |
| Audience and Where Produced | For programmer: SYSPRINT data set.<br>For operator: console.                                                                                                                                                                                                                                                              |
| Message Format              | IFDnnnI text (in SYSPRINT)<br>xx IFDnnns text (on console)<br><br>nnn Message serial number.<br>text Message text.<br>xx Message reply identification (absent, if operator reply not required).<br>s Type code:<br><br>D Decision; operator must choose an alternative.<br>I Information; no operator action is required. |
| Comments                    | None.                                                                                                                                                                                                                                                                                                                     |
| Associated Publications     | <u>IBM System/360 Operating System:</u><br><u>Online Test Executive Program</u> , GC28-6650                                                                                                                                                                                                                               |
| Problem Determination       | Refer to the fold-out in part VI of this publication for problem determination instructions.                                                                                                                                                                                                                              |

### IFD100I message

Explanation: The message may be any of the following:

xxxxxyyy CANNOT RUN ON UNIT zzz

The configuration data in the OLT library or the UCB for unit zzz does not specify the device characteristics required by section yyy of test xxxxx. The test section is bypassed.

Operator Response: Probable user error. Check for an error in the test definition (OLTEP control statement or reply to message IFD105D).

Problem Determination: Table I, items 1, 2, 4, 5a, 16, 29. Cancel the job, requesting a dump.

NO DEVICE DESCRIPTORS FOR DEVICE

OLTEP scheduled a test for a device for which there is no configuration data entry in the OLTEP library. The test is bypassed.

Operator Response: None.

### NOT ALL SELECTED ROUTINES WERE RUN

Not all the routines specified in the response to message IFD105D (ENTER-DEV/TEST/OPT) were executed. Either the routines do not exist, or the test section terminated before the routines were able to run.

Operator Response: None.

TEST CANCELLED. ATTEMPTED TO WRITE ON FILE PROTECTED DEVICE

A device is being tested in File Protect Mode. OLTEP is terminating a test section that tried to write on the device.

Operator Response: None.

test output

A test section is running and producing output. Because the Parallel Print (PP) option was selected, OLTEP sends this output to the console as well as to the output data set. Content depends on the value specified with the option:  
PP(0) - header only  
PP(1) - header, description, comments  
PP(2) - header, results  
PP(3) - header, description, comments, results

IFD

If no value was specified with the option, PP(2) is assumed.

Operator Response: None.

IFD101D message

Explanation: This message is issued by an OLT program (test section). The OLT program requires the operator to perform some action or to make a decision before testing can continue.

System Action: OLTEP waits for the operator to respond.

Operator Response: Respond as indicated in the message text.

IFD102I OLTS RUNNING

Explanation: The Online Test Executive Program (OLTEP) has been loaded. Note: OLTEP is the executive program for the Online Test System (OLTS).

System Action: OLTEP processes the first OLTEP control statement (if any), or issues message IFD105D.

Operator Response: None.

IFD103I UCB NOT READY BIT ON - dddddddd TESTS BYPASSED

Explanation: The not-ready bit in the unit control block for device dddddddd is set to 1.

System Action: OLTEP will bypass all tests on device dddddddd. If another device was specified in the test definition, OLTEP will schedule testing of that device.

Operator Response: Ready device ddd. Request the same test again when OLTEP sends you message IFD105D.

IFD104E TO FORCE COMMUNICATION WITH OLTEP EXECUTIVE, ENTER ANY CHAR

Explanation: This message enables the operator to stop a test in order to define a new test or terminate the job step.

Operator Response: Do not reply immediately. Reply when and if you want to stop a test in order to define a new test or terminate the job step.

To stop the running of a test, enter REPLY xx,'y', where y is any character on the console keyboard. OLTEP will suspend testing and issue message IFD105D. If you respond by defining a new test, OLTEP will reissue message IFD104E before the new test is started.

Note that you can reply to message IFD104E at any time before the end of the job step. If you do not reply to the message, it is not reissued.

IFD105D ENTER - DEV/TEST/OPT/

Explanation: OLTEP is asking the operator what to do next. The operator can define the next test to be run, or terminate the job step. He can also ask for help in defining the next test.

System Action: OLTEP waits for the operator to reply.

Operator Response: Define the next test (ask for help if necessary), or terminate the job step.

To define the next test, enter REPLY xx,'devices/tests/options/'.

This reply is a test definition: it specifies the devices to be tested, the tests to be run, and the OLTEP options to be applied. For example, REPLY xx,'180-184/2400/'

This means: "Test units 180 to 184; run basic IBM 2400 tape unit tests; use standard OLTEP options." For full information on how to enter a test definition, refer to the publication IBM System/360 Operating System: Online Test Executive Program, GC28-6650.

To ask OLTEP for help in defining a test, enter REPLY xx,'PROMPT yyyy', where yyyy is one of the following:

DEV - device field  
TEST - test field  
OPT - option field  
ALL - all of the above

OLTEP will issue messages that give examples of correct device, test, and option specifications. OLTEP will then reissue message IFD105D to let you define the next test.

Note: Rather than ask OLTEP for help, you can get the same information by referring to this manual for descriptions of messages IFD147I, IFD1482, and IFD149I.

To terminate the job step, enter REPLY xx'CANCEL'.

IFD106I INPUT DATA DOES NOT CONTAIN 3 SLASHES

Explanation: An incorrect test definition has been entered, either as an OLTEP control statement or as a reply to message IFD105D. The test definition is incorrect because it does not contain three slashes as field delimiters. For example,

devices/tests/options  
should be  
devices/tests/options/

NOTE: If you reply to message IFD168E and the RETAIN/370 Interface terminates before the response is transmitted to the remote specialist, you may receive first message IFD105D, then this message, then IFD105D again. In that case, you should ignore this message.

System Action: OLTEP will issue message IFD105D to permit a new test definition to be entered.

Operator Response: Probable user error. Respond as indicated to message IFD105D. If the test definition is correct, make sure that the sequence of events described in the NOTE above has occurred. Cancel the job, requesting a dump.

Problem Determination: Table I, items 1, 2, 4, 5a, 16, 29.

IFD107I OPTIONS ARE xxx ...,xxx

Explanation: A correct test definition has been entered. The test definition specifies or implies the OLTEP options indicated by the xxx fields in the message.

System Action: Testing continues.

Operator Response: None.

IFD108I INVALID ENTRY IN DEV FLD xx

Explanation: An incorrect test definition has been entered, either as an OLTEP control statement or as a reply to message IFD105D. The test definition is incorrect because of an error in the device field. The error is of type xx, which may be any of the following:

- 01 - Invalid delimiter.
- 02 - Invalid address.
- 04 - Field omitted.
- 60 - Invalid range of device addresses.

System Action: OLTEP issues message IFD161I, which explains how to request help in entering the device field. OLTEP then issues message IFD105D to permit either a request for help or a new test definition to be entered.

Operator Response: Probable user error. Respond as indicated to message IFD105D.

Problem Determination: Table I, items 1, 2, 4, 5a, 16, 29. Cancel the job, requesting a dump.

IFD109I dddddd NOT OFFLINE

Explanation: OLTEP has been asked to test device dddddd, but the device is not offline to the operating system.

System Action: OLTEP bypasses the device.

Operator Response: Vary the device offline, and request the same test again when OLTEP issues message IFD105D. (The VARY OFFLINE command will take effect when the operating system terminates or initiates a job step. If no jobs are being run concurrently with OLTEP, you must terminate OLTEP to let the VARY command take effect.)

Additional Technical Information: This message may be issued for any device except a telecommunications line.

Telecommunications lines can be tested while online, provided they are not actually in use.

IFD110I TESTABLE DEVICES MAY NOT EXCEED 16

Explanation: In a test definition (OLTEP control statement or reply to message IFD105D), more than 16 devices were selected for testing.

System Action: OLTEP will test the first 16 devices that meet test requirements; the others will be ignored.

Operator Response: None. Devices not tested at this time can be respecified the next time that OLTEP issues message IFD105D.

IFD111I NO DEVICES AVAILABLE FOR TEST

Explanation: In a test definition (OLTEP control statement or reply to message IFD105D), OLTEP has been asked to test one or more devices. The devices do not exist, or cannot be tested because they are online to the operating system.

System Action: OLTEP processes the next OLTEP control statement (if any), or issues message IFD105D.

Operator Response: Make sure that devices are specified correctly in the test definition. Vary offline any of the devices that are online.

Problem Determination: Table I, items 1, 2, 4, 5a, 16, 29. Cancel the job, requesting a dump.

IFD112I INVALID ENTRY IN TEST FLD xx

Explanation: An incorrect test definition has been entered, either as an OLTEP control statement or as a reply to message IFD105D. The test definition is incorrect because of an error in the test field. The error is of type xx, which may be any of the following:

- 01 - Invalid delimiter.
- 04 - Field omitted.
- 05 - Invalid test type (contains both letters and numerics).
- 06 - Invalid test sections (name not alphabetic).
- 07 - Invalid range of test sections.
- 08 - Invalid specification of test section routine (more than one test section is specified).
- 09 - Invalid test section routine (not numeric).
- 10 - Invalid range of test section routines.

System Action: OLTEP issues message IFD161I, which explains how to request help in entering the test field. OLTEP then issues message IFD105D to permit either a request for help or a new test definition to be entered.

Operator Response: Probable user error. Respond as indicated to message IFD105D.

Problem Determination: Table I, items 1, 2, 4, 5a, 16, 29. Cancel the job, requesting a dump.

IFD114I ALL GRAPHICS ON CONTROL UNIT NOT OFFLINE

Explanation: OLTEP has been asked to test one or more IBM 2250 graphic display units. These unit cannot be tested, because other 2250s on the same control unit are online to the operating system.

System Action: OLTEP processes the next OLTEP control statement (if any), or issues message IFD105D.

Operator Response: Vary all devices on the control unit offline; request the same test again when OLTEP issues message IFD105D. (The VARY OFFLINE command will take effect when the operating system terminates or initiates a job step. If no jobs are being run concurrently with OLTEP, you must terminate OLTEP to let the VARY command take effect).

IFD115I INVALID ENTRY IN OPT FLD--xxxxxxxxxxxx

Explanation: An incorrect test definition has been entered, either as an OLTEP control statement or as a reply to message IFD105D. The test definition is incorrect because of an invalid entry in the option field. The first three characters of the invalid entry appear in the xxx field of the message text. The first ten characters of the invalid entry appear in the xxxxxxxxxx field of the message text.

System Action: OLTEP issues message IFD161I, which explains how to request help in entering the option field. OLTEP then issues message IFD105D, to permit either a request for help or a new test definition to be entered.

Operator Response: Probable user error. Respond as indicated to message IFD105D. statement. Cancel the job, requesting a dump.

Problem Determination: Table I, items 1, 2, 4, 5a, 16, 29.

IFD116D LINE dddddddd IS ONLINE, CAN IT BE TESTED. REPLY YES OR NO

Explanation: OLTEP has been asked to test an online teleprocessing line (device dddddddd). To be tested, the line must be inactive.

System Action: OLTEP waits for the operator to reply.

Operator Response: Ensure that the line is inactive. (If the line is allocated to QTAM, you can do this by entering the STOPLN command at the primary or alternate telecommunication terminal.) Then enter REPLY xx,'YES'; OLTEP will accept the line as a device to be tested.

If the line is active and cannot be made inactive, enter REPLY xx,'NO'; OLTEP will

bypass testing of the line. If the line is line 0 attached to an IBM 2702 or 2703 transmission control unit, OLTEP will bypass testing of all lines and issue message IFD111I.

IFD117I SECTION xxxxyyyy NOT FOUND

Explanation: In a test definition (OLTEP control statement or reply to message IFD105D), OLTEP has been asked to run one or more sections of test xxxxx. The OLT program required to perform section yyy is not available in the step library, job library, or link library.

System Action: OLTEP bypasses the test section.

Operator Response: Probable user error. If the OLT program named xxxxyyyy has not been included in the system link library (SYS1.LINKLIB), be sure that it is included in a private library that has been defined as the step library or job library.

Problem Determination: Table I, items 2, 4, 29. If the program has been included in the step, job, or link library, execute the IEHLIST utility program to list the library directory. Save the listing.

IFD118I UNREADABLE TAPE LABEL - dddddddd

Explanation: OLTEP has been asked to test device dddddddd, which is an IBM 2400/3400 magnetic tape unit. Because of a permanent input error, OLTEP cannot determine whether a standard label scratch tape is mounted.

System Action: OLTEP issues messages IFD137I and IFD139D.

Operator Response: Respond as indicated below to messages IFD137I and IFD139D.

Message IFD137I indicates the nature of the error (for example, the device may not be loaded). If you can correct the error, enter REPLY xx,'R' in response to message IFD139D; OLTEP in turn will try again to read standard labels from the tape.

If you cannot correct the error, probable hardware error. Enter one of the following responses to message IFD139D:

- REPLY xx,'B' to allow OLTEP to bypass the device.
- REPLY xx,'P' to allow OLTEP to proceed with the test, using the mounted volume as a scratch tape; if the volume contains data or labels, they may be destroyed.

Problem Determination: Table I, items 30.

IFD119I NON-STANDARD TAPE LABEL - dddddddd

Explanation: OLTEP has been asked to test device dddddddd, which is an IBM 2400/3400 magnetic tape unit. Because the mounted volume does not have standard labels, OLTEP cannot determine whether the volume

is a scratch tape. Device dddddddd may not be the one that the operator intended to test; in that case, the operator may have made a simple typing error when he entered the test definition.

System Action: OLTEP issues message IFD139D.

Operator Response: Make sure that the correct devices was specified in the test definition. If it was not, this is probably a user error; enter REPLY xx,'B' in response to message IFD139D, and specify the correct device the next time message IFD105D is issued.

If the correct device was specified in the test definition, and the volume mounted on device ddd is not a scratch tape, remove the volume and replace it with a scratch tape. Then respond to message IFD139D as indicated below:

- If you mount a scratch tape with standard labels, enter REPLY xx,'R' in response to message IFD139D. OLTEP in turn will read the volume and data set labels to make sure that the tape can be used as a scratch volume.
- If you mount a scratch tape with no labels or with nonstandard labels, enter REPLY xx,'P' in response to message IFD139D. OLTEP will then proceed with the test. Data and labels may be destroyed.

If the volume mounted on device ddd has standard labels, or if you cannot mount a scratch volume, enter REPLY xx,'B' in response to message IFD139D and call IBM for support.

IFD120D CAN VOL DATA ON dddddddd BE DESTROYED  
REPLY YES OR NO

Explanation: Device dddddddd is an IBM 2311 or 2314/2319 disk storage device or an IBM 2301 or 2303 drum storage device; it is offline to the operating system. OLTEP is asking whether it can run tests that will destroy data stored on the device.

System Action: OLTEP waits for the operator to reply.

Operator Response: If OLTEP is permitted to destroy all data stored on the device, enter REPLY xx,'YES'. OLTEP will use the entire volume for testing. When testing is complete, you must use the IBCDASDI utility program to reinitialize the volume.

If the data on the volume must be preserved, enter REPLY xx,'NO' OLTEP will test the device in File Protect Mode; no write testing will be performed, and no data will be destroyed.

IFD121I xx MESSAGE CANCELLED BY OLTEP

Explanation: An OLT program previously issued message IFD154E with message identifier xx. The operator has not

replied, and the OLT program can no longer accept a reply.

System Action: OLTEP has cancelled the message, making a reply impossible.

Operator Response: Ignore the cancelled message.

Additional Technical Information: If the system provides multiple console support (MCS), message IFD121I is preceded by message IEE600I (ACCEPTED REPLY TO MSG xx IS 'S').

IFD122I VOL ON dddddddd { SECURITY PROTECTED }  
UNEXPIRED DATE

Explanation: OLTEP has been asked to test device ddd, which is an IBM 2400/3400 magnetic tape unit. The volume mounted on the device has standard labels, and the data set header label indicates that the volume contains a security-protected data set or a data set with an unexpired date. OLTEP cannot use this volume as a scratch tape for testing the device.

Device ddd may not be the one that the operator intended to test; in that case, the operator may have made a simple typing error when he entered the test definition.

System Action: OLTEP issues message IFD139D.

Operator Response: Make sure that the correct device was specified in the test definition. If it was not, this is probably a user error; enter REPLY xx,'B' in response to message IFD139D, and specify the correct device the next time message IFD105D is issued.

If the correct device was specified in the test definition, and the volume mounted on device ddd is not a scratch tape, remove the volume and replace it with a scratch tape that does not contain a security-protected data set. Then enter REPLY xx,'R' in response to message IFD139D. OLTEP will try again to recognize the volume as a scratch volume.

If the volume mounted on device ddd was not security-protected or if you cannot mount a scratch volume, enter REPLY xx,'B' in response to message IFD139D and call IBM for support.

IFD124I CE VOL NOT ON UNIT dddddddd

Explanation: OLTEP has been asked to test unit ddd which is an IBM 2311, 2314, or 2319 direct access device. The volume label does indicate a C.E. volume.

System Action: OLTEP issues message IFD139D.

Operator Response: If possible, replace the mounted volume with a C.E. volume. Then respond to message IFD139D as indicated below.

If you can mount a C.E. volume, enter REPLY xx,'R' in response to message IFD139D. OLTEP will verify that the volume is a C.E. volume and proceed with the test.

If a C.E. volume is not available to be mounted, enter one of the following responses to message IFD139D:

- REPLY xx,'B' to allow OLTEP to bypass the device.
- REPLY xx,'P' to allow OLTEP to proceed in File Protect Mode; the test will not destroy data on the volume unless you give permission in a later response to message IFD120D.

IFD125I UNREADABLE LABEL ON ddd

Explanation: OLTEP attempted unsuccessfully to read the label of the volume on device ddd.

System Action: OLTEP issues messages IFD137I and IFD139D.

Operator Response: Respond to messages IFD137I and IFD139D as indicated below:

Message IFD137I indicates the nature of the error. If you can correct the error, enter REPLY xx,'R' in response to message IFD139D. OLTEP will try again to read the volume label.

If you cannot correct the error, this is probably a hardware error. Enter one of the following response to message IFD139D:

- REPLY xx,'B' to allow OLTEP to bypass the device.
- REPLY xx,'P' to allow OLTEP to proceed in File Protect Mode; tests will not destroy data on the volume unless you give permission in a later response to message IFD120D.

Problem Determination: Table I, item 30.

IFD126I BIN 0 OF dddddddd DOES NOT INDICATE CE CELL

Explanation: OLTEP has been asked to test device dddddddd, which is an IBM 2321 data cell drive. The operator replied YES to message IFD140D, indicating that a C.E. volume is mounted in bin 0. However, the C.E. sense bit is set to zero, which indicates that a C.E. volume is not mounted.

System Action: OLTEP issued messages IFD137I and IFD139D.

Operator Response: Make sure that a C.E. volume is mounted in bin 0 of device ddd. Then enter REPLY xx,'R' in response to message IFD139D; OLTEP will try again to recognize the mounted volume as a C.E. volume.

If a C.E. volume is not available to be mounted, enter REPLY xx,'B' in response to message IFD139D. OLTEP will bypass the device.

Problem Determination: Table I, items 2, 4, 30.

IFD128I TEST BYPASSED CHANNEL DATA PROTECT NOT DONE

Explanation: An OLT program (test section) has asked OLTEP to execute a special instruction (Diagnose) that is used only for channel testing. The device field of the test definition did not specify channel testing, (that is, it did not begin with the characters "CH").

System Action: OLTEP terminates the test section and tries to execute any other test section specified in the test definition.

Operator Response: Probable user error. Determine the error, and enter a corrected test definition when OLTEP next issues message IFD105D. (If you are trying to test a channel, enter the device field as CHddd, where ddd is a device attached to the channel. If you are not trying to test a channel, reenter the test field to specify the correct test type.) Cancel the job, requesting a dump.

Problem Determination: Table I, items 1, 2, 4, 5a, 16, 29.

IFD129I FIRST ERROR COMMUNICATION xxxxxxxx yyyy UNIT dddddddd [aaaaaaaaa]

Explanation: Section yyyy of OLT program xxxxxxxx has detected an error on device dddddddd. (OLT program xxxxxxxx performs section yyyy of the test.) Because the first error (FE) communication option is in effect, OLTEP will issue message IFD105D to let the operator determine whether testing should continue. aaaaaaaaa is used if a symbolic name is applicable.

System Action: OLTEP issues message IFD105D.

Operator Response: If the PP option has been specified, message IFD100I will be issued to indicate the nature of the error. After you have determined the cause of the error and have taken the appropriate corrective action, you can choose to do one of the following:

- You may resume testing with the same option in effect by entering REPLY xx,'///' in response to message IFD105D. The First Error Communication option will remain in effect. When the next input/output error occurs, OLTEP will again issue messages IFD129I and IFD105D.
- You may resume testing with different options by entering REPLY xx,'///yyy,yyy,.../' where yyy is an OLTEP option. (For a list of OLTEP options, refer to the description of message IFD149I.) Any option that is not specifically changed remains in effect. Thus, the FE option remains in effect unless you specify NFE; when the next input/output error occurs, OLTEP

will again issue messages IFD129I and IFD105D.

- You may define a new test or terminate the job step; to do this, refer to the description of message IFD105D.

If you are unable to correct the error described by message IFD100I, or if you are unable to determine the nature of the error, call IBM for support.

IFD130I INTERVENTION REQ ddddddd

Explanation: OLTEP has been asked to test device dddddddd. The device is not ready; operator intervention is required.

System Action: OLTEP issues messages IFD137I and IFD139D.

Operator Response: Ready the device; then enter REPLY xx,'R' in response to message IFD139D. OLTEP will again read or sense to see if the device is ready. If the device remains unready, OLTEP will issue the same messages again.

If you cannot successfully ready the device, you can either proceed with the test or bypass it. To proceed with the test; enter REPLY xx,'P' in response to message IFD139D. If you are testing an IBM 2311 or 2314 direct access device, testing will proceed in File Protect Mode; data on the device will not be destroyed unless you give permission in response to a later issuance of message IFD120D. To bypass the test, enter REPLY xx,'B' in response to message IFD139D.

IFD131I SENSE TO dddddddd FAILED

Explanation: OLTEP has been asked to test device dddddddd, which is an IBM 2321 data cell drive. The operator replied YES to message IFD140D, indicating that a C.E. volume is mounted in bin 0. A permanent error occurred when OLTEP issued a sense command to verify that a C.E. volume is mounted.

System Action: OLTEP issues messages IFD137I and IFD139D.

Operator Response: Probable hardware error. Respond as indicated to messages IFD137I and IFD139D.

Message IFD137I indicates the cause of the error. If you can correct the error, enter REPLY xx,'R' in response to message IFD139D. OLTEP will try again to verify that a C.E. volume is mounted. If you cannot correct the error, enter REPLY xx,'B' in response to message IFD139D; OLTEP will bypass the device.

Problem Determination: Table I, items 2, 4, 29.

IFD132I CE BIT WILL NOT RESET-dddddddd

Explanation: OLTEP has been asked to test device dddddddd, which is an IBM 2321 data cell drive. The operator responded YES to

message IFD140D, indicating that a C.E. volume is mounted. OLTEP issued a sense command to verify the operator's reply. The C.E. sense bit is set to 1, which normally indicates that a C.E. volume is mounted in bin 0; but the bit cannot be reset. Therefore it is not certain that the C.E. sense bit is meaningful.

System Action: OLTEP issues messages IFD137I and IFD139D.

Operator Response: Probable hardware error. Respond to messages IFD137I and IFD139D as indicated below.

Message IFD137I indicates the nature of the error. If you can correct the error, enter REPLY xx,'R' in response to message IFD139D; OLTEP will try again to verify that a C.E. volume is mounted. If you cannot correct the error, enter REPLY xx,'B' in response to message IFD139D; OLTEP will bypass the device.

Problem Determination: Table I, items 2, 30.

IFD133I TIMER NOT STEPPING, TIMING TEST BYPASSED.

Explanation: OLTEP has been asked to run the tape motion test for an IBM 2400 magnetic tape unit. OLTEP cannot run the test because the interval timer is not working.

System Action: OLTEP bypasses the tape motion test.

Operator Response: Set the timer switch ON and request the tape motion test again when OLTEP next issues message IFD105D.

Problem Determination: Table I, items 30.

IFD135D ARE TIME DEPENDENT DEVICES ACTIVE(TP, 1419), REPLY YES OR NO

Explanation: OLTEP has been asked to run the tape motion test for an IBM 2400 magnetic tape unit. OLTEP cannot run this test if time-dependent devices are active within the system. Time-dependent devices are teleprocessing lines and the IBM 1419 magnetic character reader.

System Action: OLTEP waits for the operator to reply.

Operator Response: If time-dependent devices are active, enter REPLY xx,'YES'; OLTEP will bypass the tape motion test and issue message IFD136I. If time-dependent devices are not active, enter REPLY xx,'NO'; OLTEP will then run the tape motion test, provided that the interval timer is working properly.

IFD136I TIME DEPENDENT DEVICES ARE ACTIVE, TIMING TEST BYPASSED

Explanation: The operator replied YES to message IFD135D, indicating that time-dependent devices are active within the system.

System Action: OLTEP bypasses the tape motion test.

Operator Response: None.

IFD137I CSW - XXYYYYYYYYYYYYY SNS - sns

Explanation: An error occurred during execution of OLTEP data protection. This message displays sense data resulting from the error condition (indicated in the message text by sns) and the low-order bytes of the channel status word (CSW).

System Action: OLTEP issues message IFD139D.

Operator Response: Examine the sense data and the flag bytes of the CSW to determine what action, if any, can be performed to correct the error. (Note that some of the sense data may be invalid; the number of valid sense bytes depends on the device type.) Respond as indicated to message IFD139D.

IFD138I DEV dddddddd NOT OPERATIONAL, CC=3

Explanation: OLTEP has been asked to test device dddddddd. The device is not operational or does not exist. In the message text, CC=3 represents the condition code resulting from an SIO instruction.

System Action: OLTEP issues message IFD139D.

Operator Response: If device ddd does not exist, enter REPLY xx,'B' in response to message IFD139D. Enter the correct device the next time message IFD105D is issued.

If device ddd exists but is not loaded, mount a C.E. volume or scratch volume and ready the device. If the device exists but is not ready, make it ready. In both cases, enter REPLY xx,'R' in response to message IFD139D; OLTEP will again test for an operational device.

If you cannot make the device operational, this is probably a hardware error. Enter one of the following:

- REPLY xx,'B' to allow OLTEP to bypass the device.
- REPLY xx,'P' to allow OLTEP to proceed in File Protect Mode and attempt to perform the specified test; testing, if successful, will not destroy data, unless you give permission in response to a later issuance of message IFD120D.

In both cases, call IBM for hardware support.

IFD139D REPLY { B TO BYPASS, R TO RETRY  
B TO BYPASS, R TO RETRY, P TO  
PROCEED  
B TO BYPASS, R TO RETRY, P TO  
PROCEED (MAY DESTROY DATA)  
R TO RETRY, P TO PROCEED }

Explanation: An input/output operation has resulted in a permanent error

condition. The cause and nature of the error has been given in messages issued previously.

System Action: The system action depends on the operator's response.

Operator Response: Respond as indicated in the messages issued previously. If you can, remove the cause of the error and enter REPLY xx,'R'; OLTEP will try again to perform the interrupted operation. If you cannot remove the cause of the error, enter REPLY xx,'B' to bypass testing of the device, or REPLY xx,'P' to proceed without retrying the unsuccessful operation.

IFD142D OLTS WAITING FOR CHANNEL x, REPLY PROCEED OR CANCEL

Explanation: OLTEP has been asked to test channel x, but has been unable to get exclusive use of the channel.

System Action: OLTEP waits for the operator to reply.

Operator Response: To continue waiting for the channel, enter REPLY xx,'PROCEED'. OLTEP will try again to get exclusive use of the channel. If it cannot do so in the next minute, it will issue the same message again.

To cancel the request for channel testing, enter REPLY xx,'CANCEL'. OLTEP will issue messages IFD152I and IFD105D to allow you to define a new test or terminate the job step.

(Note: You must enter the word PROCEED or CANCEL in uppercase.)

Additional Technical Information: This message does not appear in the OLTEP output data set.

IFD144D TIMEOUT, NO INTERRUPT-UNIT dddddddd.  
REPLY WAIT or CANCEL

Explanation: OLTEP is testing a device. Thirty seconds have elapsed since the start of an I/O operation; no interruption has occurred to signal completion of the operation. The interruption may have been lost due to a device error; OLTEP is asking whether to cancel the operation or to wait for its completion.

System Action: OLTEP waits for the operator to reply.

Operator Response: To wait for I/O completion, enter REPLY xx,'WAIT'. To cancel the I/O operation and continue testing, enter REPLY xx,'CANCEL'.

Additional Technical Information: This message will appear only if the interval timer is working, and the operating system includes MVT or MFT and the interval timer option.

IFD145D IS dddddd OFFLINE TO ALL SHARING SYSTEMS, REPLY YES OR NO

Explanation: Device ddd is an IBM 2311, 2314, or 2319 disk storage device or an IBM 2301 or 2303 drum storage device; it is shared by two or more computing systems. The device is offline in the system where OLTEP is being executed. OLTEP is asking whether the device is also offline in other systems that share the device.

System Action: OLTEP waits for the operator to reply.

Operator Response: Determine whether the device is offline to all operating systems that share the device.

If it is, enter REPLY xx, 'YES'; OLTEP will issue message IFD120D to allow you to decide whether data on the device can be destroyed.

If the device is not offline to all operating systems, enter REPLY xx, 'NO'; OLTEP will test the device in File Protect Mode. No write testing will be performed, and no data will be destroyed.

IFD146I SEE SRL - ONLINE TEST EXECUTIVE PROGRAM

Explanation: In response to message IFD105D, the operator asked OLTEP for help in entering a test definition. OLTEP has issued one or more messages to provide examples of correct device, test, and option specifications. In this message, OLTEP refers the operator to the SRL publication IBM System/360 Operating System: Online Test Executive Program, GC28-6650.

System Action: OLTEP reissues message IFD105D.

Operator Response: For additional help, refer to the publication indicated by the message. Then enter a test definition in response to message IFD105D (or terminate the job step).

IFD147I EXAMPLES OF DEVICE FIELD  
IFD147I 181/ TEST DEVICE 181  
IFD147I 185-187/ TEST DEVICES 185, 186,  
AND 187  
IFD147I 285-286,184,E/ TEST DEVICES 285, 286, 184  
AND SYMBOLIC E  
IFD147I .CH282/ TEST CHANNEL 2  
IFD147I .NDR/ NO DEVICE REQUIRED FOR TEST  
IFD147I / (slash alone)TEST PREVIOUSLY SELECTED  
DEVICES

Explanation: In response to message IFD105D, the operator asked for help in entering the device field of a test definition. In this message, OLTEP shows the operator how to specify the devices to be tested.

System Action: OLTEP issues message IFD146I and reissues message IFD105D.

Operator Response: Respond as indicated to messages IFD146I and IFD105D.

IFD148I EXAMPLES OF TEST FIELD  
IFD148I 2400/ TAPE TESTS  
IFD148I 2400A/ SECTION A OF TAPE  
TEST 2400  
IFD148I 2400C,2/ RTN. 2, SEC. C, TEST 2400  
IFD148I 2400A-C,E,G/ SEC. A,B,C,E, AND G OF  
TEST 2400  
IFD148I R2540AA/ SEC. AA OF READER TEST  
2540  
IFD148I / (SLASH ALONE) RUN PREVIOUSLY SELECTED  
TESTS

Explanation: In response to message IFD105D, the operator asked for help in entering the test field of a test definition. In this message, OLTEP shows the operator how to specify the test to be run.

System Action: OLTEP issues message IFD146I and reissues message IFD105D.

Operator Response: Respond as indicated to messages IFD146I and IFD105D.

IFD149I TABLE OF OPTIONS  
IFD149I TO REQUEST TO OMIT BY  
IFD149I OPTION OPTION DEFAULT  
IFD149I TESTING LOOP TL NTL NTL  
IFD149I TL (value) VAL=1-32767  
IFD149I ERROR LOOP EL NEL NEL  
IFD149I EL (value) VAL=1-32767  
IFD149I ERROR PRINT EP NEP EP  
IFD149I CONTROL PRINT CP NCP CP  
IFD149I PARALLEL PRINT PP NPP NPP  
IFD149I REMOTE FE CONTROL RE NRE NRE  
IFD149I PP (level) VAL=1-3  
IFD149I FIRST ERROR  
COMMUNICATION FE NFE FE  
IFD149I MANUAL INTERVENTION MI NMI NMI  
IFD149I REMOTE RE NRE NRE  
IFD149I PRINT PR NPR PR  
IFD149I ILLUSTRATIVE EXAMPLES OF OPTION FIELD  
IFD149I OPT-SPECIFICATION OF OPTIONS  
IFD149I PP, NMI, RE/  
IFD149I EP, TL(50), FE, EXT=A, B/

Explanation: In response to message IFD105D, the operator asked for help in entering the option field of a test definition. In this message, OLTEP shows the operator how to specify options.

System Action: OLTEP issues message IFD146I and reissues message IFD105D.

Operator Response: Respond as indicated to messages IFD146I and IFD105D.

IFD150I TEST BYPASSED. xxxxxxxxxxxxxx ON dddddd

Explanation: OLTEP has been asked to test a channel. It is unable to do so because the system requires the channel for access to xxxxxxxxxxxxxx on device dddddd.

System Action: OLTEP bypasses the channel test. OLTEP processes the next OLTEP control statement (if any), or issues message IFD105D.

Operator Response: None. Before you can test the channel, you must assign device ddd to another channel, or assign xxxxxxxxxxxxxx to another device (on another channel).

IFD151I TEST BYPASSED, CHANNEL NOT A 2880

Explanation: OLTEP has been asked to test a channel. The channel cannot be tested because it is not IBM 2880 block multiplexor channel.

System Action: OLTEP bypasses the channel test. OLTEP processes the next OLTEP control statement (if any), or issues message IFD105D.

Operator Response: Probable user error. Ensure that the channel is an IBM 2880, and that a device on the channel is specified in the device field of the test definition. The first digit of the device address must identify the channel; for example, enter the field CH183/ if channel 1 is to be tested. Request the channel test again when OLTEP issues message IFD105D.

Problem Determination: Table I, items 1, 2, 4, 5a, 16, 29. Cancel the job, requesting a dump.

IFD152I TEST BYPASSED, CHANNEL CANNOT BE QUIESCED

Explanation: There has been a request for OLTEP to test a channel, but the channel cannot be tested because the operator entered REPLY xx, 'CANCEL' in response to message IFD142I.

System Action: OLTEP processes the next OLTEP control statement, if any, or issues message IFD105D.

Operator Response: None.

IFD153I TEST BYPASSED, CPU NOT SUPPORTED FOR CHANNEL TESTING

Explanation: OLTEP has been asked to test an IBM 2880 block multiplexor channel. The channel cannot be tested for one of the following reasons:

- The computing system on which OLTEP is running is not an IBM System/360 Model 85 or 195 or an IBM System/370 Model 165.
- If the computing system is an IBM System/360 Model 85 or 195 or an IBM System/370 Model 165, the channel to be tested is not properly attached or is not enabled.
- If the channel to be tested is properly attached to the correct computing system and is operable, the operating system may have been defined as if it were running on a system other than an IBM System/360 Model 85 or 195 or an IBM System/370 Model 165.

System Action: OLTEP bypasses the channel test and processes the next OLTEP control statement (if any), or issues message IFD105D.

Operator Response: If the computing system on which OLTEP is running is not an IBM System/360 Model 85 or 195 or an IBM System/370 Model 165, no response is necessary. If it is an IBM System/360 Model 85 or 195 or an IBM System/370 Model 165, determine whether the channel is properly attached to the system.

If the channel is not attached to the system and you wish to test the channel, call IBM for hardware support in attaching the channel. If you do not wish to test the channel, no response is necessary.

If the channel is not enabled, enable it, and make sure that it is operable. If you cannot make it operable, call IBM for hardware support.

If the channel is properly attached to the correct system and is enabled and operable, consult messages IEA218I and IEA101A to determine whether the system has been correctly defined to the operating system. (Message IEA218I was issued during system initialization to tell you which computing system parameters were assumed for the operating system. It was followed by message IEA101A, which allowed you to change the system parameters. These messages, and your reply to message IEA101A, should appear on the master console sheet.)

If the operating system has been defined for a system other than an IBM System/360 Model 85 or 195 or an IBM System/370 Model 165, do the following:

- Enter the HOLD Q command to stop scheduling of jobs.
- Stop all readers and writers.
- After scheduled tasks have completed, restart the system. Then when you receive message IEA101A, enter REPLY xx, 'MOD=85', REPLY xx, 'MOD=165', or REPLY xx, 'MOD=195' to define the correct computing system to the operating system.

Then start OLTEP and specify this test again when you enter the first test definition.

Problem Determination: Table I, items 2, 29.

IFD154E message

Explanation: This message is issued by an OLT program that OLTEP has called to perform a test section. The text of the message varies, but always defines an operator response. The response is generally optional, and can be made at any time before the test section is completed.

System Action: The OLT program continues processing.

Operator Response: Respond as indicated in the message text. If you do not reply to the message before the test section is completed, OLTEP will cancel the message and notify you by issuing message IFD121I.

IFD155I TEST SECTIONS MAY NOT EXCEED 26, WILL TEST  
xxx-xxx

Explanation: Too many test sections were specified in a test definition (OLTEP control statement or reply to message IFD105D). The maximum number of test sections for a single test definition is 26.

System Action: OLTEP will run (or try to run) the first 26 test sections specified in the test definition. OLTEP will ignore the remaining sections. xxx - xxx indicates the names of the first - last sections tested.

Operator Response: None. Test sections not run at this time can be respecified when OLTEP next issues message IFD105D.

IFD156I DEVICE dddddddd STATUS CHANGED, BYPASS TESTS

Explanation: OLTEP has suspended testing of device dddddddd. During the test, the device status was changed from online to offline, or from offline to online.

System Action: OLTEP bypasses the device.

Operator Response: If the device status has changed from online to offline, no action is necessary. If the device status has changed from offline to online, do the following:

If the device can be tested while online, you can request the same test again when OLTEP next issues message IFD105D. If the device cannot be tested while online, you can enter a VARY command to return the device to offline status. (The VARY OFFLINE command will take effect when the operating system terminates or initiates a job step. If no other jobs are being executed concurrently, you must terminate OLTEP to let the VARY command take effect.) Note that for complete testing, direct access devices must always be offline.

IFD157I CATASTROPHIC ERROR ON DEVICE  
ddddddd{name}

Explanation: OLTEP has suspended testing of device dddddddd. The device is not ready, or for some other reason cannot be tested. When present, name indicates the symbolic name.

System Action: OLTEP issues message IFD105D.

Operator Response: Make sure that the device is ready. If it is not, make it ready and enter REPLY xx,'///' in response to message IFD105D.

If the device is ready, look for diagnostic information which will be issued by the OLT program. If the PP option has been specified, this information will appear on the console as

the text of message IFD100I; otherwise, the information will be routed to the SYSOUT data set.

After you have determined the nature and cause of the error and have taken the appropriate corrective action, you can choose to resume testing by entering REPLY xx,'///' in response to message IFD105D. If you cannot correct the error, enter a new test definition or terminate the job step (use the procedure outlined in the description of message IFD105D), and call IBM for support.

IFD158I ww xxxxx{yyy}UNIT ddddddd  
{y \$}

Explanation: New section yyy or old section y \$ of test xxxxx has been started or terminated for unit dddddddd. (If the test definition specifies NDR (no device required), the phrase UNIT ddd does not appear.) The ww field is one of the following:

- S Section has been started.
- T Section has been terminated.
- \*T Section has been terminated; device errors were detected.

Operator Response: None.

Additional Technical Information: This message is issued only when the Control Print (CP) option is in effect.

IFD159I MODULE {xxxxxxx} NOT FOUND  
{G0000ddd}  
{aaaaaaaa}

Explanation: One of the following has occurred:

- An OLT program has asked OLTEP to load module xxxxxxxx. This module is not in the step library, job library, or link library (SYS1.LINKLIB).
- No configuration data exists for device ddd or for symbolically named terminal aaaaaaa.

System Action: If the message is issued because of a missing module, the OLT program terminates. If the message is issued because of missing configuration data, and if testing is taking place on a System/370 CPU, device ddd or aaaaaaa is not tested. If testing is on a System/360 CPU, testing may or may not proceed, depending on whether the online test program needs the configuration data.

Operator Response: Do one of the following:

- If the message is issued because of a missing module or because of missing configuration data for device ddd, and if the module or data is supposed to reside in a private library, make sure that a step library or job library is defined in the JCL which is used to invoke OLTEP.

- If the message is issued because of missing configuration data for device aaaaaaaa, make sure that the data set which contains configuration data for symbolically named devices is specified in the JCL which is used to invoke OLTEP.

IFD160I INSUFFICIENT CORE

Explanation: An OLT program has required more main storage than is available.

System Action: OLTEP returns control to the OLT program with an error return code. Testing will proceed if the OLT program can recover from the error condition; otherwise, testing will be terminated.

Operator Response: If you can provide additional main storage, cancel the job and reschedule it in a larger region (MVT) or partition (MPT).

IFD161I FOR HELP ENTER PROMPT xxxx TO DEV/TEST/OPT/ MESSAGE

Explanation: OLTEP has issued message IFD108I, IFD112I, or IFD115I to diagnose an error in the test definition. The error is in the xxxx field, where xxxx is DEV, TEST, or OPT. This message explains how to request help in correcting the error.

System Action: OLTEP issues message IFD105D.

Operator Response: Respond as indicated to message IFD105D. For help, enter REPLY xx, 'PROMPT xxxx'.

IFD162I UNIT dddddddd, DSNAME=xxxxxxxxx COULD NOT BE SCRATCHED

Explanation: OLTEP is testing an IBM 2301 or 2303 drum storage device. An OLT program has created a data set on the device, and OLTEP has tried unsuccessfully to scratch the data set.

System Action: OLTEP continues processing.

Operator Response: Probable hardware error. Execute the IEHPRGM utility program to scratch the data set. (Refer to the publication IBM System/360 Operating System: Utilities, GC28-6586.)

Problem Determination: Table I, items 30.

IFD163I RETAIN/370 READY

Explanation: This message is issued when a line connection has been successfully established between RETAIN/370 and the OLTEP REI interface.

Operator Response: Proceed with testing.

IFD164I CANNOT LINK TO RETAIN/370

Explanation: OLTEP attempted unsuccessfully to enable a telecommunication line between RETAIN/370 center and the OLTEP REI interface.

Operator Response: Make the attempt again.

Problem Determination: Table I, items 30.

IFD165I ENTRY IN DEV FLD NOT ALLOWABLE BY REMOTE

Explanation: The remote specialist has entered unit addresses in the device field in response to message IFD105D. NDR (no devices required) is the only permissible entry in the device field.

System Action: OLTEP reissues message IFD105D.

Operator Response: Respond to message IFD105D, making sure that no unit addresses are specified in the device field. Unless you wish to enter NDR in the device field, make sure that any information entered in the test and option fields is preceded only by a / (slash).

IFD167I PERMANENT ERROR ON REI DEVICE

Explanation: Contact with the RETAIN/370 center has been lost or cannot be established because of an uncorrectable error. The message includes the low-order seven bytes of the channel status word (indicated by yyyyyyyyyyyy) and sense data (indicated by xx); this information can be used to determine the nature of the error.

System Action: OLTEP issues messages IFD169I and IFD105D.

Operator Response: You can attempt to reestablish contact with the RETAIN/370 center by entering REPLY xx, 'REI' in response to message IFD105D.

Problem Determination: Table I, items 30.

IFD168E TO COMMUNICATE WITH REMOTE SPECIALIST ENTER MESSAGE

Explanation: This message allows the on-site operator to communicate with the remote specialist.

Operator Response: When you want to communicate with the remote specialist, enter REPLY xx, 'message', where message is any character string that you wish to send. You need not reply to this message immediately.

IFD169I RETAIN/370 TERMINATED

Explanation: This message is issued to indicate that RETAIN/370 has been terminated.

Operator Response: None.

IFD170I MESSAGE xx ANSWERED BY REMOTE

Explanation: This message is issued to the on-site console to indicate that the remote specialist has replied to message IFD104E or IFD105D. In the message text, xx represents the reply ID of message IFD104E or IFD105D.

Operator Response: None.

IFD173I REPLY xx NOT VERIFIED

Explanation: OLTEP is unable to verify the reply ID specified by the remote specialist in his reply to a message.

Operator Response: The remote specialist must reenter his response, making sure that he specifies the correct reply ID.

IFD174I UNABLE TO RESTORE LABEL ON DEVICE dddddddd

Explanation: OLTEP has completed testing of device dddddddd, which is an IBM 2400 magnetic tape unit. A standard-label scratch tape is mounted, but testing has destroyed the labels. OLTEP has tried unsuccessfully to create new labels on the tape.

System Action: OLTEP issues messages IFD137I and IFD139D.

Operator Response: Probable hardware error. Respond as indicated to messages IFD137I and IFD139D.

Message IFD137I indicates the nature of the error, which may be, for example, that the device is not loaded. If you can correct the error, enter REPLY xx, 'R' in response to message IFD139D. OLTEP will try again to write standard labels on the tape.

If you cannot correct the error, enter REPLY xx, 'B' in response to message IFD139D. OLTEP will leave the tape unlabelled. You must relabel the tape before you can use it again as a standard-label scratch tape.

Problem Determination: Table I, items 30

IFD176I MUTUALLY EXCLUSIVE OPTIONS HAVE BEEN SELECTED

Explanation: In responding to message IFD105D, the operator selected options RE and MI; these options are mutually exclusive.

System Action: OLTEP issues message IFD161I and reissues message IFD105D.

Operator Response: Probable user error. In responding to message IFD105D, select either option RE or option MI, but do not specify both.

Problem Determination: Table I, items 2, 29.

IFD178I MESSAGE xx ANSWERED BY REMOTE

Explanation: This message is issued to the on-site console to indicate that the remote specialist has replied to message IFD104E or IFD105D. In the message text, xx represents the reply ID of message IFD104E or IFD105D.

Operator Response: None.

IFD179I NO UCB FOR ADDRESS dddddddd

Explanation: OLTEP has been asked to test device dddddddd. There is no UCB (unit control block) for this address.

System Action: OLTEP bypasses the device.

Operator Response: Probable user error. Ensure that dddddddd is the correct address for the device to be tested. If the address is wrong, enter the correct address when OLTEP next issues message IFD105D.

Problem Determination: Table I, items 1, 2, 4, 5a, 16, 29. Cancel the job, requesting a dump.

IFD186D VERIFY CHANNEL x RELEASE TO OLTS, REPLY YES OR NO

Explanation: One of the following conditions occurred:

- OLTEP has been asked to test channel x. It is therefore asking for exclusive use of that channel.
- Because of an error in the system, some unauthorized program is asking for exclusive control of the channel.

System Action: OLTEP waits pending the operator's reply.

Operator Response: If you intend to test the channel, enter REPLY xx, 'YES.' OLTEP will try again to gain exclusive use of the channel. If it is successful, OLTEP will proceed with the test. If it is unsuccessful, it will issue the message IFD142D to ask whether it should try again or cancel the test.

If you do not desire to test the channel, enter REPLY xx, 'NO.' OLTEP will bypass the test.

(NOTE: You must enter the word YES or NO in uppercase.)

Additional Technical Information: This message does not appear in the OLTEP output data set.

IFD210I ROUTINE xxxxx BYPASSED, MANUAL INTV REQUIRED

Explanation: OLT program routine xxxxx requires manual intervention by the operator, but the Manual Intervention (MI) option was not specified in the test definition.

IFD

System Action: Routine xxxx is not executed.

Operator Response: If you wish to run routine xxxx, the next time you reply to message IFD105D specify routine xxxx in the test field and MI in the option field of your test definition.

IFD212I CANNOT DATA PROTECT DEVICE dddddddd

Explanation: OLTEP attempted unsuccessfully to verify the class and type of device dddddddd.

System Action: OLTEP issues message IFD120D.

Operator Response: Respond to message IFD120D as indicated below:

If OLTEP is permitted to destroy all data stored on the device, enter REPLY xx, 'YES'.

If the data on the volume must be preserved, enter REPLY xx, 'NO'. OLTEP will bypass testing the device.

IFD255I message

Explanation: This is a communications message from an on-site C.E. to the remote specialist, or vice versa.

Operator Response: If applicable, respond as indicated in the message text.

IFD400I TP LINE CONNECTION, LINE=xxxxxxx, TERMINAL=xxxxxxx

Explanation: OLTEP is testing teleprocessing equipment, and the above message is the output for each TP test where:

LINE=address of the line  
TERMINAL=symbolic name of the terminal.

System Action: Processing continues.

Operator Response: None.

IFD405I OPERATOR CALL REQUIRED, TELEPHONE NUMBER NOT IN CDS

Explanation: OLTEP is testing Teleprocessing equipment. The telephone number for the terminal to be tested is not in the configuration data set; therefore, the operator must establish the line connection by placing a call to that terminal.

System Action: If the call has not been made within 4 minutes, the line connection is terminated.

Operator Response: If the telephone number is known, place a call to the terminal.

IFD406I OPERATOR CALL TERMINAL ON NUMBER  
XXXXXXXXXXXXXXXXXXXX

Explanation: OLTEP is attempting to test a terminal. To continue with the line connection, the operator must call the terminal.

System Action: If the call has not been made within 4 minutes, the line connection is terminated.

Operator Response: Place a call to the terminal on the number displayed.

IFD407I OPERATOR CALL NOT COMPLETED WITHIN TIME LIMITS

Explanation: OLTEP is attempting to test a terminal, and the operator has been requested to call that terminal within a specific time interval. The call was not placed to terminal within the allotted time (4 minutes) after message IFD405I or IFD406I appeared.

System Action: Line connection for that terminal is not made.

Operator Response: None.

IFD412I CCW CHAIN TERMINATED ON xxxxxxxxxxxxxxxx

Explanation: The displayed CCW chain, used for a line connection, has terminated.

System Action: The line connection is not made.

Operator Response: Make sure that the terminal is operational and retry the procedure.

IFD413I REQUIRED CDS POINTER NOT PRESENT

Explanation: The OLT did not specify the configuration data set for this device.

System Action: Line connection is not made.

Operator Response: None.

IFD415I REQUIRED DATA INCORRECT OR MISSING IN CDS

Explanation: One of the following errors occurred:

- an invalid CCW line connection code
- the set mode bytes were not present
- The number of dial digits exceeds 20
- the dial digit count equals zero

System Action: Line connection is not made.

Operator Response: Correct the CDS file to include all the necessary information.

IFD505I TIME INTERVAL EXPIRED, NO LINE ACTIVITY

Explanation: One of the following conditions has occurred:

1. The RETAIN/370 Interface has been activated successfully, but no line activity to or from the remote terminal has occurred for ten minutes. The Interface must be reactivated before it can be used.
2. An unsuccessful attempt was made to activate the RETAIN/370 Interface. (That is, message IFD163I was not issued within ten minutes after the command was entered.)

System Action: In the second case, OLTEP terminates the RETAIN/370 Interface. In both cases, OLTEP issues message IFD105D.

(Note: Sometimes the system enters a two-minute wait state after issuing message IFD505I. If that happens, wait for OLTEP to issue this message again and then respond as indicated below.)

Operator Response: In the first case, do one of the following:

- Attempt to reactivate the RETAIN/370 Interface by entering REPLY xx, 'REI' in response to message IFD105D. If you receive message IFD163I you may then resume testing from the point where the Interface was interrupted.

To resume testing with the RE option, enter REPLY xx, '//RE/' in response to message IFD105D. (You must reenter the option, even if it had already been specified in the previous test definition. To resume testing without the RE option, enter REPLY xx, '///' in response to message IFD105D.

- To resume testing from the point where the RETAIN/370 Interface was interrupted without using the RETAIN/370 feature of OLTEP, enter REPLY xx, '///' in response to message IFD105D.
- To define a new test or terminate the job step without first trying to reactivate the RETAIN/370 Interface enter REPLY xx, 'dev/test/opt/' or REPLY xx, 'CANCEL' in response to message IFD105D.

In the second case, do one of the following:

- Attempt to activate the RETAIN/370 Interface again by entering REPLY xx, 'REI' in response to message IFD105D.
- To proceed without the RETAIN/370 feature, enter REPLY xx, 'dev/test/opt/' or REPLY xx, 'CANCEL' in response to message IFD105D.



## Graphic Programming Services Messages (IFF)

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component Name              | IFF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Program Producing Messages  | Graphics Access Method Program                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Audience and Where Produced | For the Operator: console<br>For 2250 display unit programmer: 2250 display unit                                                                                                                                                                                                                                                                                                                                                                                                                |
| Message Format              | <p>IFFnnnI text (for 2250 display unit)<br/> xx IFFnnnI text (for system console)<br/> xx<br/>     message reply identifier (absent if no operator reply is needed).</p> <p>nnn<br/>     Message serial number; (also indicates recipient of message)<br/> 0nn message routed to console.<br/> 1nn message routed to 2250 display unit programmer.</p> <p>I<br/>     Information: no operator action is required except to inform the system programmer.</p> <p>text<br/>     Message text.</p> |
| Comments                    | IFF messages are not included in this publication. They are documented in the publication <u>Problem Determination Aids and Messages and Codes for GPS and GSP, GC27-6970.</u>                                                                                                                                                                                                                                                                                                                  |
| Associated Publications     | <u>Problem Determination Aids and Messages and Codes for GPS and GSP, GC27-6970.</u>                                                                                                                                                                                                                                                                                                                                                                                                            |



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System Action: Enter wait state.

Operator Response: Probable hardware error. If 'S' is present, execute the SEREP program for the model. If 'S' is not present, restart the system and execute the IFCEREPO program.

Problem Determination: Table I, items 14, 30.

IGF002W [S] SUPVR MC CPU ID {1  
2}

Explanation: MCH has encountered a nonrecoverable failure within a supervisor area.

System Action: Enter wait state.

Operator Response: Probable hardware error. If 'S' is present, execute the SEREP program for the model. If 'S' is not present, restart the system and execute the IFCEREPO program.

Problem Determination: Table I, items 14, 30.

IGF003W [S] UNEX MCI

Explanation: MCH has encountered an unexpected machine-check interruption during its error recovery attempt.

System Action: Enter wait state.

Operator Response: Probable hardware error. If 'S' is present, execute the SEREP program for the model. If 'S' is not present, restart the system and schedule the execution of the IFCEREPO program.

Problem Determination: Table I, items 14, 30.

IGF004W [S] PGM CHK CPU ID {1  
2}

Explanation: A program interruption occurred during MCH processing.

System Action: Enter wait state.

Operator Response: Probable hardware error. If 'S' is present, execute the SEREP program for the model. If 'S' is not present, restart the system and schedule the execution of the IFCEREPO program.

Problem Determination: Table I, items 14, 30.

IGF006W [S] I/O ERR {CPU ID {1  
2}  
cua

Explanation: The MCH Resident Nucleus module was unable to load a schedule MCH transient module. MCH operation must terminate. For Model 65, an I/O error occurred during MCH processing. Consult

the wait state code for further information about the type of error.

System Action: Enter wait state.

Operator Response: Probable hardware error. If 'S' is present, execute the SEREP program for the model. If 'S' is not present, restart the system and schedule the execution of the IFCEREPO program.

Problem Determination: Table I, items 14, 30.

IGF010W S NOT M/xx CPU ID {1  
2}

xx = 65 or 85

Explanation: MCH determined that the machine is not an IBM System/360 Model 65, or it is not an IBM System/360 Model 85.

System Action: Enter wait state.

Operator Response: Probable hardware error. Execute the SEREP program for the model. Ensure that the correct operating system is being used.

Problem Determination: Table I, items 14, 30.

IGF011W S MCI-NIP CPU ID {1  
2}

Explanation: MCH determined that it has not been properly initialized by NIP.

System Action: Enter wait state.

Operator Response: Probable hardware error. Execute the SEREP program for the model.

Problem Determination: Table I, items 14, 30.

IGF012W [S] MCI-CCH {CPU ID {1  
2}  
c

Explanation: MCH determined that a machine-check interruption occurred during Channel-Check Handler processing.

System Action: Enter wait state.

Operator Response: Probable hardware error. If 'S' is present, execute the SEREP program for the model. If 'S' is not present, restart the system and schedule the execution of the IFCEREPO program.

Problem Determination: Table I, items 14, 30.

IGF013W [S] CHAN ERR {CPU ID {1  
2}  
c

Explanation: MCH was entered because there was a channel-check interruption and

a) CCH was not in the system or b) CCH could not recover from the failure.

System Action: Enter wait state.

Operator Response: Probable hardware error. If 'S' is present, execute the SEREP program for the model. If 'S' is not present, restart the system and schedule the execution of the IFCEREPO program.

Problem Determination: Table I, items 14, 30.

IGF014 { I cua csw }  
      { W S cua csw }

cua = device address  
csw = channel status word

Explanation: An I/O error occurred while MCH was clearing the channel path to an I/O device.

System Action: Continue operation or enter wait state according to the severity of the error.

Operator Response: Problem hardware error. If 'S' is present, execute the SEREP program for the model. If 'S' is not present, restart the system and schedule the execution of the IFCEREPO program.

Problem Determination: Table I, items 14, 30.

IGF015 I { UNEX ERR }  
      W { [S] UNEX ERR }

Explanation: An unexpected error occurred while MCH was making a recovery attempt. For System/370, probable causes of this error are:

- The system encountered an erroneous machine check interrupt code.
- The machine check handler program was processing a hard machine check interruption when another hard machine check interruption occurred.
- The system encountered a program check in the machine check handler.

System Action: Continue operation or enter WAIT state according to the severity of the error.

Operator Response: Probable hardware error. If the type code in the message is I, no response is necessary. If the type code is W and S appears in the message text, execute the SEREP program for the model. If the type code is W and S does not appear in the message text, restart the system and schedule the execution of the IFCEREPO program. If the problem

Problem Determination: Table I, items 14, 30.

IGF016W [S] 2880 CHx

Explanation: MCH encountered a catastrophic failure on the 2880 channel identified by x. The failure occurred when hardware could not perform a channel logout. If 'S' is not present in the message text, the error was recorded in the SYS1.LOGREC data set. If 'S' is present in the message text, the error was not recorded.

System Action: Enter wait state.

Operator Response: Probable hardware error. If 'S' is present, execute the SEREP program for the model. If 'S' is not present, restart the system and schedule the execution of the IFCEREPO program.

Problem Determination: Table I, items 14, 30.

IGF020I ABEND

Explanation: MCH has encountered a nonretryable or a retry-failed condition in a task which can be abended.

System Action: The affected task is scheduled for an abnormal termination. System operation continues.

Operator Response: Probable hardware error.

Problem Determination: Table I, items 30.

IGF021I nnnnnnnn

Explanation: MCH has encountered a nonrefreshable error in the Resident Access Method (RAM) entry Area. The module name has been deleted from RAM (this message is applicable only to MFT).

nnnnnnnn = Request Block (RB) name

System Action: The requestor is abnormally terminated; system operation continues.

Operator Response: Probable hardware error. If a system task was terminated, this task should reinitialized. If a problem program was terminated, this program should be rescheduled. problem recurs, call IBM for hardware

Problem Determination: Table I, items 30.

IGF022I RAM xx

Explanation: MCH has detected a nonrefreshable error and has determined that the RAM chain has been altered (applicable to MFT only). 1

xx = RAM chain ID of the last good chain member

System Action: System operation continues.



Operator Response: None. Probable hardware error.

Problem Determination: Table I, items 30.

IGF023I BLDL DLT

Explanation: MCH has detected a nonrefreshable error in the LINKLIB BLDL table and has either deleted the affected entry (Model 65 only), or has deleted the table from use.

System Action: The requestor has been scheduled for an abnormal termination. System operation continues.

Operator Response: None. Probable hardware error.

Problem Determination: Table I, items 30.

IGF024I { P } address { S }  
{ B } { P<sub>1</sub> }  
{ U }

nnnnnnnn SET NON-DISPATCHABLE  
xxxxxxxxx

P = Primary storage failure  
B = Block storage failure  
U = Unit storage failure  
address = Address of storage failure  
S = System task  
P<sub>1</sub> = Problem program  
xxxxxxxxx = Job identity not available.

Note: The second format of this message is for System/370 only.

Explanation: If the first format of this message is issued, MCH encountered a permanent storage failure in the dynamic area which affects the indicated task. If the second form of the message is issued, MCH encountered a permanent error in storage which affects the indicated job.

System Action: The affected task's TCB is set nondispatchable with the result of system degradation; system operation may either quiesce or continue.

Operator Response: Probable hardware error. Monitor the system until it quiesces, then attempt to restart the system.

Problem Determination: Table I, item 29.

IGF025I { MSTRSCHD }  
{ bbbbbbbb }

MSTRSCHD = Master Scheduler (MVT)  
bbbbbbbb = Master Scheduler or  
Communication Task -- not  
determinable (MFT)

Explanation: MCH has encountered a nonretryable or retry-failed condition within the indicated task.

System Action: The affected task's TCB is set nondispatchable with the result of system degradation; system operation quiesces.

Operator Response: Probable hardware error. Monitor the system until it quiesces, then restart the system.

Problem Determination: Table I, item 30.

IGF026I { RDR xx }  
{ WTR xx }  
{ I/T xx }  
{ SYTSK xx }  
{ STC xx }

RDR = Reader system task  
WTR = Writer system task  
I/T = Initiator/Terminator task (MVT)  
SYTSK = System Task (MFT)  
STC = System Task Control Routine (MVT)  
xx = bb (MVT) or Partition ID (MFT)

Explanation: MCH has encountered a nonretryable or retry-failed condition in the indicated task.

System Action: The affected task is abnormally terminated with the result of system degradation; system operation continues.

Operator Response: Probable hardware error. Reinitialize the affected task.

Problem Determination: Table I, item 30.

IGF027I STORAGE DAMAGE aaaaaa-bbbbb JOB ABEND  
(DS OPEN)

IGF027I jjj(dsn)(dsn)...; jjj(dsn);...

aaaaaa = starting address of damaged  
storage area  
bbbbbb = final address of damaged storage  
area  
jjj = name of job(s) that have been  
abnormally terminated  
dsn = name of data set(s) that were left

IGF028I I/O ERR

Explanation: The MCH error recorder has failed because of an I/O failure on the SYSRES device.

System Action: System operation continues.

Operator Response: Probable hardware error. Relocate the SYSRES volume on another device and restart the system.

Problem Determination: Table I, item 30.

IGF029I cua csw  
cua = device address  
csw = channel status word

Explanation: The MCH error recorder has failed because of an I/O failure on the SYSRES device.

System Action: System operation continues.

Operator Response: Probable hardware error. Relocate the SYSRES volume on another device and restart the system.

Problem Determination: Table I, item 30.

IGF032I aaaaaa

aaaaaa = the address of the instruction which was successfully retrieved

Explanation: MCH instruction retry was successful.

System Action: System operation continues.

Operator Response: None. Probable hardware error.

Problem Determination: Table I, item 30.

IGF033E RUN EREP

Explanation: The SYS1.LOGREC data set lacks adequate space for an MCH record entry. At least one MCH recovery record has been lost.

System Action: System operation continues.

Operator Response: None. Probable hardware error.

Problem Determination: Table I, items 18, 30.

IGF040I TSO { S } { ND }  
          { R } { AB }

TSO - TSO Subsystem  
S - Subsystem is affected by MCI  
R - Region is affected by MCI  
ND - Affected task has been set non-dispatchable  
AB - Affected task has been abnormally terminated

Explanation: MCH has associated an error with a task which is in a nonrefreshable portion of code in the TSO subsystem area.

System Action: The affected task in the TSO subsystem has been either set non-dispatchable or abnormally terminated by the TSO recovery routine. System operation continues.

Operator Response: None. Probable hardware error.

Problem Determination: Table I, items 30.

IGF041I STAT ERR

Explanation: The machine status as indicated in logout does not agree with the status record of MCH.

System Action: MCH restored the machine to the status per its record and continued its execution.

Operator Response: None. Probable hardware error.

Problem Determination: Table I, items 30.

IGF042I HSM-ERR

Explanation: A residue or parity error has been detected in the high speed multiply feature.

System Action: The regular multiply algorithm has been loaded in writable control storage (WCS). The MCW bit to bypass the high speed multiply feature has been turned on. All multiply instructions will now be executed by the regular multiply algorithm. System operation continues.

Operator Response: None. Probable hardware error.

Problem Determination: Table I, items 30.

IGF043I { HIR } CNT  
          { ECC }

HIR = Hardware Instruction Retry  
ECC = Error Correction Code

Explanation: The threshold provided by the operator to control mode switching automatically has been reached.

System Action: The indicated machine recovery facility (HIR or ECC) has been switched to count mode.

Operator Response: None. Probable hardware error.

Problem Determination: Table I, items 30.

IGF044I ECC SUCCESSFUL

Explanation: MCH has identified a soft machine-check interruption which resulted from an ECC-corrected single-bit storage data failure.

System Action: Continue operation.

Operator Response: None. Probable hardware error.

Problem Determination: Table I, items 30.

IGF045I { MULT BIT X<sub>1</sub> X<sub>2</sub> X<sub>3</sub> }  
          { MULTIPLE BIT ERROR }

Explanation: MCH has identified a permanent machine-check interruption which resulted from an uncorrectable multiple-bit storage data failure. (The second format of the message appears only for an IBM System/370 model).

For IBM 2365 system:  
X<sub>1</sub> X<sub>2</sub> X<sub>3</sub> is the sub-unit in which the failing storage is located.

0 0 = Biframe 0  
X<sub>1</sub> = 1 1 = Biframe 1

L L = Left unit  
X<sub>2</sub> = R R = Right unit

O O = odd BOM  
X<sub>3</sub> = E E = even BOM



For IBM 2385 storage system:

0 0 = Core Storage Unit 0  
X<sub>1</sub> = 1 1 = Core Storage Unit 1  
2 2 = Core Storage Unit 2  
3 3 = Core Storage Unit 3

0 0 = Logical Storage Unit 0  
X<sub>2</sub> = 1 1 = Logical Storage Unit 1  
2 2 = Logical Storage Unit 2  
3 3 = Logical Storage Unit 3

L L = Left Basic Storage Module  
X<sub>3</sub> = R R = Right Basic Storage Module

System Action: Continue operation.

Operator Response: None. Probable hardware error.

Problem Determination: Table I, items 30.

IGF046I n SEC xx

n = 1 Buffer In Key  
2 Block Valid  
3 Sector Compare  
4 Multiple Sector Compare  
5 Sector Key  
6 Buffer Mark  
7 Buffer Address Bus  
8 Buffer Data Bus Out

xx = two digit number from 00 to 31

Explanation: The check indicated by n has occurred.

System Action: MCH has deleted the buffer sector indicated by xx to prevent further machine check interruptions.

Operator Response: None. Probable hardware error.

Problem Determination: Table I, items 30.

IGF047I n BUFFER

Explanation: The check indicated by n has occurred. (See IGF046I for meaning of n).

System Action: MCH has disabled the buffer to prevent further machine check interruptions.

Operator Response: None. Probable hardware error.

Problem Determination: Table I, items 30.

IGF048I HIR SUCCESSFUL

Explanation: MCH has identified a soft machine check interruption which resulted from a successful hardware retry.

System Action: System operation continues.

Operator Response: None. Probable hardware error.

Problem Determination: Table I, items 30.

IGF049I MODE STATUS

```
SECTORS DELETED MULT
IGF049I HIR - mode ECC - mode
 00-10 nnnnnnnnnnn status
IGF049I THR-dzzzzzzzzz THR-dzzzzzzzzz
 11-21 nnnnnnnnnnn BUFR
IGF049I CNT-dzzzzzzzzz CNT-dzzzzzzzzz
 22-31 nnnnnnnnnnn status
```

Note: These formats issued on Model 85 only.

Explanation: This message gives the status of certain machine facilities of the Model 85, in response to the operator command MODE entered with the parameter STATUS. It gives the mode, threshold, and present number count of the machine recovery facilities Hardware Instruction Retry (HIR) and Error Correction Code (ECC); a list of sectors deleted from the high speed buffer; and the status of the high speed multiply and high speed buffer facilities, as follows (descriptions of all these terms may be found in IBM System/360 Operator's Reference, GC28-6691):

mode  
for Hardware Instruction Retry (HIR) and Error Correction Code (ECC), may be either RECORD, indicating that the facility is in recording mode, or COUNT, indicating count mode.

zzzzzzzzzz  
indicates the threshold (THR) and the present error count (CNT) in decimal.  
nnnnnnnnnn  
indicates, for each sector, whether the sector is active or deleted. Each number in each row represents a sector; '0' indicates that the sector is active, '1' that it has been deleted.

status  
for the high speed multiply facility (MULT), may be either NORM, indicating that the facility is working normally, or ALT, indicating that it is not working, and the alternate multiply control is being used instead; for the high speed buffer (BUFR), may be either ENB, indicating that the buffer is enabled, or DSB, indicating that the buffer is disabled.

Operator Response: None.

IGF049I HIR, ( R ) aaaa/bbbb,cccc/dddd ECC,  
          ( Q )  
          ( R )  
          ( Q )

BUF DEL=xxxx

R=recording mode  
Q=quiet mode  
aaaa=current error count  
bbbb=error count threshold  
cccc=elapsed time or 'INVL' if the TOD clock is invalid  
dddd=time threshold  
xxxx=number of buffer pages deleted



System Action: The system will proceed as usual except that further errors will not be recorded.

Operator Response: Probable hardware error. Schedule the IFCEREPO program. Then schedule the IFCDIP00 program.

Problem Determination: Table I, items 14, 30.

IGF058I BUFFER DISABLED

Explanation: Four buffers errors were detected by MCH. (Model 165 message only).

System Action: MCH has disabled the buffer between main storage and the CPU to prevent further machine-check interruptions. System operation continues without use of the buffer.

Operator Response: Probable hardware error. If the problem recurs, call IBM for hardware support.

IGF060I SYS1.LOGREC NEAR FULL

Explanation: The SYS1.LOGREC data set, used by the Machine-Check Handler for error recording, is nearly full. This message may be followed by the message IGF054E SYS1.LOGREC FULL. See Operator Response.

System Action: System operation continues.

Operator Response: Print out the Environment Record, Edit and Print (EREP) data set by running the IFCEREPO program. If space is not made available thus, an MCH recovery record may be lost.

IGF061I MODE SWITCH COMPLETEQQ

Explanation: The machine status has been successfully altered through the use of the MODE command.

System Action: System operation continues.

Operator Response: None.

IGF063I SVC BLDL DLT

Explanation: MCH has detached a nonrefreshable error in the SVCLIB BLDL table and has deleted the affected entry or has deleted the table.

System Action: The requestor has been scheduled for an abnormal termination. System operation continues.

Operator Response: None. Probable hardware error.

Problem Determination: Table I, items 30.

IGF500I SWAP xxx TO yyy

IGF500D { REPLY 'YES', DEVC, OR 'NO' }  
{ REPLY 'YES', OR 'NO' }

Explanation: The message is a repeat of a SWAP command entered by the operator. If IGF500D is REPLY 'YES', OR 'NO', device xxx is a shared direct access storage device, which can only be removed from and remounted on itself.

System Action: The system continues operation. The 'YES' or DEVC reply invokes the dynamic device reconfiguration function. The 'NO' reply causes a permanent I/O error to be posted for device xxx, or, if the request is operator-initiated, causes the SWAP command to be cancelled.

Operator Response: When IGF500D is REPLY 'YES', DEVC, OR 'NO':

- If a swap to device yyy is desired, then enter YES. See note below.
- If dynamic device reconfiguration is desired but device yyy is not acceptable, enter the primary channel unit address of the device to which the volume on xxx is to be moved. Warning: Insure that the specified device is available to the system before entering the reply. See note.
- If dynamic device reconfiguration is not desired, enter NO.
- When IGF500D is REPLY 'YES', OR 'NO':
- If you wish to remove the volume from shared direct access device xxx and then remount it on device xxx, enter YES. See note.
- If you do not wish to remove the volume from shared direct access device xxx and then remount it on device xxx, enter NO.

Note: When entering YES or 3-character device address, do not move the volume until the "PROCEED" message for device xxx is written. If the volume is moved before the "PROCEED" message is written, data set integrity may be lost.

CAUTION: If 2314 or 2319 is indicated, insure before swapping that no head-disk interference ("head crash") problem exists.

If you decide to cancel the job that was running when DDR got control, or if that job ABENDs, you must reply to any outstanding DDR messages that require replies.

If message IGF500I (or IGF509I) is received again for the same error on the 2314/2319, do not SWAP again. Devices actively involved in DDR should not be varied offline.

Problem Determination: Table I, items 2, 30.

IGF501D SWAP SYSRES FROM xxx TO yyy

Explanation: Either a permanent I/O error has occurred on the primary SYSRES device or a SWAP command has been entered for the primary SYSRES device.

System Action: The system will not start any I/O operations on the SYSRES device or on device yyy until the swap is completed as instructed.

Operator Response: Take one of the following actions:

- Move the primary SYSRES volume from device xxx to yyy. (If there is a volume mounted on yyy, exchange it with SYSRES.) Ready the device with the primary SYSRES volume first.
- Put a duplicate SYSRES volume on device yyy and ready the device. Before using the duplicate volume, the installation must insure that writing to SYSRES has been prohibited except to the SYS1.LOGREC data set.
- If xxx = yyy:

For 2311's, ready the current SYSRES device.

For 2314's and 2319's, move SYSRES to any spare drive belonging to the same control unit as the SYSRES device and ready the device with the address plug xxx.

IGF502E PROCEED WITH SWAP xxx TO yyy

Explanation: Dynamic device reconfiguration (DDR) is waiting for swapping of volumes.

System Action: The system continues operation.

Operator Response: Move the volume on device xxx to device yyy. If a volume resides on yyy, move that volume to device xxx. Make both devices ready.

If xxx and yyy are the same device, make the device not ready, then make it ready.

If you decide to cancel the job that was running when DDR got control, or if that job ABENDs, you must reply to any outstanding DDR messages that require replies.

You must complete the physical swap.

IGF503I ERROR ON yyy, SELECT NEW DEVICE

Explanation: A permanent I/O error has occurred during dynamic device reconfiguration tape repositioning; tape repositioning was in process as the result of a SWAP request to yyy. The error occurred positioning the tape from the load point on yyy.

System Action: The tape is rewound and unloaded. The system continues operation.

Operator Response: Select a new "to" device for yyy. If the reply is NO, the job must be cancelled.

**CAUTION:** If you decide to cancel the job that was running when DDR got control or if that job ABENDs, you must reply to any outstanding DDR messages.

IGF504I AN ERP IS IN PROCESS FOR xxx

Explanation: A swap was requested from tape device xxx. By the time dynamic device reconfiguration gained control, an error recovery procedure had begun processing for that device. This message will always be followed by message IGF512I.

System Action: The system continues operation. The operator-initiated swap request is cancelled. If the error recovery procedure is unsuccessful, the system will request dynamic device reconfiguration.

Operator Response: If the system does not request dynamic device reconfiguration, the error recovery procedure was successful. Enter the SWAP command again.

IGF505I SWAP FROM xxx TO yyy COMPLETE

Explanation: The swap requested for the tape volume on device xxx is now complete.

System Action: The system continues operation.

Operator Response: If an operator-initiated swap has previously been rejected by the system, because another dynamic device reconfiguration request was processing, reissue the SWAP command. Otherwise, no action is required.

IGF507A VOLUME ON DEVICE yyy UNIDENTIFIABLE, SWAP SYSRES TO zzz

Explanation: While swapping the system residence volume during dynamic device reconfiguration, the label of the volume made ready as SYSRES could not be determined on the device with address yyy. Either an I/O error occurred during the volume label verification, or device yyy was made not ready prior to readying volume identification.

System Action: The system is no longer certain of the whereabouts of SYSRES. It is now waiting for SYSRES to be mounted on the "to" device zzz as specified in the message.

Operator Response: If yyy is not equal to zzz, move SYSRES to zzz and ready it. If there is a volume already mounted on zzz, demount it move SYSRES to zzz and ready zzz, then mount the volume removed from zzz on the original failing SYSRES device.

If yyy=zzz:

For 2311's, ready the device zzz.

For 2314's, 2319's, ready the device zzz, but if the message is repeated, move SYSRES to any spare drive belonging to the same control unit as zzz, then ready the device with the address plug zzz.

IGF508I OPERATOR INITIATED SWAP CANCELED BY SYSTEM

Explanation: (1) A conflict among DDR, WTO, and device allocation is imminent; DDR cannot continue processing. (2) For SYSRES: Either the "to" device specified in the SWAP command was found not operative or the execution of the command was interrupted by a system-initiated system residence volume swap.

System Action: The SWAP command is rejected. The system continues operation.

Operator Response: If you still wish to swap, re-enter the SWAP command.

IGF509I SWAP xxx

IGF509D REPLY DEVC, OR 'NO'

Explanation: A permanent I/O error has occurred on the device with channel unit address xxx. The I/O error recovery procedures may be recycled by removing the volume from device xxx and then replacing the volume on a device of the same type as device xxx.

System Action: The system continues operation. Job jjj will not complete until the operator responds with one of the indicated replies.

Reply with a 3-character device address (indicated in the message by DEVC) to invoke the dynamic device reconfiguration function.

Reply NO to cause a permanent I/O error to be posted for device xxx.

Operator Response: If the DDR function is desired, the primary address of a device of the same type as xxx. (An unallocated device on a different channel is preferred.) Do not move the volume until the system directs to do so with the "PROCEED" message. If the volume is moved before the "PROCEED" message is written, data set integrity may be lost.

Warning: Insure that the specified device is available to the system before entering the reply.

If the DDR function is not desired, enter NO.

CAUTION: If xxx is a 2314 or 2319 direct access storage device, insure before swapping that no head-disk interference ("head crash") problem exists.

If message IGF509I (or IGF500I) is received again for the same error on the 2314 or 2319, do not swap.

If you decide to cancel the job that was running when DDR got control, or if that job ABENDS, you must reply to any outstanding DDR messages that require replies.

Problem Determination: Table I, items 2, 30.

IGF510I SYSRES RESIDES ON xxx

Explanation: This is a reminder in response to a SWAP command for SYSRES.

System Action: This message is always followed by a WTOR (IGF500D), requesting confirmation.

Operator Response: None.

IGF511A WRONG VOLUME MOUNTED ON yyy

Explanation: In performing a swap, the volume that had been on the "from" device was not put on yyy. Some other volume has been mounted.

System Action: The system continues operation.

Operator Response: Demount the volume on yyy and put the volume that was on the "from" device on yyy.

IGF512I DDR TERMINATED

Explanation: One of the following conditions exists, following an operator-initiated Swap request:

1. The user did not specify REPOS=Y in his DCB when using EXCP. This is an indication that the user is not keeping an accurate block count and therefore DDR for tape cannot be performed.
2. OPEN, CLOSE, or EOV was found to be in process and therefore DDR for tape cannot be performed.
3. There was no user on the "from" device, so DDR is not needed at this time.
4. The user replied NO to message IGF500D or IGF509D.
5. For an operator-initiated tape swap: the 'from' device is allocated to a TSO task that is currently out of core. The user control blocks cannot be found.

System Action: The system continues operation.

Operator Response: For case 1), none. For case 2), re-enter the SWAP command. For case 3), if you still desire to move the tape, you can do so without DDR. For case 4), none. For case 5), if you still wish to swap, re-enter the SWAP command.

IGF513I yyy INVALID FOR SWAP

Explanation: Device yyy specified in reply to message IGF500D for SWAP xxx,yyy is one of the following:

- not of the same device type as xxx.
- not a supported device (see note).
- an invalid address.
- not operational.
- reply was made in lower case.

Notes:

- Teleprocessing devices are not supported.
- Emulator 7-track "native mode" tapes are not supported.
- For a systems residence volume swap request, the system residence volume must be on the xxx device.
- The following unit record swaps are supported:
  - 1403/1404 to 1403/1404.
  - 1442 to 1442.
  - 1443 to 1443.
  - 2501 to 2501.
  - 2520 to 2520.
  - 2540 to 2540.
  - 3505 to 3505
  - 3525 to 3525
- Unit record devices must be out of ready state when a SWAP is performed.

- When swapping printers, both printers must either have or not have the UCS option; that is, one printer cannot have the UCS option when the other does not.
- The system will not initiate requests for DDR on readers, punches, and printers, but the operator may request DDR for these devices during "intervention required" conditions only.
- Shared direct access storage devices can only be removed from and remounted on themselves.
- The following tape swaps are supported:
  - 7-track to 7-track.
  - 9-track to 9-track 800 bpi, and 9-track 800 dual density to 9-track 800 bpi or dual density.
  - 9-track 1600 bpi to 9-track 1600 bpi, and 9-track 1600 dual density to 9-track 1600 bpi or dual density.
- An allocated tape device may not be specified as the yyy device in a SWAP command.

System Action: The system continues operation. You may choose another yyy device.

Operator Response: Wait for the recurring messages IGF500I and IGF500D to either correct the yyy device or cancel the swap.



## Supervisor and Data Management Assembler Macro Expansion Messages (IHB)

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component Name              | IHB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Program Producing Message   | Assembler program during expansion of supervisor and data management macro instructions.                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Audience and Where Produced | For programmer: assembler listing in SYSPRINT data set.                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Message Format              | ss, ***IHB nnn text<br>nnnn<br>ss<br>Severity code indicating effect of error on execution of program being assembled:<br>* Informational message; no effect on execution.<br>0 Information only; normal execution is expected.<br>4 Warning message; successful execution is probable.<br>8 Error; execution may fail.<br>12 Serious error; successful execution is improbable.<br>16 Terminal error; successful execution is impossible.<br>nnn or nnnn<br>Message serial number.<br>text<br>Message text. |
| Comments                    | None.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Associated Publications     | <u>IBM System/360 Operating System:</u><br><u>Supervisor and Data Management Macro Instructions, GC28-6647</u><br><u>TCAM Programmer's Guide and Reference Manual, GC30-2024.</u>                                                                                                                                                                                                                                                                                                                            |
| Problem Determination       | Refer to the fold-out in part VI of this publication for problem determination instructions.                                                                                                                                                                                                                                                                                                                                                                                                                 |

IHB001 xxx OPERAND REQ'D-NOT SPECIFIED

Explanation: A required positional or keyword operand was omitted. The position or name of the operand is xxx.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Provide the required operand and reassemble.

Problem Determination: Table I, items 15, 29.

IHB002 INVALID xxx OPERAND SPECIFIED-yyy

Explanation: An operand, whose position or name is xxx, was specified as yyy. The specified operand is invalid.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Correct the invalid operand and reassemble.

Problem Determination: Table I, items 15, 29.

IHB004 REQUIRED OPERAND(S) NOT SPECIFIED

Explanation: One or more required operands were omitted.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Provide all required operands and reassemble.

Problem Determination: Table I, items 15, 29.

IHB005 INVALID REGISTER NOTATION IN RC OPERAND-xxx

Explanation: The RC operand of a RETURN macro instruction specifies a return code location other than register 15. xxx is the operand as specified.



System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Either load the return code into register 15 and rewrite the operand as RC=(15), or specify the return code in the RC operand; recompile.

Problem Determination: Table I, items 13, 23, 29.

IHB006 INVALID REGISTER NOTATION WITH MF=L FORM

Explanation: An operand of an L-form macro instruction (with an MF=L operand) is specified in register notation.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Specify the value in the operand, or omit the operand; resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB007 PARAM= OPERAND INVALID WITH SF=L FORM

Explanation: A PARAM operand is in an L-form ATTACH or LINK macro instruction.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Omit the PARAM operand. To create a remote problem program parameter list, use the L-form of the CALL macro instruction; resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB008 INVALID REGISTER NOTATION WITH SF=L FORM

Explanation: An operand of an L-form macro instruction (with an SF=L operand) is specified in register notation.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Specify the value in the operand or omit the operand; resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB009 ENTRY SYMBOL NOT ALLOWED WITH MF=L FORM

Explanation: The first positional (entry point) operand is specified in an L-form CALL macro instruction.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Omit the first positional operand and resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB010 ID= OPERAND INVALID WITH MF=L FORM

Explanation: The ID operand is specified in an L-form CALL macro instruction.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Omit the ID operand and resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB011 INVALID OPERAND SPECIFIED WITH SF=L FORM

Explanation: An operand does not conform to the special operand requirements of an L-form macro instruction (with an SF=L operand).

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Check the special operand requirements for L-form use; omit the invalid operand and resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB012 PARAM OR VL ALLOWED ONLY WITH MF=(E,ADDR)

Explanation: A PARAM or VL operand is specified in an XCTL macro instruction.

These operands are allowed only in the E-form of the macro instruction (with an MF=E operand).

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Omit the PARAM or VL operand, or provide an MF=E operand that specifies the address of a remote problem program parameter list; resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB013 MF=L NOT ALLOWED

Explanation: An MF=L operand appears in an ATTACH, LINK, or XCTL macro instruction.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. To form a remote supervisor parameter list, specify an SF=L operand. To form a remote problem program parameter list, use an L-form CALL macro instruction; resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB014 DECB NOT SPECIFIED AS SYMBOL

Explanation: The first positional operand of a READ or WRITE macro instruction does not specify a name for an associated data event control block (DECB).

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Write the first operand as a symbolic name for a data event control block to be posted on completion of the input or output operation. Resubmit the job.

Problem Determination: Table I, items 13, 29.

IHB015 MORE THAN ONE OF EP, EPLOC, OR DE PRESENT

Explanation: More than one of the alternate operands EP, EPLOC, and DE is specified in an ATTACH, DELETE, LINK, LOAD, or XCTL macro instruction.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Rewrite the macro instruction, specifying only one of the 3 alternate operands, and resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB016 LV OPERAND NOT ALLOWED WITH SPECIFIED MODE

Explanation: The LV operand is inconsistent with the first positional (mode) operand of an S-type GETMAIN or FREEMAIN macro instruction. The mode operand is VU, VC, or V, which specifies allocation or release of a variable-length storage area, or it is LU, LC, or L, which specifies allocation or release of a list of fixed-length storage areas. The LV operand implies allocation or release of a single fixed-length storage area; this

operand can be used only if the mode operand is EU, EC, or E.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Change the mode operand to EU, EC, or E, or replace the LV operand; resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB017 LA OPERAND NOT ALLOWED WITH SPECIFIED MODE

Explanation: The LA operand is inconsistent with the first positional (mode) operand of an S-type GETMAIN or FREEMAIN macro instruction. The mode operand is EU, EC, or E, which specifies either allocation or release of a single fixed-length storage area, or it is V, which specifies release of a variable-length storage area. The LA operand implies allocation or release of a list of fixed-length storage areas, or allocation of a variable-length storage area; this operand can be used only if the mode operand is VU, VC, LU, LC, or L.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. For a GETMAIN macro instruction, change the mode operand to VU, VC, LU, LC, or L, or replace the LA operand with an LV operand. For a FREEMAIN macro instruction, omit the LA operand. Resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB018 BOTH LV AND LA OPERANDS SPECIFIED

Explanation: Both the LV and LA operands are specified in an S-type GETMAIN or FREEMAIN macro instruction.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Omit one or both of these operands, according to which mode operand is specified, and resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB019 SP NOT ALLOWED WITH LV SPECIAL REG. NOTATION

Explanation: The SP operand is specified in an R-type GETMAIN or FREEMAIN macro instruction and the optional value of the

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LV operand is specified in special register notation.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Either load the subpool number into the leftmost byte of parameter register 0 and omit the SP operand, or specify both the LV and SP operand values in the macro instruction resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB020 A= OPERAND NOT ALLOWED IN R-TYPE MACRO

Explanation: The A operand is specified in an R-type GETMAIN macro instruction.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Omit the A operand and resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB021 MORE THAN MAXIMUM VALUE IN FIELDS OPERAND

Explanation: The FIELDS operands of an EXTRACT macro instruction contain more than the maximum value.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Reduce the number of value to the maximum value and recompile.

Problem Determination: Table I, items 13, 23, 29.

IHB023 THIRD OPERAND INVALID WITH SCRATCH - SPECIFIED AS - xxx

Explanation: In a CAMLST macro instruction, the first operand specifies SCRATCH and the third operand specifies xxx. This combination of operands is invalid.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Change the first or third operand. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB024 CSECT NAME OMITTED. MACRO NAME FIELD BLANK

Explanation: A SAVE macro instruction, in an unnamed control section, contains an asterisk as the third positional (entry point identifier) operand, but it does not contain a name in its name field.

System Action: The macro instruction was expanded normally. Severity code = 4.

Programmer Response: Probable user error. Provide an entry point identifier for the program by specifying a name for the SAVE macro instruction or for the control section in which it is located and resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB025 INVALID HIARCHY OPERAND SPECIFIED

Explanation: In a GETMAIN, GETPOOL, DCB, LINK, LOAD, XCTL, or ATTACH macro instruction, the HIARCHY parameter specified a value other than 0 or 1.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Correct the HIARCHY parameter to specify a value of 0 or 1. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB026 FCB SUBLIST IS INVALID

Explanation: In a SETPRT macro instruction, the FCB parameter list was incorrectly specified. One of the following occurred:

- The format of the FCB parameter list was invalid. For example, commas or parentheses were incorrectly placed.
- One of the FCB parameters was invalid. For example, the image-id was omitted, or the ALIGN or VERIFY parameter was misspelled.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Correct the FCB parameter list. Resubmit the job.

Problem Determination: Table I, items 4, 15, 29.

IHB027 EXCESSIVE POSITIONAL PARAMETERS SPECIFIED

Explanation: More positional parameters are specified in an OPEN, CLOSE, or RDJFCB macro instruction than are in the macro prototypes.

System Action: The macro instruction is expanded, but the extra parameters are ignored. (The severity code is 12.)

Programmer Response: Probable user error. This error often occurs because the parameter list is not enclosed with parenthesis. Omit invalid or unnecessary parameters and rerun the job.

Problem Determination: Table I, items 15, 29.

IHB030 LPS MACRO xxx IMPROPERLY USED

Explanation: Macro instruction xxx cannot be used in all Line Procedure Specifications (LPS).

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Remove the macro instruction from the Line Procedure Specifications and resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB050 xxx OPERAND INCONSISTENT-IGNORED

Explanation: In a DCB macro instruction, an operand is inconsistent with the optional value of the DSORG, DEVD, LRECL, MACRF, or RECFM operand. The name of the inconsistent operand is xxx.

System Action: The macro instruction was expanded, but the inconsistent operand was ignored. Severity code = 4.

Programmer Response: Probable user error. Correct the inconsistent operand. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB051 xxx INVALID CODE FOR yyy-IGNORED

Explanation: In a DCB macro instruction, an invalid character string was specified as the optional value of a keyword operand. The name of the keyword operand is yyy. The character string is xxx.

System Action: The macro instruction was expanded, but the invalid operand was ignored. Severity code = 8.

Programmer Response: Probable user error. Correct optional value. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB052 DSORG OMITTED

Explanation: The DSORG operand was omitted from a DCB macro instruction. The MACRF operand does not specify use of the EXCP macro instruction.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Provide the DSORG operand, or specify in the MACRF operand use of the EXCP macro instruction. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB053 yyy INVALID CODE FOR DSORG

Explanation: In a DCB macro instruction, the optional value of a DSORG operand is yyy. This optional value is not valid for the DSORG operand.

System Action: The macro instruction was partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Correct the optional value of the DSORG operand. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB054 y INVALID DSORG QUALIFIER-IGNORED

Explanation: In a DCB macro instruction, the third character of the optional value of a DSORG operand is y. This character is not a valid qualifier for the specified data set organization.

System Action: The macro instruction was expanded, but the invalid operand was ignored. Severity code = 8.

Programmer Response: Probable user error. Correct the optional value of the DSORG operand. Resubmit the job. 0

Problem Determination: Table I, items 13, 19, 29.

IHB055 MACRF NOT SPECIFIED-EXCP ASSUMED

Explanation: The MACRF operand was omitted from a DCB macro instruction.

System Action: The macro instruction was expanded; use of the EXCP macro instruction was assumed. Severity code = 8.

Programmer Response: Probable user error. If the EXCP macro instruction is not used, provide the MACRF operand. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB056 z OF MACRF INVALID WITH DSORG=yyy-IGNORED

Explanation: In a DCB macro instruction, the first or only character of a sublist element for the MACRF operand is z. This character is not consistent with the optional value of the DSORG operand, which is yyy.

System Action: The macro instruction was expanded, but the invalid MACRF sublist element was ignored. Severity code = 8.

Programmer Response: Probable user error. Correct the MACRF operand to specify a type of macro instruction consistent with the specified data set organization. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB057 x INVALID QUALIER FOR z OF MACRF IF DSORG=yyy-IGNORED

Explanation: In a DCB macro instruction, z is the first character, and x is a qualifier, of a sublist element for the MACRF operand. The optional value of the DSORG operand is yyy. For this combination of data set organization and z, x is not valid.

System Action: The macro instruction was expanded, but the x in the MACRF sublist element was ignored. Severity code = 8.

Programmer Response: Probable user error. Correct the MACRF operand to specify a type of macro instruction consistent with the specified data set organization. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB058 x OF RECFM INVALID WITH DSORG=yyy-IGNORED

Explanation: In a DCB macro instruction, the optional value of the RECFM operand is x. This optional value is not consistent with the optional value of the DSORG operand, which is yyy.

System Action: The macro instruction was expanded, but the x in the RECFM operand was ignored. Severity code = 8.

Programmer Response: Probable user error. Correct the RECFM operand to specify a record format consistent with the specified data set organization. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB059 x OF OPTCD INVALID WITH DSORG=yyy-IGNORED

Explanation: In a DCB macro instruction, a character in the optional value of the OPTCD operand is x. This character is not consistent with the optional value of the DSORG operand, which is yyy.

System Action: The macro instruction was expanded, but the x in the OPTCD operand was ignored. Severity code = 8.

Programmer Response: Probable user error. Correct the OPTCD operand to specify an optional service consistent with the specified data set organization. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB060 xxx INVALID CODE FOR DEVD WITH DSORG=yyy-IGNORED

Explanation: In a DCB macro instruction, the optional value of the DEVD operand is xxx. This optional value is not consistent with the optional value of the DSORG operand, which is yyy.

System Action: The macro instruction was expanded, but the DEVD operand was ignored. Severity code = 8.

Programmer Response: Probable user error. Correct the DEVD operand to specify a device dependence consistent with the specified data set organization. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB061 DDNAME NOT SPECIFIED

Explanation: The DDNAME operand was omitted from a DCB macro instruction.

System Action: The macro instruction was expanded normally. Severity code = \*.

Programmer Response: If the name of the DD statement is not placed in the data control block during execution of the problem program, reassemble the program and provide the name through the DDNAME operand of the DCB macro instruction.

Problem Determination: Table I, items 13, 19, 29.

IHB062 DDNAME LONG-TRUNCATED TO 8 CHAR

Explanation: In a DCB macro instruction, the optional value of the DDNAME operand is longer than 8 characters.

System Action: The macro instruction was expanded; the name in the DDNAME operand was truncated to 8 characters. Severity code = 4.

Programmer Response: Probable user error. Correct the DDNAME operand by specifying not more than 8 alphameric characters, the first of which must be alphabetic. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB065 MACRF=xxx INVALID-EXCP ASSUMED

Explanation: In a DCB macro instruction, the optional value of the MACRF operand is xxx. This optional value is invalid.

System Action: The macro instruction was expanded; the invalid MACRF operand was ignored and use of the EXCP macro instruction was assumed. Severity code = 8.

Programmer Response: Probable user error. If the EXCP macro instruction is not used, correct the MACRF operand. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB066 INCONSISTENT OPERAND

Explanation: In a DCB macro instruction, the first character of every sublist element of the MACRF operand is not consistent with the optional value of the DSORG operand. Message IHB056 was given for each MACRF sublist element.

In a TCAM DATETIME macro instruction, both the Date and Time operands specified "NO".

In a TCAM SETSCAN macro instruction any of the following invalid conditions were specified:

- MOVE = RETURN, POINT = BACK
- Skip characters, POINT = BACK
- MOVE = RETURN, RESULT = Not Specified
- MOVE = KEEP, RESULT = Specified

In a TCAM STARTMH macro instruction, when neither STOP= or CONT= are specified, either CONV= or LOGICAL= is coded.

System Action: The DCB macro instruction was not expanded. The MH macros were partially expanded; expansion stopped on detection of the error. Severity code = 12.

Programmer Response: Probable user error. Correct the DSORG and MACRF operands to specify a data set organization and macro instruction types that are consistent. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB067 xxx MACRO PREVIOUSLY USED

Explanation: More than one xxx macro instruction is present in a single assembly. Only the first is used.

System Action: No xxx macro instruction beyond the first encountered is expanded. Severity code: for TCAM macros, 12; for DCBD macro, 4.

Programmer Response: Probable user error. Limit to one the number of DCBD macro instructions in each assembly. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB068 NO VALID DSORG SPECIFIED-EXCP ASSUMED

Explanation: In a DCBD macro instruction, the DSORG operand is either absent or invalid.

System Action: The macro instruction was expanded; the DSORG operand, if present, was ignored and use of the EXCP macro

instruction was assumed. Severity code = \*.

Programmer Response: If the EXCP macro instruction is not used, provide or correct the DSORG operand. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB069 DEVD NOT SPECIFIED-ALL ASSUMED

Explanation: The DEVD operand was omitted from a DCBD macro instruction.

System Action: The macro instruction was expanded; if PS, BS, or QS was specified in the DSORG operand, symbolic names were provided for all possible device dependencies. If other values were specified in the DSORG operand, no symbolic names were provided. Severity code = \*.

IHB070 SEQUENCE ERROR-MUST FOLLOW xxx MACRO

Explanation: The QTAM LPS macro instruction or the TCAM MH macro instruction is improperly placed in the source program. It must follow an xxx macro instruction.

System Action: The macro instruction is not expanded. Severity code =12.

Programmer Response: Probable user error. Correctly place the macro instruction following an xxx macro instruction and resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB071 SEQUENCE ERROR IN LPS DELIMITER MACRO.

Explanation: The LPS delimiter macro instruction is improperly placed in the source program. The previous macro instruction or section may require a specific macro instruction.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Place the macro instruction in the LPS section and resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB072 LERB REQUESTED - ERROPT=C ASSUMED

Explanation: LERB was coded in the DCB but ERROPT=C (indicating a request for line error recording) was not coded.

System Action: The macro instruction was expanded normally with line error recording provided. Severity code=\*

Programmer Response: Probable user error. Delete the LERB operand if line error recording is not wanted. Resubmit the

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job. If line error recording is wanted, code ERROPT=C.

Problem Determination: Table I, items 15, 29.

IHB073 LERB OMITTED-ERROPT=C IGNORED

Explanation: Line error recording was requested by ERROPT=C but no LERB address was given.

System Action: The macro instruction was expanded normally with no line error recording provided. Severity code=\*

Programmer Response: Probable user error. Delete ERROPT=C if line error recording is not wanted. If line error recording is wanted, code a LERB address. Resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB074 ERROPT=N - LERB IGNORED

Explanation: LERB was coded in the DCB but error recovery procedure was not requested (ERROPT=N).

System Action: The macro instruction was expanded normally with no line error recording provided. Severity code=\*

Programmer Response: Probable user error. Delete the LERB operand if the line error recording is not wanted. If line error recording is wanted, code ERROPT=C. Resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB075 TABLENAME OPERAND REPEATED-XXX

Explanation: In the ASMTRTAB macro instruction, a table name operand was coded more than once. XXX is the repeated operand.

System Action: The macro instruction was expanded normally. Severity code=\*

Programmer Response: Probable user error. Remove the duplicate operand. Resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB076 MACRO NAME FIELD BLANK - NAME REQUIRED

Explanation: A name must be specified in the name field of this macro instruction.

System Action: The macro instruction was not expanded. Severity code=12.

Programmer Response: Probable user error. Code a name in the name field of the macro instruction and resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB077 prm INVALID - SET TO xx

Explanation: The error occurred either in a SNAP macro instruction, or in a Graphics input/output (I/O) macro instruction for a 2260 device.

In a SNAP macro instruction, the parameter named prm (either SDATA or PDATA) was invalid.

In a GREAD, GWRITE, GCNTRL, or GREADR macro instruction for a 2260 device, the UNIT parameter (named prm) was not a self-defining term and may be invalid. This message may be issued as a result of a user-written, inner macro calle.

System Action: The macro instruction was expanded.

If the error is the result of a SNAP macro instruction, the value of the parameter is made xx (CB for SDATA or ALL for PDATA).

If the error is the result of a Graphics I/O macro instruction (GREAD, GWRITE, GCNTRL, or GREADR), the UNIT field was assigned a value of xx.

Severity code = 4.

Programmer Response: Probable user error.

If the error is in a SNAP macro instruction, correct the SDATA or PDATA operand resubmit the job.

If the error is in a Graphics I/O macro instruction issued by a user-written inner macro call, determine that the value xx is the desired unit; if it is, no further action is required. If it is not, correct the user-written inner macro instruction and resubmit the job. If the Graphics I/O macro instruction was not issued by an inner macro call, correct the UNIT operand so that it is a decimal integer between 1 and 25 and resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB078 {XXX} OPERAND REGISTER NOTATION INVALID - {YYY}

Explanation: For the XXX operand, the operand was not enclosed in parentheses or specified an invalid register. YYY is an invalid notation.

System Action: The macro instruction was not expanded. Severity code=12.

Programmer Response: Probable user error. Correct the register notation or specify a valid register and resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB079 FIRST OPERAND REGISTER NOTATION REQUIRED

Explanation: Register notation is required for the first operand.

System Action: The macro instruction was not expanded. Severity code=12.

Programmer Response: Probable user error. Specify a register notation for the first operand and resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB080 ONE ECBLIST OPERAND ONLY REQUIRED

Explanation: The ECBLIST operand was omitted, or more than one supplied.

System Action: The macro instruction was not expanded. Severity code=12.

Programmer Response: Probable user error. Supply only one ECBLIST operand and resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB083 MF, STORAGE, OR LIST OPERAND INVALID

Explanation: In the SNAP macro instruction, the MF, STORAGE, or LIST operand was invalid.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Correct the MF, STORAGE, or LIST operand and resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB084 IPLTXID OPERAND EXCEEDS 7 CHARACTERS

Explanation: An IPLTXID operand in a DCB macro instruction exceeds the allowable limit of 7 characters.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Correct the IPLTXID operand so that the operand does not exceed 7 characters.

Problem Determination: Table I, items 15, 29

IHB085 DEVD = xx CODED - ERROPT = y IGNORED

Explanation: In a DCB macro instruction, one of the following occurred:

- Both DEVD=BS and ERROPT=N were coded. However, ERROPT=N is invalid for Binary Synchronous devices. Error recovery procedures are required.
- Both DEVD=WT and ERROPT=R, W, or T were coded. However, ERROPT=R, W, or T is invalid for World Trade Telegraph Terminals (WTTA).

System Action: The macro instruction was expanded normally. The ERROPT parameter was ignored. Severity code = \*.

Programmer Response: Probable user error. Remove the ERROPT parameter and resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB086 xxx INVALID KEYWORD, yyy ASSUMED

Explanation: Operand xxx does not conform to the requirements of the operand format.

System Action: The macro instruction was expanded, but the invalid operand was ignored and yyy was assumed. Severity code = 4.

Programmer Response: Probable user error. Correct the invalid operand. Resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB087 INVALID OPERAND xxx PASSED TO SYSTEM MACRO IHBERMAC

Explanation: Operand nnn is not valid.

System Action: Expansion of the macro instruction is terminated when the error is detected. Severity code = 12.

Programmer Response: Probable user error. Correct the listed operand, and resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB088 REQUIRED OPTION MACRO NOT GENERATED

Explanation: The number of OPTION macros generated does not match the number of optional subfields specified in the TERM macro.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Check OPTION macros for errors or correct the optional subfields specified in the TERM macro. Resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB090 INVALID AUTOPOL VALUE

Explanation: In a POLL macro instruction, the AUTOPOL operand specified a value other than 1 or 2.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. For IBM 1030 terminals, specify an AUTOPOL operand of 1 in the POLL macro instruction. For other terminals, specify an AUTOPOL operand of 2 in the POLL macro instruction. Resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB091 MORE THAN 123-1030'S OR 82 NON 1030'S

Explanation: The POLL macro instruction specified more than the allowable number of terminals.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. For IBM 1030 terminals, reduce the number of terminals specified in the POLL macro instruction to 123 or less. For other terminals, reduce the number of terminals specified in the POLL macro instruction to 82 or less. Resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB092 DCB IS MISSING OR INVALID

Explanation: In a SETPRT macro instruction, the DCB operand, which specifies the opened data control block (DCB) for the UCS printer data set, was either missing or incorrectly specified for the form of the macro instruction used.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Supply the missing DCB operand or correct the one that is in error. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB093 UCS SUBLIST IS INVALID

Explanation: In a SETPRT macro instruction, the UCS parameter list was incorrectly specified. One of the following occurred:

- The format of the UCS parameter list was invalid. For example, the commas or parentheses were incorrectly placed.
- One of the UCS subparameters was invalid. For example, the character set code was omitted, the FOLD and/or VERIFY subparameters were misspelled, or the subparameters were out of order.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Correct the UCS parameter list. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB094 MACRO-FORM IS INVALID

Explanation: In a SETPRT macro instruction, the MF operand was not specified as MF=L for the list form of the

macro instruction or did not begin with MF=(E, for the execute form of the macro instruction.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Correct the MF operand according to the form of the macro instruction desired. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB095 OPTCD IS INVALID

Explanation: In a SETPRT macro instruction, the OPTCD operand was not specified as either U or B.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Correct the OPTCD operand. Resubmit the job.

Problem Determination: Table I, items 13, 19, 29.

IHB096 UCS, FCB, AND OPTCD SUBLISTS MISSING

Explanation: In a SETPRT macro instruction, the UCS, FCB, and OPTCD operands were omitted. At least one of these operands must be specified to execute the standard form of SETPRT macro instruction.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Specify the UCS operand, FCB operand, and/or the OPTCD operand according to the function desired. Resubmit the job.

Problem Determination: Table I, items 4, 15, 29.

IHB097 TCB OPERAND INVALID WITH MF=L FORM

Explanation: The TCB operand was specified in the list form of the SNAP macro instruction.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Omit the TCB operand and resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB098 BUFNO LESS THAN 12. 12 ASSUMED.

Explanation: In a DCB macro instruction, at least twelve buffers must be specified when processing a 1419/1275 data set.

System Action: Twelve buffers are assumed. Severity code = \*.

Programmer Response: Probable user error. Correct the BUFNO parameter of the DCB and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB099 BUFL AND BLKSIZE UNEQUAL. BUFL ASSUMED.

Explanation: In a DCB macro instruction, BLKSIZE and BUFL must be equal for a 1419/1275 data set.

System Action: BUFL length is assumed for BLKSIZE. Severity code = \*.

Programmer Response: Probable user error. Correct the parameters and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB100 X OR Y PARAMETER NOT WITHIN ALLOWABLE VALUE RANGE.

Explanation: In the ONLTST macro instruction, either the X or Y parameter specified an incorrect value. The X parameter must specify a value from 00 through 19, and the Y parameter must specify a value from 01 through 99.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Correct the X or Y parameter in the specification of the ONLTST macro instruction and resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB101 SSRTN TOO LONG. TRUNCATED TO 8 CHAR

Explanation: In a DCB macro instruction, the name of the user's stacker select routine must not be more than eight characters.

System Action: The name is truncated to eight characters. Severity code = \*.

Programmer Response: Probable user error. Correct the name, if necessary, and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB102 LRECL PLUS 6 IS GREATER THAN BUFL. BUFL ASSUMED.

Explanation: In a DCB macro instruction, LRECL plus 6 must not be greater than BUFL for the 1419/1275 data set.

System Action: BUFL is assumed to be correct. Severity code = \*.

Programmer Response: Probable user error. Correct the parameter, if necessary, and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB103 TEXT OR LENGTH MISSING WHEN X = 0 OR X = 1.

Explanation: In the ONLTST macro instruction, although the X parameter specified 0 or 1, either the TEXT or LENGTH parameter was missing. Whenever the X parameter specifies 0 or 1, the TEXT and LENGTH parameters must also be specified.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Include both the TEXT and LENGTH parameters in the specification of the ONLTST macro instruction and resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB104 TEXT OR LENGTH MISSING.

Explanation: In the ONLTST macro instruction, either the TEXT or LENGTH parameter was missing. If one of these two parameters is specified, the other parameter must be specified also.

System Action: The macro instruction was not expanded. Severity code = 1.

Programmer Response: Probable user error. Include both the TEXT and LENGTH parameters in the specification of the ONLTST macro instruction and resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB105 X GREATER THAN 1. TEXT AND LENGTH PARAMETERS IGNORED.

Explanation: In the ONLTST macro instruction, although the X parameter specified a value greater than 1, the TEXT and LENGTH parameters were also specified. Whenever the X parameter specifies a value greater than 1, the TEXT and LENGTH parameters should not be specified.

System Action: The macro instruction is expanded normally, and the TEXT and LENGTH parameters are ignored.

Programmer Response: Probable user error. Remove the TEXT and LENGTH parameters from the specification of the ONLTST macro instruction. Resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB107 DIALCOUNT AND DIALCHARS NOT IN AGREEMENT.

Explanation: In the DFTRMLST macro instruction, the length of the telephone number specified in the dialcount parameter is not the same as the number of



dial digits specified in the dialchars parameter.

System Action: The dial digits are generated as specified in the dialchars parameter without regard to the length specified in the dialcount parameter. Severity code = 4.

Programmer Response: Probable user error. Correct the dialcount or dialchars parameter in error. Resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB108 POLLING CHARACTERS ARE IMPROPER.

Explanation: In the DFTRMLST macro instruction, the number of entries specified in the polling list was greater than 253 or one of the polling characters in an entry was hexadecimal FE, a value that must not be used as a polling character.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Correct the polling list. Resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB109 LENGTH OF POLLING CHARACTERS PER ENTRY IS IMPROPER.

Explanation: In the DFTRMLST macro instruction, the entries in the polling list are not all of the same length.

System Action: All entries are truncated or expanded to equal the length of the first entry. Severity code = 4.

Programmer Response: Probable user error. Correct the polling list so that all the entries are of the same length. Resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB110 DIAL CHARACTERS INVALID IN WTLIST.

Explanation: In the DFTRMLST macro instruction, dial digits were specified. However, a WTLIST should only be used for a manual dial, and no dial digits can be used.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Correct the specification of the dial digits in the terminal list and resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB111 LENGTH OR ADDRESS OF TONE OMITTED.

Explanation: In the DFTRMLST macro instruction, either the address or length operand was omitted. However, both operands must be included for an answering WTLIST.

System Action: The macro instruction was not expanded. Severity code = 12.

Programmer Response: Probable user error. Make sure both length and address operands are specified for an answering WTLIST. Resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB113 IDCOUNT AND IDSENT DO NOT AGREE

Explanation: In a DFTRMLST macro instruction, the value specified for IDCOUNT does not equal the number of characters in IDSENT.

System Action: The macro instruction was partially expanded; expansion stopped upon detection of the error. Severity code = 12.

Programmer Response: Probable user error. Correct the IDCOUNT value. Resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB114 IDCOUNT IS TOO LARGE

Explanation: In a DFTRMLST macro instruction, the value specified for IDCOUNT is greater than 16 (AD or MD calling list), or is greater than 17 (AN answering list).

System Action: The macro instruction was partially expanded; expansion stopped upon detection of the error. Severity code = 12.

Programmer Response: Probable user error. Correct the IDCOUNT value and resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB115 INVALID TYPE ATTRIBUTES

Explanation: In a DFTRMLST macro instruction, an invalid type attribute was specified for one of the operands.

System Action: The macro instruction was partially expanded; expansion stopped upon detection of the error. Severity code = 12.

Programmer Response: Probable user error. Correct the operand and resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB116 AUTHORIZED SEQUENCE IS MISSING

Explanation: In a DFTRMLST macro instruction, either a control value or user data area was specified without an authorized sequence having been specified.

System Action: The macro instruction was partially expanded; expansion stopped upon detection of the error. Severity code = 12.

Programmer Response: Probable user error. Either specify an authorized sequence or eliminate the control value or user data area. Resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB117 PARENTHESIS IS MISSING

Explanation: In a MFTRMLST macro instruction, the authorized sequence was not enclosed in parenthesis.

System Action: The macro was partially expanded; expansion stopped upon detection of the error. Severity code = 12.

Programmer Response: Probable user error. Enclose the authorized sequence in parentheses and resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB120 DCB ADDRESS MISSING OR INVALID.  
GENERATION TERMINATED.

Explanation: In a RDLNE, DSPLY, or RESCN macro instruction, the required DCB address was not specified correctly.

System Action: The macro instruction was not expanded. Severity code = 16.

Programmer Response: Probable user error. Correct the DCB address operand and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB121 REGISTER SPECIFICATION INVALID.  
GENERATION TERMINATED.

Explanation: In a DSPLY macro instruction, an optional register specification was not specified correctly.

System Action: The macro instruction was not expanded. Severity code = 16.

Programmer Response: Probable user error. Correct the register specification and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB122 REGISTER SPECIFICATIONS NOT PAIRED.  
GENERATION TERMINATED.

Explanation: In a RESCN or DSPLY macro instruction, two valid registers were not specified.

System Action: The macro instruction was not expanded. Severity code = 16.

Programmer Response: Probable user error. Correct the register specification and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB123 NUMBER OF RETRIES EXCEEDS 9. 9 ASSUMED.

Explanation: In a RESCN macro instruction, a number of retries greater than 9 was specified.

System Action: The macro instruction was expanded normally with a retry value of 9. Severity code = 4.

Programmer Response: Probable user error. Correct the retry value and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB124 NUMBER OF RETIRES INVALID. 1 ASSUMED.

Explanation: In a RESCN macro instruction, an invalid number of retries (other than greater than 9) was specified.

System Action: The macro instruction was expanded normally with a retry value of 1. Severity code = 4.

Programmer Response: Probable user error. Correct the retry value and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB125 UNRECOGNIZABLE PARAMETER. PARAMETER IGNORED.

Explanation: In a RESCN macro instruction, an unrecognizable parameter was specified.

System Action: The parameter was ignored, and the macro instruction was expanded normally. Severity code = 8.

Programmer Response: Probable user error. Correct the invalid parameter and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB126 PARAMETER PREVIOUSLY DEFINED. FIRST DEFINITION ASSUMED.

Explanation: In a RESCN macro instruction, either the number of retries or the register specifications was repeated.

System Action: The macro instruction was expanded normally, using the first specification. Severity code = 4

Programmer Response: Probable user error. Delete the unwanted specification and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB127 LABEL PREFIX MISSING OR INVALID.  
GENERATION TERMINATED.

Explanation: In a DEFAREA macro instruction, the required label prefix was not supplied correctly.

System Action: The macro instruction was not expanded. Severity code = 16.

Programmer Response: Probable user error. Supply a correct label prefix and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB128 UNRECOGNIZABLE PARAMETER SPECIFIED.  
GENERATION TERMINATED.

Explanation: In a DEFAREA or DEFCCW macro instruction, an unrecognizable parameter was specified.

System Action: The macro instruction was not expanded. Severity code = 16.

Programmer Response: Probable user error. Correct the parameter in error and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB129 TIMES NOT PRECEDED BY FIELD LENGTH.  
GENERATION TERMINATED.

Explanation: In a DEFAREA macro instruction, a TIMES operand was not preceded by a valid field length.

System Action: The macro instruction was not expanded. Severity code = 16.

Programmer Response: Probable user error. Supply a valid field length and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB130 TIMES NOT FOLLOWED BY NUMBER. GENERATION  
TERMINATED.

Explanation: In a DEFAREA macro instruction, a TIMES operand was not followed by a valid duplication factor.

System Action: The macro instruction was not expanded. Severity code = 16.

Programmer Response: Probable user error. Supply a valid duplication factor and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB131 OPTIONAL PARAMETER SPECIFIED AFTER FIELD  
DEFINITION. PARAMETER IGNORED

Explanation: In a DEFAREA macro instruction, an optional parameter (FLAG, CNTR, or RGHT) was specified after the first field was defined.

System Action: The parameter was ignored, and the macro instruction was expanded normally. Severity code = 4.

Programmer Response: Probable user error. Remove the optional parameter and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB132 LABEL FOR LOAD FORMAT DATA MISSING OR  
INVALID. GENERATION TERMINATED.

Explanation: In a DEFCCW macro instruction, the required label for the load format data was not specified correctly.

System Action: The macro instruction was not expanded. Severity code = 16.

Programmer Response: Probable user error. Supply a valid label and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB133 LABEL PREFIX FOR DEFAREA MISSING OR  
INVALID. GENERATION TERMINATED.

Explanation: In a DEFCCW macro instruction, the label prefix from the associated DEFAREA macro instruction was not specified correctly.

System Action: The macro instruction was not expanded. Severity code = 16.

Programmer Response: Probable user error. Supply a valid label prefix and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB134 REFMARK OR UNFORMAT NOT SPECIFIED PRIOR TO  
DEFINITION OF FIRST FIELD. FORMATTED MODE  
ASSUMED.

Explanation: In a DEFCCW macro instruction, the parameter REFMARK or UNFORMAT was not specified before defining the field.

System Action: The macro instruction was expanded normally in the formatted mode. REFMARK was assumed. Severity code = 4.

Programmer Response: Probable user error. If unformatted mode was desired, specify the UNFORMAT parameter, and resubmit the job.

IHB135 Problem Determination: Table I, items 3, 15, 29.

REFMARK SPECIFIED WHEN PROCESSING IN UNFORMATTED MODE. GENERATION TERMINATED.

Explanation: In a DEFCCW macro instruction, REFMARK was specified after UNFORMAT was specified.

System Action: The macro instruction was not expanded. Severity code = 16.

Programmer Response: Probable user error. Re-evaluate the desired CCW chain, and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB136 THRU NOT PRECEDED BY FIELD NUMBER. GENERATION TERMINATED.

Explanation: In a DEFCCW macro instruction, a THRU parameter was not preceded by a valid field number.

System Action: The macro instruction was not expanded. Severity code = 16.

Programmer Response: Probable user error. Supply a valid field number, and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB137 THRU NOT FOLLOWED BY FIELD NUMBER. GENERATION TERMINATED.

Explanation: In a DEFCCW macro instruction, a THRU parameter was not followed by a valid field number.

System Action: The macro instruction was not expanded. Severity code = 16.

Programmer Response: Probable user error. Supply a valid field number, and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB138 ENDING VALUE IN THRU LESS THAN STARTING VALUE. GENERATION TERMINATED.

Explanation: In a DEFCCW macro instruction, a THRU parameter was specified with a starting value greater than the ending value.

System Action: The macro instruction was not expanded. Severity code = 16.

Programmer Response: Probable user error. Correct the ending value in THRU, and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB139 LAST CCW GENERATED USES COMMAND CHAINING. POSSIBLE ERROR.

Explanation: In a DEFCCW macro instruction, the last defined CCW has the command chaining bit on.

System Action: The macro instruction was expanded normally. Severity code = 8.

Programmer Response: Probable user error. If command chaining was not desired, specify the parameter NOCHAIN immediately before the parameter(s) which generate the last CCW, and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB140 SYMBOL WITH LABEL PARAMETER MISSING OR INVALID. GENERATION TERMINATED.

Explanation: In a DEFCCW macro instruction, a LABEL parameter was specified without a valid symbol.

System Action: The macro instruction was not expanded. Severity code = 16.

Programmer Response: Probable user error. Supply a valid symbol and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB141 FIELD NUMBER FOR RBT/RFT MISSING OR INVALID. GENERATION TERMINATED.

Explanation: In a DEFCCW macro instruction, an RBT or RFT parameter was not followed by a valid field number.

System Action: The macro instruction was not expanded. Severity code = 16.

Programmer Response: Probable user error. Supply a valid field number, and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB142 SYMBOL FOR RBT/RFT MISSING OR INVALID. GENERATION TERMINATED.

Explanation: In a DEFCCW macro instruction, an RBT or RFT parameter was specified without a validly specified symbol.

System Action: The macro instruction was not expanded. Severity code = 16.

Programmer Response: Probable user error. Supply a valid symbol, and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB143 SYMBOL(S) FOR COMPARE MISSING OR INVALID.  
GENERATION TERMINATED.

Explanation: In a DEFCCW macro instruction, a COMPARE parameter was specified with one or both of its associated symbols invalidly specified.

System Action: The macro instruction was not expanded. Severity code = 16.

Programmer Response: Probable user error. Supply valid symbol(s), and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB144 SYMBOL FOR BRANCH MISSING OR INVALID.  
GENERATION TERMINATED.

Explanation: In a DEFCCW macro instruction, a BRANCH parameter was specified without a validly specified symbol following it.

System Action: The macro instruction was not expanded. Severity code = 16.

Programmer Response: Probable user error. Supply a valid symbol, and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB145 STACKER NUMBER FOR ESD MISSING OR INVALID.  
GENERATION TERMINATED.

Explanation: In a DEFCCW macro instruction, an ESD parameter was specified without a valid stacker number.

System Action: The macro instruction was not expanded. Severity code = 16.

Programmer Response: Probable user error. Supply a valid stacker number, and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB146 SYMBOL FOLLOWING REFMARK MISSING OR  
INVALID. GENERATION TERMINATED.

Explanation: In a DEFCCW macro instruction, a REFMARK parameter was specified without a valid symbol.

System Action: The macro instruction was not expanded. Severity code = 16.

Programmer Response: Probable user error. Supply a valid symbol and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB147 GENERATION TERMINATED BY E OR DE LINETYPE

Explanation: In a multiple-line WTO macro instruction, a line type of E (end) or DE (data end) was encountered prior to the end of the message.

System Action: The macro expansion is terminated at the line in which the DE or E specification was found. Severity code = \*.

Programmer Response: Probable user error. Supply a valid line type and resubmit the job.

Problem Determination: Table I, items 2 (with a printout of the WTO), 3, 15, 29.

IHB148 INVALID LINETYPE, E OR DE ASSUMED

Explanation: In a multiple-line WTO macro instruction expansion, a linetype other than C, L, D, DE, or E was encountered.

System Action: The expansion is terminated with the line containing the invalid line type. Any lines following that line are ignored. Severity code = \*.

Programmer Response: Probable user error. Supply a valid line type, and resubmit the job.

Problem Determination: Table I, items 2 (with a printout of the WTO), 3, 15, 29.

IHB149 INVALID C OR L LINETYPE, DE ASSUMED -  
GENERATION TERMINATED

Explanation: In a multiple-line WTO macro instruction expansion, an invalid C (control) or L (label) line type was encountered:

- Line type C can be coded only for the first line of the multiple-line WTO message; any other specification is invalid.
- Line type L can be coded only for the first line of the message, the line following the C line of the message, or the line following the first L line of the message; any other specification is invalid.

System Action: Expansion is terminated with the line the line in which the invalid specification is encountered; any lines following that line are ignored, and SVC 35 is not issued. Severity code = 16.

Programmer Response: Probable user error. Supply the correct line type, and resubmit the job.

Problem Determination: Table I, items 2 (with a printout of the WTO), 3, 15, 29.

IHB150 INVALID COMBINATION OF CHARACTERS IN xxxx  
OPERAND - yyyy

Explanation: The xxxx operand of the DCB macro instruction was specified with yyyy, which is an invalid combination of characters.

System Action: The xxxx field was set to zero. Severity code = 12.

Programmer Response: Probable user error. Correct the specified operand and resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB151 INVALID CHARACTER IN xxxx OPERAND-y

Explanation: The xxxx operand of the DCB macro instruction was specified with y, which is an invalid character for that function.

System Action: The xxxx field was set to zero. Severity code = 12.

Programmer Response: Probable user error. Correct the specified operand and resubmit the job.

Problem Determination: Table I, items 15, 29.

IHB152 NUMBER OF LINES REQUESTED IS 0 OR GREATER THAN 10 - GENERATION TERMINATED

Explanation: In a WTO macro expansion, the number of lines coded was either 0 or greater than 10.

System Action: The macro is not expanded. Severity code = 16.

Programmer Response: Probable user error. Recode the WTO macro with a valid number of lines, and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB153 MLWTO/WTOR MUTUALLY EXCLUSIVE - GENERATION TERMINATED

Explanation: A WTOR macro instruction was coded using the multiple-line WTO macro instruction format.

System Action: The macro is not expanded. Severity code = 16.

Programmer Response: Probable user error. Recode the WTOR using the correct format, and resubmit the job.

Problem Determination: Table I, items 3, 15, 29.

IHB236 SECOND OPERAND NOT ALLOWED -- IGNORED

Explanation: In a TIME macro instruction, a second operand was specified with the DEC, BIN, or TU operands. A second operand (,address) can be used only with the MIC operand.

System Action: The macro expansion took place as if the second operand had not been specified. Severity code = 4.

Programmer Response: Probable user error. Omit the second operand or code the macro instruction with the MIC operand. Resubmit the job.

Problem Determination: Table I, items 13, 23, 29.

IHB245 COMPLETION CODE CANNOT APPEAR IN LIST FORM

Explanation: The completion code operand cannot appear in the list form of the POST macro instruction.

System Action: The macro instruction was not expanded. The severity code = 12.

Programmer Response: Problem user error. Correct the POST macro instruction by removing the completion code operand. Rerun the job.

Problem Determination: Table I, 15, 22, 29.

IHB246 TCB OPERAND SPECIFIED WITHOUT TJID OPERAND

Explanation: In the list form of the POST macro instruction, the TCB operand was specified without including the TJID operand.

System Action: The macro instruction was partially expanded; expansion stopped when the error was detected. Severity code = 12.

Programmer Response: Correct the POST macro instruction by including the TJID operand. Rerun the job.

Problem Determination: Table I, items 15, 22, 29.

IHB250 DDNAME SHORT-PADDED TO 8 CHAR

Explanation: In a DCB macro instruction, the optional value of the DDNAME operand is shorter than 8 characters.

System Action: The macro instruction was expanded; the name in the DDNAME operand was padded to 8 characters. The severity code is 0.

Programmer Response: None.

IHB252 id TOO LONG FOR apdg - TRUNCATED TO 2 CHAR

Explanation: In a EXCP DCB macro instruction, the user supplied ID (id) for the appendage (apdg) was too long.

System Action: The macro instruction was expanded; the user supplied ID was truncated to 2 characters. Severity code = \*.

Programmer Response: Correct the ID specifying no more than 2 characters.

Problem Determination: Table I, items 15, 22, 29.

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IHB253 id TOO SHORT FOR apdg - PADDED TO 2 CHAR

Explanation: In an EXCP DCB macro instruction, the user supplied ID (id) for the appendage (apdg) was too short.

System Action: The macro instruction was expanded; the user supplied ID was padded to 2 characters. Severity code is 0.

Programmer Response: Correct the ID specifying 2 characters.

Problem Determination: Table I, items 15, 22, 29.

IHB254 oprnd NOT SPECIFIED - PRESET TO y

Explanation: In a macro instruction, a required operand, oprnd, is not specified; therefore, it is assigned the value y.

System Action: The macro instruction is expanded; the severity code is 0.

Programmer Response: Check to see if the operand in question is required; if so, specify the correct value and reassemble the program.

Problem Determination: Table I, items 15, 22, 29.

IHB256 oprnd OPERAND INVALID OR NOT SPECIFIED - SET TO y

Explanation: In a macro instruction, a required operand, oprnd, is invalid or not specified; therefore, it is set to the value y.

System Action: The macro instruction is expanded; the severity code is 4.

Programmer Response: Correct the invalid operand, and reassemble the program.

Problem Determination: Table I, items 15, 22, 29.

IHB257 BPX COUNTER INDICATES WRAP AROUND TO TOP OF CRT

Explanation: The beam position counter for the X coordinate indicates that the wrap around condition is about to occur. That is, the beam position will change from the lower right-hand corner of the matrix to the upper left-hand corner.

System Action: The macro instruction is expanded; the severity code is 4.

Programmer Response: Verify previously specified image generation macros to determine if display distortion will occur.

Problem Determination: Table I, items 15, 22, 29.

IHB258 BLC GREATER THAN OR EQUAL TO BLIM

Explanation: The buffer load counter (BLC) exceeds specified or default buffer limits (BLIM).

System Action: The macro instruction is expanded; the severity code is 4.

Programmer Response: Adjust the graphic order program so that the Buffer Load Counter does not exceed the buffer limits. Rerun the job.

Problem Determination: Table I, items 15, 22, 29.

IHB259 CURRENT BUFFER xxx=y

Explanation: This message is issued as a result of a FIND macro instruction. xxx is the specified counter and y is the current value.

System Action: None. The severity code is 0.

Programmer Response: None.

IHB260 CURRENT BEAM POSITION COUNTER IS X=m, Y=n

Explanation: This message is issued as a result of a GBPOS macro instruction where m is the value of the X coordinate counter, and n is the value of the Y coordinate counter.

System Action: None. The severity code is 0.

Programmer Response: None.

IHB261 ctr COUNTER EXCEEDS CRT LIMITS

Explanation: The ctr counter value has exceeded the limits of the specified CRT device.

System Action: The macro instruction is expanded; the severity code is 4.

Programmer Response: Correct the graphic order program to remain within the CRT limits.

Problem Determination: Table I, items 15, 29.

IHB262 LOAD VARIABLE SPACE ORDER MAY HAVE NOT BEEN SPECIFIED PRIOR TO ENTERING STROKE MODE

Explanation: The Load Variable Space order has not been specified, and a request has been made to enter Stroke Mode. This is not allowed.

System Action: The assembly continues; the severity code is 4.

Programmer Response: Verify that the GLVS macro instruction is specified. If it is not, correct and reassemble the program.

Problem Determination: Table I, items 15, 29.

IHB263 INVALID ctlbk ADDR-X-y

Explanation: The indicated system control block (ctlbk) has an invalid address, and y indicates what action the system takes.

System Action: The severity code is 8.

Programmer Response: Correct the control block address and reassemble the program.

Problem Determination: Table I, items 15, 22, 29.

IHB264 mac MORE THAN 5 POSITIONAL OPERANDS

Explanation: The macro instruction (mac) contains more than 5 positional operands; this is not allowed.

System Action: Expansion of the macro (mac) is terminated; the severity code is 12.

Programmer Response: Correct the macro instruction, specifying no more than 4 positional operands, and reassemble the program.

Problem Determination: Table I, items 15, 22, 29.

IHB300 xxxx OPERAND INVALID AS SPECIFIED

Explanation: In an INTRO macro instruction or an MH macro instruction, the specified operand did not satisfy TCAM requirements.

System Action: The macro instruction was partially expanded; expansion stopped when the error was detected. Severity code=12.

Programmer Response: Probable user error. Check the requirements for the operand in error and correct it.

Problem Determination: Table I, items 13, 19, 29.

IHB301 QSTART SPECIFIED - NO EXPANSION

Explanation: The user has coded a QSTART macro instruction in a QTAM application program that is assumed to be compatible with TCAM.

System Action: The macro is not expanded.

Programmer Response: Probable user error. Check to see that the program containing the macro is being reassembled to achieve TCAM compatibility.

Problem Determination: Table I, items 13, 19, 29.

IHB302 NAME FIELD LONG - TRUNCATE TO xxx CHARACTERS

Explanation: The user coded a TERMINAL, PROCESS, or TLIST entry whose name field exceeds the length specified in the TTABLE macro instruction.

System Action: The entry name is truncated to xxx characters.

Programmer Response: Probable user error. Correct the erroneous entry, specifying the correct number of characters.

Problem Determination: Table I, items 13, 19, 29.

IHB303 INVALID OPERAND xxx, yy ASSUMED

Explanation: Operand xxx in an INTRO macro instruction is specified incorrectly. In the message text, yy is the default value assigned for the operand in error.

System Action: The macro instruction will be expanded with yy substituted for the invalid operand. Severity code = 12.

Programmer Response: Probable user error. If the default value does not satisfy the user's requirements, either recode the INTRO macro specifying the correct value for the operand in error and reassemble, or instruct the operator to specify a satisfactory value in responding to a message issued during execution.

Problem Determination: Table I, items 13, 19, 29.

IHB304 xxx SPECIFIED TOO MANY CHARACTERS

Explanation: The xxx operand on the INTRO macro instruction has specified a character string longer than eight characters.

System Action: The macro instruction is expanded and the default value is substituted for the erroneous operand. Severity code = 12.

Programmer Response: Probable user error. If the default value is unsatisfactory, either respecify the INTRO macro instruction correctly and reassemble, or instruct the operator to specify a satisfactory value in responding to a message issued at INTRO execution time.

Problem Determination: Table I, items 13, 19, 29.

IHB305 xxx MACRO NOT SPECIFIED

Explanation: An INTRO macro instruction has not been specified prior to the READY macro instruction, or a TTABLE macro instruction has not been specified prior to the INVLIST macro instruction.

System Action: The READY or INVLIST macro instruction is not expanded. Severity code = 12.

Programmer Response: Probable user error. Make sure that READY follows INTRO and/or that INVLIST follows TTABLE in the assembly of the TCAM message control program.

IHB

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>IHB306 TOO MANY OPDATA PARAMETERS</p> <p><u>Explanation:</u> The OPDATA operand of a TERMINAL, TPROCESS, or TLIST macro specified more OPTION fields than were defined by OPTION macro instructions.</p> <p><u>System Action:</u> The OPDATA operand(s) that exceeded the number of OPTION fields are ignored. Severity code = 12.</p> <p><u>Programmer Response:</u> Probable user error. Make sure that a sufficient number of OPTION macros is used to define the necessary number of OPTION fields.</p> | <p>IHB310 INVALID CONSTANT TYPE SPECIFIED</p> <p><u>Explanation:</u> An invalid constant has been specified while defining the fields for an OPTION macro instruction.</p> <p><u>System Action:</u> The macro instruction is not expanded.</p> <p><u>Programmer Response:</u> Probable user error. Make sure that the constants specified are defined correctly; for example, make sure that XL3'0' is specified, and not GL3'0'.</p>                                                                                                                       |
| <p>IHB307 INCONSISTENT LENGTH FOR xxx</p> <p><u>Explanation:</u> The operand lengths of the INVLIST macro instructions are not consistent.</p> <p><u>System Action:</u> The macro instruction is not expanded.</p> <p><u>Programmer Response:</u> Probable user error. Make sure that the operands of the INVLIST macro instructions specify the same length for the polling characters.</p>                                                                                                                   | <p>IHB311 xxx MACRO PREVIOUSLY SPECIFIED</p> <p><u>Explanation:</u> More than one xxx macro has been included in this Message Control Program.</p> <p><u>System Action:</u> The macro instruction is not expanded.</p> <p><u>Programmer Response:</u> Probable user error. Include only one xxx macro instruction in a Message Control Program. Resubmit the job.</p>                                                                                                                                                                                       |
| <p>IHB308 INVALID LENGTH QUALIFIER SPECIFIED</p> <p><u>Explanation:</u> The length qualifier for an OPTION macro instruction is invalid.</p> <p><u>System Action:</u> The macro instruction is not expanded.</p> <p><u>Programmer Response:</u> Probable user error. Make sure that any length qualifiers for OPTION macro instructions are coded correctly. CL8' ' or XL4'0' are examples of correctly coded length qualifiers.</p>                                                                           | <p>IHB312 MACRO MUST FOLLOW xxx MACRO WITH yyy</p> <p><u>Explanation:</u> A TCAM macro instruction was improperly placed in the source program. It must follow an xxx macro instruction, and it must specify the required yyy operand.</p> <p><u>System Action:</u> The macro instruction was not expanded.</p> <p><u>Programmer Response:</u> Probable user error. Make sure that the macro instruction, with the required yyy operand, correctly follows the xxx macro instruction.</p>                                                                   |
| <p>IHB309 LENGTH QUALIFIER REQUIRED</p> <p><u>Explanation:</u> The length has not been given for the fields defined by an OPTION macro instruction; length qualifiers are required.</p> <p><u>System Action:</u> The macro instruction is not expanded.</p> <p><u>Programmer Response:</u> Probable user error. Make sure that any fields defined by an OPTION macro instruction include length qualifiers; for example, make sure that XL8'0' is specified and not X'0000000000000000'.</p>                   | <p>IHB313 MORE THAN ONE NOLOG EXIT</p> <p><u>Explanation:</u> More than one LOGON macro instruction in an MH has specified a NOLOG= operand, and only one exit routine may be specified for each MH.</p> <p><u>System Action:</u> The macro instruction is not expanded. Severity code = 12.</p> <p><u>Programmer Response:</u> Probable user error. Only one LOGON macro instruction per MH may specify the NOLOG= operand. Remove any additional NOLOG= operands from subsequent LOGON macro instructions and reassemble the Message Control Program.</p> |
| <p><u>Problem Determination:</u> Table I, items 13, 19, 29.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                | <p><u>Problem Determination:</u> Table I, items 13, 19, 29.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <p><u>Problem Determination:</u> Table I, items 13, 19, 29.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                | <p><u>Problem Determination:</u> Table I, items 13, 19, 29.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <p><u>Problem Determination:</u> Table I, items 13, 19, 29.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                | <p><u>Problem Determination:</u> Table I, items 13, 19, 29.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <p><u>Problem Determination:</u> Table I, items 13, 19, 29.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                | <p><u>Problem Determination:</u> Table I, items 13, 19, 29.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

- IHB315 SEQUENCE ERROR - MUST PRECEDE LAST ENTRY SPECIFIED BY TTABLE MACRO
- Explanation: The last entry defined by the TTABLE macro instruction is not the last terminal entry specified.
- System Action: The macro instruction is not expanded.
- Programmer Response: Probable user error. Make sure that the last entry in the terminal table specified by the TTABLE macro instruction is the last terminal specified by a TERMINAL macro instruction.
- Problem Determination: Table I, items 13, 19, 29.
- IHB316 MAXIMUM NUMBER OF OPTION FIELDS EXCEEDED
- Explanation: The TCAM user has specified more than the maximum number of OPTION macro instructions permitted in one Message Control Program.
- System Action: The macro instruction will not be expanded. Severity code = 12.
- Programmer Response: Make sure that no more than 253 OPTION macro instructions are included in one Message Control Program.
- Problem Determination: Table I, items 13, 19, 29.
- IHB317 OPDATA INVALID - NO OPTION FIELDS SPECIFIED
- Explanation: No OPTION macro instructions were coded in the terminal table, by an OPDATA operand was coded on a TERMINAL, TPROCESS, or TLIST macro instruction.
- System Action: All OPDATA operands are ignored. The macro is partially expanded. Severity code = 12.
- Programmer Response: Probable user error. Make sure that the required OPTION macro instructions are coded, or remove OPDATA operand(s) from the macro instruction.
- Problem Determination: Table I, items 13, 19, 29.
- IHB318 QUEUES OPERAND xx INVALID WITH MSUNITS = 0
- Explanation: The MUSUNITS operand of the INTRO macro instruction specified that no main-storage Message Queues Data Set was to be used, but the QUEUES operand of a TERMINAL or TPROCESS macro instruction specified that main-storage message queues would be used.
- System Action: The macro instruction is not expanded. Severity code = 12.
- Programmer Response: Probable user error. Modify the QUEUES operand to indicate disk message queues only, or code the MSUNITS operand of the INTRO macro instruction with a non-zero integer.
- Problem Determination: Table I, items 13, 19, 29.
- IHB319 CONTINUATION EXPECTED GENERATION DEFERRED
- Explanation: An INVLIST macro instruction series using the continuation capability was coded. This statement is not the last in the series, and generation of the macro instruction is deferred until the operands of the last macro instruction have been validated.
- Programmer Response: None.
- IHB320 TOO MANY ENTRIES SPECIFIED
- Explanation: More than 200 entries were specified by one INVLIST macro series using the continuation capability. Two hundred is the maximum number of entries supported by an INVLIST macro instruction.
- System Action: The macro instruction is not expanded. Severity code = 12.
- Programmer Response: Probable user error. Recode the INVLIST macro series that is in error, and resubmit the job.
- Problem Determination: Table I, items 13, 19, 29.
- IHB342 INVALID OPERANDS SPECIFIED
- Explanation: Operands invalid for the TERMINAL macro instruction are present.
- System Action: The macro instruction is not expanded. Severity code = 12.
- Programmer Response: Probable user error. Specify correct operands for the TERMINAL macro instruction, and resubmit the job.
- Problem Determination: Table I, items 13, 19, 29.
- IHB345 DIALNO = REQD WHEN CINTVL OR CLOCK SPECIFIED
- Explanation: TERMINAL macro instruction operand DIALNO is required when CINTVL or CLOCK is specified.
- System Action: The macro instruction is not expanded. Severity code = 12.
- Programmer Response: Probable user error. Make sure that the DIALNO operand is coded with the TERMINAL macro instruction if CINTVL or CLOCK is specified.
- Problem Determination: Table I, items 13, 19, 29.
- IHB346 CLOCK AND CINTVL MUTUALLY EXCLUSIVE
- Explanation: TERMINAL macro instruction operands CLOCK and CINTVL are mutually exclusive.
- System Action: The macro instruction is not expanded. Severity code = 12.

Programmer Response: Probable user error.  
Make sure that the operands CLOCK and  
CINTVL are not coded with the same  
TERMINAL macro instruction.

Problem Determination: Table I, items 13,  
19, 29.

## FORTRAN IV Object Program Messages (IHC)

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component Name              | IHC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Program Producing Message   | Object program originally coded in FORTRAN IV G or H language.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Audience and Where Produced | For programmer: object error unit, generally the SYSOUT data set (defined using SYSOUT=A parameter in DD statement).<br>For Operator: console.                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Message Format              | <p>IHCnnnI <span style="float: right;">(in SYSPRINT)</span><br/> xx IHCnnns text <span style="float: right;">(on console)</span></p> <p>nnn<br/> Message serial number.</p> <p>xx<br/> Message reply identification (absent, if operator reply not required).</p> <p>s<br/> Type code:</p> <p>A Action; operator must perform a specific action.<br/> I Information; no operator action is required.</p> <p>text<br/> Message text.</p>                                                                                                                                                 |
| Comments                    | <p>IHC messages are not included in this publication. They are documented in the publication <u>IBM System/360 Operating System: FORTRAN IV (G and H) Programmer's Guide</u>, GC28-6817. If your installation uses FORTRAN IV G or H frequently, you may prefer to have the IHC messages in this publication; the index tab on this page is provided so that you can remove the IHC messages from the Programmer's Guide and insert them here.</p> <p>For routing and descriptor codes of IHC messages, see Table 21 in Part V of this publication: "Routing and Descriptor Codes."</p> |
| Associated Publications     | <u>IBM System/360 Operating System:</u><br><u>FORTRAN IV (G and H) Programmer's Guide</u> , GC28-6817<br><u>IBM System/360 FORTRAN IV Language</u> , GC28-6515                                                                                                                                                                                                                                                                                                                                                                                                                          |





## COBOL E Object Program Messages (IHD)

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component Name              | IHD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Program Producing Message   | Object program originally coded in COBOL E language.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Audience and Where Produced | For programmer: SYSPRINT data set and console.<br>For operator: console.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Message Format              | IHD9nnI text<br><br>9nn      Message serial number.<br>text      Message text.                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Comments                    | IHD messages are not included in this publication. They are documented in the publication <u>IBM System/360 Operating System: COBOL E Programmer's Guide</u> , GC24-5029. If your installation uses COBOL E frequently, you may prefer to have the IHD messages in this publication; the index tab on this page is provided so that you can remove the IHD messages from the Programmer's Guide and insert them here.<br><br>For routing and descriptor codes of IHD messages, see Table 22 in Part V of this publication: "Routing and Descriptor Codes." |
| Associated Publications     | <u>IBM System/360 Operating System:</u><br><u>COBOL E Programmer's Guide</u> , GC24-5029<br><u>COBOL Language</u> , GC28-6516                                                                                                                                                                                                                                                                                                                                                                                                                              |





## PL/I F Object Program Messages (IHE)

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component Name              | IHE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Program Producing Message   | Object program originally coded in PL/I F language.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Audience and Where Produced | <p>For programmer: in SYSPRINT data set. (If SYSPRINT is absent, on console. In this case, ON CHECK system action messages and COPY option output are not produced.)</p> <p>Note: Certain IHE messages always appear on the console; this is indicated in the explanations of such messages.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Message Format              | <p>IHEnnnI FILE name - text IN STATEMENT xxxxx AT location message<br/>         IHEnnnI rname - text IN STATEMENT xxxxx AT location message<br/>         IHEnnnI text IN STATEMENT xxxxx AT location message</p> <p>nnn<br/>         Message serial number.</p> <p>name<br/>         Name of file associated with the error (given only in input/output messages).</p> <p>rname<br/>         Name of the library routine in which the error occurred (given only for computational subroutines):</p> <p>IHEATL Long float arctan.<br/>         IHEATS Short float arctan.<br/>         IHEATW Short float complex arctan and hyperbolic arctan.<br/>         IHEATZ Long float complex arctan and hyperbolic arctan.<br/>         IHEHTL Long float hyperbolic arctan.<br/>         IHEHTS Short float hyperbolic arctan.<br/>         IHELNL Long float logarithm.<br/>         IHELNS Short float logarithm.<br/>         IHESNL Long float sine and cosine.<br/>         IHESNS Short float sine and cosine.<br/>         IHESQL Long float square root.<br/>         IHESQS Short float square root.<br/>         IHETNL Long float tangent.<br/>         IHETNS Short float tangent.<br/>         IHEXIL Long float integer exponentiation.<br/>         IHEXIS Short float integer exponentiation.<br/>         IHEXIW Short float complex integer exponentiation.<br/>         IHEXIZ Long float complex integer exponentiation.<br/>         IHEXXL Long float general exponentiation.<br/>         IHEXXS Short float general exponentiation.<br/>         IHEXXW Short float complex general exponentiation.<br/>         IHEXXZ Long float complex general exponentiation.</p> <p>text<br/>         Message text.</p> <p>xxxxx<br/>         Number of statement in which the condition occurred. Phrase IN STATEMENT xxxxx appears only when statement number option is specified.</p> <p>location message<br/>         Location of error in program, expressed in either of two formats:</p> <p>OFFSET ± hhhhh FROM ENTRY POINT xx<br/>         OFFSET ± hhhhh FROM ENTRY POINT OF cccc ON-UNIT</p> <p>Phrase AT OFFSET... is replaced by NEAR OFFSET... if message is a model 91 or model 195 message resulting from an imprecise interrupt.</p> |

(continued)

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Comments</p>                | <p>These messages are produced usually for two reasons:</p> <ul style="list-style-type: none"> <li>• An error occurs for which no specific ON-condition exists. When the message is produced, an ERROR ON-condition is raised.</li> <li>• An ON-condition is raised by compiled code or a PL/I library routine; system action is required, for which the language specifies COMMENT as part of the necessary action.</li> </ul> <p>Input/output and computational ON-condition messages may occur because of SIGNAL statements.</p> <p>Tasking errors are associated with CALL, READ, or WRITE statements with TASK option; with WAIT statement; with TASK or EVENT variables; with PRIORITY pseudo-variable or built-in function; or with COMPLETION pseudo-variable.</p> <p>Conversion errors occur most often on input because of errors in input data or in format list.</p> <p>Non-computational program interrupt errors may be caused by a program interruption in a PL/I object program because of a severe program error which cannot be detected until execution time. Other program interrupts may arise if PL/I control blocks have been destroyed.</p> <p>After a multiple-exception imprecise interrupt on a model 91, certain exceptions will remain unprocessed if the ERROR condition is raised before all the exceptions have been handled. If the program subsequently is terminated as a direct result of the ERROR condition being raised in these circumstances, a message is produced.</p> <p>Storage management error messages are associated with storage handling and transfer of control. These errors can result from program errors, but they may arise because the save area chain, allocation chain, or pseudo-register vector has been overwritten.</p> <p>To assist error determination, use diagnostic aids with these guidelines:</p> <ol style="list-style-type: none"> <li>1. Enable SIZE, SUBSCRIPTRANGE, STRINGRANGE conditions.</li> <li>2. Do not disable any of conditions CONVERSION, FIXEDOVERFLOW, OVERFLOW, UNDERFLOW, ZERODIVIDE.</li> <li>3. Insert an on-unit for the ERROR condition in the Main Procedure, and include a PL1DUMP DD statement for the failing job step. e.g. ON ERROR SNAP CALL IHEDUMP;</li> <li>4. Recompile program with compiler options 'ST,A,X,L'.</li> <li>5. Use Linkage Editor options 'LIST,MAP', or Loader options 'PRINT,MAP'.</li> <li>6. Specify MSGLEVEL=(1,1) on job statement.</li> <li>7. Include a SYSABEND DD statement for the failing job step.</li> </ol> <p>Note: If the shared-library feature is in use, do the following before calling IBM for programming support:</p> <ul style="list-style-type: none"> <li>• Obtain a list of the options specified in the PL1LIB macro used during system generation.</li> <li>• Obtain a linkage editor map of the resident shared-library module IHELTVA.</li> </ul> |
| <p>Comments</p>                | <p>IHE messages are not included in this publication. They are documented in the publication <u>IBM System/360 Operating System: PL/I (F) Programmer's Guide</u>, GC28-6594. If your installation uses PL/I (F) frequently, you may prefer to have the IHE messages in this publication; the index tab on this page is provided so that you can remove the IHE messages from the Programmer's Guide and insert them here.</p> <p>For routing and descriptor codes of IHE messages, see Table 23 in Part V of this publication: "Routing and Descriptor Codes."</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <p>Associated Publications</p> | <p><u>IBM System/360 Operating System: PL/I (F) Programmer's Guide</u>, GC28-6594</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

Maintenance Program - Analyzer Messages (IHG)

|                             |                                                                                              |
|-----------------------------|----------------------------------------------------------------------------------------------|
| Component Name              | IHG                                                                                          |
| Program Producing Message   | Analyzer of maintenance program.                                                             |
| Audience and Where Produced | For system programmer: console.                                                              |
| Message Format              | IHGnnnI text<br>nnn Message serial number.<br>text Message text.                             |
| Comments                    | None.                                                                                        |
| Associated Publications     | <u>IBM System/360 Operating System:</u><br><u>Maintenance Program, GC27-6918</u>             |
| Problem Determination       | Refer to the fold-out in part VI of this publication for problem determination instructions. |

IHG001I NO BLANK AFTER OP (image of control card)

Explanation: No blank follows the operation code in this control card; the analyzer cannot be certain of the operand field.

System Action: The analysis run is terminated immediately after control-card processing is completed.

Programmer Response: Probable user error. Correct the construction of the control statement accompanying this message, and resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

Programmer Response: Probable user error. Correct the operand(s) of the control statement accompanying this message, and resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IHG002I OP CODE IN ERROR (image of control card)

Explanation: This control card contains an invalid operation code.

System Action: The analysis run is terminated immediately after control-card processing is completed.

Programmer Response: Probable user error. Correct the op code of the control statement accompanying this message, and resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

Explanation: This card is not a valid control card for the analyzer. (This message is written when a card contains information in column 1, but is not one of the job-information cards, which contain 2-character identifications in columns 1 and 2.)

System Action: The analysis run is terminated immediately after control-card processing is completed.

Programmer Response: Probable user error. Ensure that column 1 is blank for the UAP control statement accompanying this message, and resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IHG003I OPERAND IN ERROR (image of control card)

Explanation: This control card contains an invalid operand.

System Action: The analysis run is terminated immediately after control-card processing is completed.

Explanation: A job-information card of this type has already been read and stored. (This card is not assumed to be a continuation of the first card, since it did not immediately follow that first card in the input job stream.)

System Action: The analysis run is terminated immediately after control-card processing is completed.

IHG004I NOT AN UAP CTL CARD (image of control card)

IHG005I PRIOR CARD THIS TYPE (image of control card)

Programmer Response: Probable user error. Supply the correct job-information identification characters in columns 1-2 of the job-information statement accompanying this message. Correct the sequence of the statements, as necessary, and resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IHG006I IS NOT CONT OF PREV (image of control card)

Explanation: This card was expected to be a continuation of the last job-information card processed, but it is not. (That is, this job-information card is a different type from the one that contained a punch in its continuation column.)

System Action: The analysis run is terminated immediately after control-card processing is completed.

Programmer Response: Probable user error. Correct the condition indicated in the message text for the job-information statement accompanying this message and resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IHG007I LAST CARD PROCESSED EXPECTED A CONTINUATION NONE ENTERED

Explanation: The last analyzer control card processed, or the last job-information card processed, indicated that a continuation card was to follow, but none did.

System Action: The analysis run is terminated immediately after control-card processing is completed.

Programmer Response: Probable user error. Insert the missing continuation statement as indicated in the message text. If no continuation is desired, correct the statement that indicates a continuation. Resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IHG008I LIBSEQ CARD MISSING OR CARD NUMBER DUPLICATED

Explanation: In checking the numbers subscripted to the change PDS name, the analyzer has detected that a number is missing or duplicated.

System Action: The analysis run is terminated immediately after control-card processing is completed.

Programmer Response: Probable user error. Ensure that the LIBSEQ statements are uniquely and sequentially numbered for a particular change PDS. Then resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IHG009I ALIAS TABLE IS FULL (image of control card)

Explanation: The space allotted for storing aliases has been filled. (This message is repeated each time an alias card is read subsequent to the overflow condition.)

System Action: The analysis run is terminated immediately after control-card processing is completed.

Programmer Response: Probable user error. Take one or both of the following table-overflow steps and resubmit the job:

- Reduce the number of analysis phases per the PARM field of the Analyzer's EXEC statement; also, remove any associated control statements from the Analyzer's input job stream.
- Suppress processing one or more libraries specified in the LIBSEQ statement; also, remove any associated control statements from the Analyzer's input job stream.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IHG010I DATA TABLE IS FULL (image of control card)

Explanation: The space allotted for storing job-information cards has been filled. (This message is repeated each time a job-information card is read subsequent to the overflow condition.)

System Action: The analysis run is terminated immediately after control-card processing is completed.

Programmer Response: Probable user error. Reduce the number of job-information continuation statements and resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IHG011I NO SPACE/BASE JOB CD

Explanation: The space allotted for storing job-information cards has been filled, but no JOB card has been stored there. (And there is no room to store an analyzer-generated JOB card.)

System Action: The analysis run is terminated immediately after control-card processing is completed.

Programmer Response: Probable user error. Reduce the number of job-information continuation statements and resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IHG012I LIBSEQ TABLE IS FULL (image of control card)

Explanation: The space allotted for storing library-sequence information has been filled. (This message is repeated each time a LIBSEQ card is read subsequent to the overflow condition.)

System Action: The analysis run is terminated immediately after control-card processing is completed.

Programmer Response: Probable user error. Reduce the number of LIBSEQ statements and/or refer to message IHG009I for further table-overflow steps. Then resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IHG013I IHGUAP PARM ERROR

Explanation: The PARM field of the EXEC card for the analyzer contains an invalid parameter.

System Action: The analysis run is terminated immediately after control-card processing is completed.

Programmer Response: Probable user error. Correct the PARM field of the Analyzer's EXEC statement and resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IHG014I CARD FORMAT ERROR

Explanation: If any of the error messages related to control cards (IHG001I through IHG013I and IHG015I through IHG018I) have been given, this message is written to indicate that an error condition was detected, and that the analysis run is being terminated at this point.

Programmer Response: Probable user error. Correct the error(s) indicated in previous diagnostics and resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IHG015I DU/DP DATA MISSING

Explanation: Job-information cards for the SYSUT1 and/or the SYSRINT DD cards were not included in the control-card input.

System Action: The analysis run is terminated immediately after control-card processing is completed.

Programmer Response: Probable user error. Insert the missing job-information statement(s) and resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IHG016I FELIB TABLE IS FULL (image of control card)

Explanation: The space allotted for library-name entries in the force and except table has been filled. (This message is repeated each time a FORCE or EXCEPT card containing a new library name is read subsequent to the overflow condition.)

System Action: The analysis run is terminated immediately after control-card processing is completed.

Programmer Response: Probable user error. Refer to message IHG009I for table-overflow steps and resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IHG017I FEITEM TABLE IS FULL (image of control card)

Explanation: The space allotted for change-item entries in the force and except table has been filled. (This message is repeated each time a FORCE or EXCEPT card is read subsequent to the overflow condition.)

System Action: The analysis run is terminated immediately after control-card processing is completed.

Programmer Response: Probable user error. Refer to message IHG009I for table-overflow steps and resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IHG018I DUPLICATE ALIAS CARD (image of alias card)

Explanation: A second ALIAS card has been read for the same library member. (This card (listed in the message) is not a continuation of the ALIAS card previously read for this member.)

System Action: The analysis run is terminated immediately after control-card processing is completed.

Programmer Response: Probable user error. Apply standard continuation rules when using multiple ALIAS statements for the same library member. Then resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 4, 29.

IHG021I DISTN ERROR. CHANGE TYPE SHOULD BE M OR R OR D.

Explanation: Position 15 of the distribution control statement for this change member contains an error.

System Action: Execution continues. The change member is disregarded.

Programmer Response: Probable user error. For an existing member in the user's library, the add update is unacceptable. If the error occurred in user supplied input, correct the type-of-change field in the distribution control statement and resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 4, 5a, 7c, 29.

IHG022I DISTN ERROR. CT HDR CARD MISSING OR MISPUNCHED.

Explanation: The CT header card for this change member is either missing or contains an error.

System Action: Execution continues. The change member is disregarded.

Programmer Response: Probable user error. For user supplied input, correct or supply the missing CT header statement as the second statement in the symbolic or macro change PDS and resubmit the job for this change member.

Problem Determination: Table I, items 1, 2, 3, 4, 5a, 7c, 29.

IHG023I BLDL PERM I/O ERROR.

Explanation: A permanent input/output error occurred when the analyzer attempted to issue a BLDL macro instruction against the target library.

System Action: Execution continues. The library is closed; the current and further change items for the library are disregarded.

Programmer Response: None.

Problem Determination: Table I, items 1, 2, 3, 4, 5a, 7c, 29. Table II, Format 1: trace option - TRACE=SYS.

IHG024I DISTN ERROR. DISTN CTL CARD MISSING OR MISPUNCHED.

Explanation: The distribution control statement for this change member is either missing or contains an error.

System Action: Execution continues. The change member is disregarded.

Programmer Response: Probable user error. For user supplied input, correct or supply, as the first statement in this change PDS, the missing distribution control statement, and resubmit the job for this change member.

Problem Determination: Table I, items 1, 2, 3, 4, 5a, 7c, 29.

IHG025I DISTN ERROR. SYSLIN DD CARD MISSING OR MISPUNCHED.

Explanation: The SYSLIN DD card for this change member is either missing or contains an error.

System Action: Execution continues. The change member is disregarded.

Programmer Response: Probable user error. For user supplied input, correct or supply the missing SYSLIN DD statement in this change PDS to mark the beginning of the input data set to the linkage editor, and resubmit the job for this change member.

Problem Determination: Table I, items 1, 2, 3, 4, 5a, 7c, 29.

IHG026I DISTN ERROR. LE EXEC CARD MISSING OR MISPUNCHED.

Explanation: The EXEC card to execute the linkage editor is either missing or contains an error.

System Action: Execution of the analyzer continues. The change member is disregarded.

Programmer Response: Probable user error. For user supplied input, correct or supply, as the second statement in the change PDS, the missing EXEC statement to execute the linkage editor and resubmit the job for this change member.

Problem Determination: Table I, items 1, 2, 3, 4, 5a, 7c, 29.

IHG027I DISTN ERROR. CHANGE TYPE SHOULD BE A OR R.

Explanation: Position 15 of the distribution control statement for this change member contains an error.

System Action: Execution continues. The change member is disregarded.

Programmer Response: Probable user error. Only an add or replace update is acceptable for user forced updating to a non-existent member in a library. If the error occurred in user supplied input, correct the type-of-change field in the distribution control statement, and resubmit the job for this change member.

Problem Determination: Table I, items 1, 2, 3, 4, 5a, 7c, 29.

IHG031I member HAS BEEN DELETED.

Explanation: This message, written by the analyzer's deletion routine, indicates that the member name identified in the message has been successfully deleted from the directory of the system library in which the member resided.

Programmer Response: None.

IHG032I member WAS NOT IN DIRECTORY.

Explanation: This message, written by the analyzer's deletion routine, indicates that the member name identified in the message could not be found in the directory of the system library that supposedly contained the member.

Programmer Response: Probable user error. If the member was inadvertently deleted subsequent to the preprocessor analysis run, disregard this message.

If the member was relocated to another library, correct the DD statement for the affected library and rerun the deletion routine for this member.

Problem Determination: Table I, items 1, 2, 3, 4, 5a, 7c, 29.

IHG033I member, PERM I/O ERROR.

Explanation: This message, written by the analyzer's deletion routine, indicates that an irrecoverable I/O error occurred while trying to delete the member name identified in the message.

Programmer Response: None

Problem Determination: Table I, items 1, 2, 3, 4, 5a, 7c, 29. Table II, Format 1: trace option - TRACE=SYS.

IHG040I NO CHANGE TO LIBRARY ON LIBSEQ CARD  
libname

Explanation: A LIBSEQ card specifies a library, libname, for which no change items are included in the change PDS.

System Action: The specification is ignored.

Programmer Response: Probable user error. If job rerun is required, remove the subject record; otherwise no action is required.

IHG041I changepds member name DIST CTL CD MEMBER  
OR LIBRARY NAME ERROR

Explanation: A distribution control record from the specified change PDS contains a member name that is not in the change PDS directory, or a library name that is unrecognizable.

System Action: This error condition is discovered prior to analyzing any of the change items from this change PDS. The analyzer continues reading the distribution control records from this change PDS in order to determine whether the error condition occurs again. (Thus, this message may be repeated for the same change PDS.) However, no analysis is performed for the change items from this change PDS, and the analyzer proceeds to the analysis phase associated with the next change PDS (if any).

Programmer Response: Probable user error. If the error occurred in user supplied input, use the IEBPTCH data set utility program to list the incorrect distribution control record. Then use the appropriate data set utility program (IEBUPDAT, IEBUPDTE) to modify the incorrect member name or library name in the distribution control record.

Problem Determination: Table I, items 1, 2, 3, 4, 5a, 7c, 29.

IHG042I TABLE AREA OVERFLOW

Explanation: Insufficient space is available to build tables of control information related to the change PDS.

System Action: This condition is discovered prior to analyzing any of the change items from this change PDS. No analysis is performed for any of these change items, and the analyzer immediately proceeds to the analysis phase associated with the next change PDS (if any).

Programmer Response: Probable user error. Refer to Message IHG009I for table-overflow steps, and resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 4, 5a, 7c, 29.

IHG043I I/O ERROR

Explanation: An irrecoverable I/O error has occurred while reading the change PDS.

System Action: This condition is discovered prior to analyzing any of the change items from this change PDS. No analysis is performed for any of these change items, and the analyzer immediately proceeds to the analysis phase associated with the next change PDS (if any).

Programmer Response: None

Problem Determination: Table I, items 1, 2, 3, 4, 5a, 7c, 29. Table II, Format 1: trace option - TRACE=SYS.

IHG044I changepds NOT PROCESSED

Explanation: The change PDS identified in the message (MACCHG, SYMCHG, or UPCTL) cannot be processed. This message is written if one of the 3 preceding messages (IHG041I through IHG043I) has been given as the result of an error condition related to the change PDS.

System Action: The analysis phase associated with this change PDS has been discontinued, and the analyzer is proceeding with the next analysis phase (if any).

Programmer Response: Probable user error. Correct the error indicated in the previous diagnostic and resubmit the job.

Problem Determination: Table I, items 1, 2, 3, 4, 5a, 7c, 29.

IHG050I UPDATE ANALYSIS COMPLETED

Explanation: Normal end-of-job message.

Programmer Response: None.



## ALGOL Object Program Messages (IHI)



|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component Name              | IHI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Program Producing Message   | Object program originally coded in ALGOL language.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Audience and Where Produced | For programmer: SYSPRINT data set.<br>For operator: console.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Message Format              | <p>IHI<sup>nnn</sup>I SC <sup>nnnnn</sup> text</p> <p><sup>nnn</sup><br/>Message serial number.</p> <p><sup>nnnnn</sup><br/>Semicolon number, right-adjusted, and in decimal.</p> <p>text<br/>Message text. Where appropriate, begin with:</p> <p>DSN=<sup>nn</sup> or DSN=<sup>ddname</sup><br/>Indicates the number (nn) or name (ddname) of the data set involved in the error.</p> <p>PSW=<sup>nnnn</sup> <sup>nnnn</sup><br/>Contents of the program status word (PSW) held by the system when the error occurred.</p> <p>**<br/>Indicates that the program does not correspond to the parameters specified in the job control statements.</p> |
| Comments                    | <p>IHI messages are not included in this publication. They are documented in the publication <u>IBM System/360 Operating System: ALGOL Programmer's Guide</u>, GC33-4000. If your installation uses ALGOL frequently, you may prefer to have the IHI messages in this publication; the index tab on this page is provided so that you can remove the IHI messages from the Programmer's Guide and insert them here.</p> <p>For routing and descriptor codes of IHI messages, see Table 25 in Part V of this publication: "Routing and Descriptor Codes."</p>                                                                                        |
| Associated Publications     | <p><u>IBM System/360 Operating System:</u><br/><u>ALGOL Language</u>, GC28-6615<br/><u>ALGOL Programmer's Guide</u>, GC33-4000</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |



## Checkpoint/Restart Messages (IHJ)



|                             |                                                                                                                                                                                                                                                                                                          |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component Name              | IHJ                                                                                                                                                                                                                                                                                                      |
| Program Producing Message   | Checkpoint/restart.                                                                                                                                                                                                                                                                                      |
| Audience and Where Produced | For operator: console.                                                                                                                                                                                                                                                                                   |
| Message Format              | xx IHJnnns text<br><br>xx<br>Message reply identification (absent, if operator reply not required).<br><br>nnn<br>Message serial number.<br><br>s<br>Type code:<br><br>A Action; operator must perform a specific action.<br>I Information; no operator action is required.<br><br>text<br>Message text. |
| Comments                    | None.                                                                                                                                                                                                                                                                                                    |
| Problem Determination       | Refer to the fold-out in part VI of this publication for problem determination instructions.                                                                                                                                                                                                             |

IHJ000I CHKPT jjj [(ddn)] NOT TAKEN (xx)

Explanation: During execution of a CHKPT macro instruction, an error occurred before the checkpoint routine wrote any part of a checkpoint entry.

In the message text, jjj is the jobname, ddn is the data definition name of the checkpoint data set (which is omitted if xx is 01), and xx explains why the checkpoint entry was not written:

- | xx | <u>Explanation</u>                                                                                                                                                                                                     |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 01 | A checkpoint parameter list error was encountered. (Return code - 08.)                                                                                                                                                 |
| 02 | An uncorrectable input/output error occurred or a DD statement error was encountered while opening the data control block (DCB) for the checkpoint data set. Possibly, a DD statement was missing. (Return code - 0C.) |
| 03 | Insufficient space was available for a work area. (Return code - 08.)                                                                                                                                                  |
| 04 | The checkpoint work area extended too low in main storage; too few bytes were below the work area to write a valid record on the checkpoint device. (Return code - 08.)                                                |
| 05 | The checkpoint data set key length was not equal to zero. (Return code - 08.)                                                                                                                                          |
| 06 | The checkpoint data set record format was not U. (Return code - 08.)                                                                                                                                                   |
| 07 | The data control block (DCB) for the checkpoint data set was opened for other than basic sequential access method (BSAM) or basic partitioned access method (BPAM) processing.                                         |

- |    |                                                                                                                                                                                              |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | (Return code - 08.)                                                                                                                                                                          |
| 08 | The time interval specified in the STIMER macro instruction had not elapsed. (Return code - 08.)                                                                                             |
| 09 | The CHKPT macro instruction was issued in an exit routine other than the end of volume exit routine. (Return code - 08.)                                                                     |
| 10 | A graphic data control block (DCB) has been detected but is not supported in checkpoint restart. (Return code - 08.)                                                                         |
| 11 | The current task was a subtask. (Return code - 08.)                                                                                                                                          |
| 12 | The current task had subtasks. (Return code - 08.)                                                                                                                                           |
| 14 | A reply to a WTOR macro instruction was not received. (Return code - 08.)                                                                                                                    |
| 15 | An incorrect checkpoint identification length or format was encountered. (Return code - 08.)                                                                                                 |
| 16 | The checkpoint data set device type was not magnetic tape or direct access. (Return code - 08.)                                                                                              |
| 18 | The checkpoint data set block size was less than 600 bytes, the minimum acceptable size. (Return code - 08.)                                                                                 |
| 19 | Either MACRF=W was not specified for the checkpoint data control block (DCB), or the data control block was opened by the user's program, but was not opened for output. (Return code - 08.) |
| 20 | The step was using main storage outside of its requested region. (Return code - 08.)                                                                                                         |
| 21 | LABEL=AL or LABEL=AUL was coded in the DD statement for the checkpoint data set. These values for the LABEL                                                                                  |

- parameter must not be used in a checkpoint data set DD statement. (Return code - 08.)
- 25 An uncorrectable input/output error occurred while reading a job control table (JCT). (Return code - 0C).
  - 27 Secondary allocation occurred while writing the checkpoint data set on a direct access volume, or end of volume occurred twice while writing the checkpoint data set on tape. (Return code - 08).
  - 29 The OPTCD subparameter of the DCB parameter was coded incorrectly. The value coded is not acceptable for a checkpoint data set. (Return code - 08.)
  - 30 An uncorrectable input/output error occurred while quiescing pending input/output requests. (Return code - 0C.)

**System Action:** A checkpoint entry was not written. A restart was not requested, but any previous request for a restart remains in effect.

If MOD is not the disposition of the checkpoint data set and if this is the first issuance of the CHKPT macro instruction after the data control block for the data set was opened, then all checkpoint entries in the data set are lost. (The data control block may have been opened by the programmer or as a result of this checkpoint request.) However, if xx is 01, no entries are lost.

**Programmer Response:** If xx was 25 or 30, resubmit the job.

If xx was other than 25 or 30, probable user error.

If xx is 01, 02, 05, 06, 07, 15, 16, 18, 19, 21, or 29, correct the indicated error and resubmit the job.

If xx is 03 or 04, use a larger main storage area. Then resubmit the job.

If xx is 08, cancel the time interval before issuing the CHKPT macro instruction, and then restore the interval. Then resubmit the job.

If xx is 09, make sure that the CHKPT macro instruction is not issued in an exit routine other than the end of volume exit routine. Then resubmit the job.

If xx is 11 or 12, make sure that the CHKPT macro instruction is not issued when multiple tasks (created by the ATTACH macro instruction) exist. Then resubmit the job.

If xx is 14, issue a WAIT macro instruction after the WTOR macro instruction, but before the CHKPT macro instruction. Then resubmit the job.

If xx is 20, make the step ineligible to roll out other steps and use a REGION parameter requesting a larger main storage

area or change the step so that it does not issue a CHKPT macro instruction when it could cause rollout. Then resubmit the job.

**Operator Response:** If xx is 25 or 30, and if the programmer indicated that the job was to be canceled if it did not take checkpoints correctly, cancel the job; otherwise, none. (The job may execute successfully and not require restart.) If the error persists, specify a different location for the SYS1.SYSJOBQE data set when the system is restarted.

**Problem Determination:** Table I, items 1, 3, 13, 29.

IHJ001I jjj (ddn,utn,ser) INVLD checkid (xx)

**Explanation:** During execution of a CHKPT macro instruction, an error occurred while the checkpoint routine was writing a checkpoint entry.

In the message text, jjj is the jobname, ddn is the data definition name of the checkpoint data set, utn is the unit name, ser is the serial number of the volume containing the data set, checkid is the checkpoint identification, and xx explains why the checkpoint was invalid:

| xx | Explanation                                                                                                                                                                                                                                     |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 17 | Execution of a STOW macro instruction was unsuccessful; there was no space in the checkpoint data set directory. (Return code - 08.)                                                                                                            |
| 22 | An uncorrectable input/output error occurred while reading system control blocks from the SYS1.SYSJOBQE data set. (Return code - 0C.)                                                                                                           |
| 23 | An uncorrectable input/output error occurred while writing the checkpoint data set. (Return code - 0C.)                                                                                                                                         |
| 26 | Execution of a STOW macro instruction was unsuccessful; a permanent input/output error occurred. (Return code - 0C.)                                                                                                                            |
| 27 | End of volume occurred while writing the checkpoint data set on a direct access volume and secondary allocation was requested and allocated, or end of volume occurred twice while writing the checkpoint data set on tape. (Return code - 08.) |

**System Action:** A partial invalid checkpoint entry was written. A restart was not requested, but any previous request for a restart remains in effect.

**Programmer Response:** If checkpoint identifications specified by the programmer are being used in a sequential data set, then a checkpoint identification different from checkid in the message text must be specified for the next entry in order to make the next entry retrievable in a restart.

If xx is 17 or 27, correct the checkpoint data set directory, and resubmit the job.

If xx is 22, 23, or 26 resubmit the job.

If xx is 22, and if the programmer indicated that the job was to be canceled if it did not take checkpoints correctly, cancel the job; otherwise, none. If the error persists, specify a different location for the SYS1.SYSJOBQJE data set when the system is started again.

If xx is 23, and if the programmer indicated that the job was to be canceled if it did not take checkpoints correctly, cancel the job; otherwise, none. If the job is canceled or terminates abnormally, and a rerun is attempted, then (1) if a nonspecific volume was requested for the checkpoint data set, mount a different volume during the rerun than was used originally, or (2) vary offline the device originally containing the checkpoint data set.

If xx is 27, and if the programmer indicated that the job was to be canceled if it did not take checkpoints correctly, cancel the job; otherwise, none. If the job is canceled or terminates abnormally, attempt a rerun only if the volume containing the checkpoint data set was requested as a nonspecific volume. During the rerun, mount a volume (tape or direct access) containing more available space than was contained on the volume used originally.

Problem Determination: Table I, items 1, 3, 13, 29.

IHJ002I jjj (ddn,utn,ser) ERROR checkid

Explanation: During execution of a CHKPT macro instruction, an uncorrectable input/output error occurred while the checkpoint routine was writing a job control table (JCT) after it had written a checkpoint entry.

In the message text, jjj is the jobname, ddn is the data definition name of the checkpoint data set, utn is the unit name, ser is the serial number of the volume containing the data set, and checkid is the checkpoint identification.

System Action: A valid checkpoint entry that can be used to perform a deferred restart was written. A restart was not requested, but any previous request for a restart remains in effect.

Programmer Response: As desired, resubmit the job as is or request that a restart be performed at the indicated checkpoint.

Operator Response: The programmer indicated that the job was to be canceled if this message was issued, cancel the job; otherwise, none. (The job may execute successfully and not require restart.) If the error persists, specify a different location for the SYS1.SYSJOBQJE data set when the system is started again.

Problem Determination: Table I, items 1, 3, 13, 29.

IHJ004I jjj (ddn,utn,ser) CHKPT checkid

Explanation: A CHKPT macro instruction was executed successfully; no errors occurred.

In the message text, jjj is the jobname, ddn is the data definition name of the checkpoint data set, utn is the unit name, ser is the serial number of the volume containing the data set, and checkid is the checkpoint identification.

System Action: A valid checkpoint entry was written. A restart was requested.

Programmer Response: If a deferred restart is to be performed:

- Code the checkpoint identification (checkid in the message text) in the RESTART parameter of the JOB statement.
- If multiple checkpoint data sets were used, use ddn in the message text to determine the name of the data set containing the desired checkpoint entry. Code the data set name in the DSNAME parameter of the SYSCHK DD statement.
- If the checkpoint data set is multivolume, indicate on the SYSCHK DD statement that the volume containing the checkpoint data set is the first (or only) volume containing the data set. That is, code the serial number (ser in the message text) in the VOLUME=SER parameter or, if the data set is to be retrieved using the catalog, code the sequence number of the volume in the volume sequence subparameter of the VOLUME parameter.

Then resubmit the job.

IHJ005I jjj (ddn,utn,ser) ENQS checkid

Explanation: A CHKPT macro instruction was executed successfully. Although no errors occurred, the user's program was enqueued upon resources. (The ENQ macro instruction was issued by either the problem program, the BDAM READ macro instruction with exclusive control, the RESERVE macro instruction, or the BDAM WRITE macro instruction with variable-length (V) or undefined (U) record format.) Note that the enqueues will not be re-established if restart occurs.

In the message text, jjj is the jobname, ddn is the data definition name of the checkpoint data set, utn is the unit name, ser is the serial number of the volume containing the data set, and checkid is the checkpoint identification.

System Action: A valid checkpoint entry was written. A restart was requested.

Programmer Response: Make sure that the program re-establishes the enqueues upon restart.

IHJ006I jjj RESTARTING AT  
 {wwwwww xxxxxx  
 YYYYYY zzzzzz  
 {wwwwww xxxxxx YYYYYY zzzzzz}

Explanation: During execution of a checkpoint restart for job jjj, the main storage indicated in the message was requested. In the message text, wwwwww is the lowest address and xxxxxx is the highest address of hierarchy 0 (processor storage), and yyyyyy is the lowest address and zzzzzz is the highest address of hierarchy 1 (IBM 2361 core storage).

System Action: If the required areas are currently unavailable, restart is delayed until the areas are available.

Operator Response: In systems with MVT, use the DISPLAY A command to determine if the required areas are occupied by system tasks or by other job step tasks.

If the area is occupied by a system task, either allow the system task to continue and terminate (if a reader), stop the system task (if a reader or writer).

If the area is occupied by another job step task, either allow the job step task to continue and terminate, cancel the job step task.

IHJ007I RESTART NOT SUCCESSFUL FOR jjj (xx,ddd)

Explanation: During execution of a checkpoint restart for job jjj, an error occurred.

In the message text, xx is the code used to identify why the restart was not successful and, for tape errors, ddd identifies the unit address.

| xx | Explanation                                                                                                                                                                                                                                                                               |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 24 | An uncorrectable input/output error occurred while reading a job file control block (JFCB).                                                                                                                                                                                               |
| 28 | An uncorrectable input/output error occurred in the user's nonstandard label (NSL) routine.                                                                                                                                                                                               |
| 31 | A system failure occurred in the reader/interpreter.                                                                                                                                                                                                                                      |
| 32 | A system failure occurred during reinterpretation.                                                                                                                                                                                                                                        |
| 33 | The checkpoint data set is partitioned and the specified entry could not be found.                                                                                                                                                                                                        |
| 34 | A DD statement was missing for the restarted step.                                                                                                                                                                                                                                        |
| 35 | A checkpoint entry record of undetermined type was encountered.                                                                                                                                                                                                                           |
| 36 | An uncorrectable input/output error occurred while reading or writing a system control block on the SYS1.SYSJOBQE data set. This error will also occur if MSGLEVEL=1 is not specified on the restart JOB card of a deferred restart or in the original JOB card for an automatic restart. |
| 37 | A specified checkpoint entry could not be found.                                                                                                                                                                                                                                          |

- 38 An uncorrectable input/output error occurred while reading the checkpoint data set.
- 40 An uncorrectable input/output error occurred while reading standard volume labels.
- 44 Insufficient devices were available for restart.
- 48 An uncorrectable input/output error occurred while reading a volume label on a direct access device.
- 52 A module, which was located in the link pack area and was being used by job jjj when the checkpoint was taken, is either not in that area now or is in a different location in that area.
- 54 ANSI label used for SYSIN/SYSOUT tape.
- 60 Data set repositioning errors occurred on tape.
- 64 Record repositioning errors occurred on tape.
- 72 An uncorrectable input/output error occurred while reading a data set control block (DSCB). This message is also issued if a data set was scratched or deleted.
- 76 A direct access data set (other than the system input data set) being processed for input did not occupy the same extent as it did originally; that is, discrepancies were found in comparing the space allocations described in the data extent block (DEB) and the data set control block (DSCB).
- 79 DUMMY was specified for an open data set and either the data set was not being processed by the basic or queued sequential access methods or the checkpoint at which restart was to occur was established in an end of volume exit routine for the data set.
- 82 The TCAM control program was not active at restart.
- 83 The QNAME= parameter's DCB is not the name of a process entry in the terminal table.
- 84 A QNAME= parameter's process entry is being used by another user.
- 85 Core storage is not available in the Message Control Program to build necessary control blocks.
- 92 An error occurred during basic partitioned access method (BPAM) processing. For example, an error was detected after the convert routine or after reading the directory blocks.
- 96 An error occurred during use of the STOW macro instruction to delete a member from the directory.

System Action: Restart for job jjj is terminated.

Programmer Response: If xx is 33, 34, 35, 37, 44, 52, 76, or 79, probable user error.

If xx is 33 or 37, make sure that the checkpoint identification subparameter of the RESTART parameter of the JOB statement specifies a checkpoint entry on the volume

specified by the SYSCHK DD statement.  
Then resubmit the job.

If xx is 34, supply the missing DD  
statement. Then resubmit the job.

If xx is 35, make sure that the program  
does not write in the checkpoint data set.  
Then resubmit the job.

If xx is 38, 60, 64, or 96, either restart  
at an earlier checkpoint or repeat the  
original execution, using a different  
volume. Then resubmit the job.

If xx is 44, ensure that the UNIT  
parameter of the DD statement accurately  
reflects the device requirements for the  
data set. Then resubmit the job.

If xx is 52, make sure that the IPL  
parameters are the same parameters that  
were in use when the checkpoint was taken.

If xx is 54, make sure that the type  
specified for SYSIN/SYSOUT has IBM  
standard labels. ANSI labels are not  
permitted for SYSIN/SYSOUT.

If xx is 72, ensure that no data set has  
been scratched or deleted.

If xx is 76, make sure that no input data  
set (other than the system input data set)  
has been expanded, or rewritten, on its  
original volume. Then resubmit the job.

If xx is 79, make sure that DUMMY is  
specified only for data sets being  
processed by the queued or basic  
sequential access methods. Also, make  
sure that restart is not to occur at a  
checkpoint that was established in an end  
of volume exit routine for a data set that  
has been made dummy.

If xx is 24, 36, or 92, and if the restart  
was deferred, the restart may be attempted  
again. If the error persists, specify a  
different location for the SYS1.SYSJOBQE  
data set when the system is started again.

If xx is 28, 40, 48, or 72, and if the  
restart was deferred, the restart may be  
attempted again. If a preceding  
input/output error message for the  
restarted job identified the device in  
error, vary offline the device before  
attempting the restart again.

If xx is 31 or 32, resubmit the job.

If xx is 38, and if the restart was  
deferred, the restart may be attempted  
again. However, vary offline the device  
containing the checkpoint data set before  
attempting the restart again.

If xx is 82 or 85 make sure that the TCAM  
control program region is active and is  
large enough to add control blocks.  
Resubmit the job.

If xx is 83 or 84 make the necessary  
corrections to the QNAME= parameter and  
resubmit the job.

Problem Determination: Table I, items 1,  
3, 13, 29.

IHJ008I jjj RESTARTED

Explanation: A checkpoint restart for job  
jjj has completed successfully.

System Action: Processing of job jjj  
continues.

Operator Response: None.

IHJ



## Remote Job Entry and Conversational Remote Job Entry Messages (IHK)

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component Name              | IHK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Program Producing Message   | Remote job entry and conversational remote job entry.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Audience and Where Produced | For central operator: console.<br><br>For remote operator and programmer: terminal (CRJE only); SYSOUT (RJE).                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Message Format              | <p>IHKnnnI text (on terminal in both RJE and CRJE)<br/>                     IHKnnns text ssssssss (in RJE, on terminal and SYSOUT)<br/>                     IHKnnn text (in CRJE, on terminal)</p> <p>nnn Message serial number.<br/>                     text Message text.<br/>                     s Type code:<br/>                     A Action; operator must perform a specific action.<br/>                     I Information; no operator action is required.<br/>                     ssssssss Command or statement sequence number.</p> |
| Comments                    | RJE messages sent to the remote work stations are not included in this publication. They are documented in the publication <u>IBM System/360 Operating System: Remote Job Entry, GC30-2006</u> . CRJE messages sent to remote work stations are not included in this publication. They are documented in the publication <u>IBM System/360 Operating System: Conversational Remote Job Entry Terminal User's Guide, GC30-2014</u> .                                                                                                                |
| Associated Publications     | <u>IBM System/360 Operating System: Remote Job Entry, GC30-2006</u><br><u>Conversational Remote Job Entry System Programmer's Guide, GC30-2016</u><br><u>Conversational Remote Job Entry Terminal User's Guide, GC30-2014</u> .                                                                                                                                                                                                                                                                                                                    |
| Problem Determination       | Refer to the fold-out in part VI of this publication for problem determination instructions.                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

IHK

Remote Job Entry Messages Sent to the Central Operator

IHK000I RJSTART ACCEPTED termid unitname

Explanation: A work station (termid) has logically attached itself to the central system and is using the communications line (unitname).

System Action: Central resources are made available to the work station.

Operator Response: None.

IHK001I {uuu kkk {OFF OFF termid ON termid unitname} } NO USERS IN DIRECTORY

Explanation: This is the response to a SHOW USERS or SHOW USERS, userid command:

where

- uuu is the assigned userid.
kkk is the associated protection key.
OFF indicates the user is currently logged off.
ON indicates the user is currently logged on.
termid is the work station where the user was last or is currently logged on.
unitname is the communication line currently being used by the work station.

NO USERS IN DIRECTORY indicates there are no entries for users in the User Directory.

System Action: Reporting continues until the request has been honored.

Operator Response: None.

IHK003I RJEND ACCEPTED termid

Explanation: The work station (termid) has logically detached itself from the central system.

System Action: The work station is logically detached from the central system.

Operator Response: None.

IHK004I NO JOB(S) IN SYSTEM [jobname]

Explanation: A display of remotely submitted jobs resident in the central system has been requested. No remotely submitted jobs are in the central system, or a CENOUT or SHOW command for job (jobname) was issued and it was not found in the RJE system.

System Action: None.

Operator Response: None.

IHK005I JOB(S) NOT COMPLETE jobname userid

Explanation: A CENOUT command for a job (jobname) was issued and the job was not complete.

System Action: The request is ignored.

Operator Response: Resubmit the command when the job completes.

IHK007I JOB DELETED jobname

Explanation: Either a job (jobname) submitted at the central system has placed output in the RJE SYSOUT class, the central operator deleted a user with jobs in the system, or the operator started RJE with FORM specified in the START command after warmstarting OS.

System Action: The job and its output are deleted.

Operator Response: The operator should tell the programmer who submitted the job not to use the RJE SYSOUT class if the job deleted was a job submitted at the central installation.

IHK011I MSG PENDING STARTUP {NONE termid termid NONE}

Explanation: The operator has requested either a display of messages waiting for a work station startup or a transmission of a message to an inactive work station. If a display was requested, the requested messages are displayed. NONE indicates that no messages are pending. Termid NONE indicates that there are no messages waiting for a specified terminal.

System Action: If a display has been requested, reporting continues until all the pending messages requested are displayed. If message transmission has been requested, the message is held until the work station initiates startup procedures, unless the central operator deletes the message.

Operator Response: None.

IHK012I MSG QUEUED FOR DELIVERY {userid termid TERMINALS}

Explanation: The message specified in the MSG command is awaiting delivery either to the specified user (userid), to a specified work station (termid), or to all active work stations (TERMINALS).

System Action: The message is transmitted as soon as the work station will accept it.

Operator Response: None.

IHK013I MSG IGNORED {userid  
termid  
DISK ERROR }

Explanation: The request for message transmission cannot be serviced because:

userid - The message is directed to a user who is not logged on.  
termid - The central system has no space to keep a pending message.  
DISK ERROR - The message could not be held on the message pending data set for the terminal.

System Action: The request is ignored.

Operator Response: If immediate action is required, the operator may use the telephone. Pending messages for inactive work stations can be displayed and, if necessary, deleted to make room.

IHK014I MAX JOBS EXCEEDED jobname

Explanation: The number of job entries currently maintained by the central system is the maximum specified by the installation. The job entry (jobname) cannot be accepted.

System Action: The job is refused and a message is returned to the remote user submitting it.

Operator Response: If the condition persists, the central system must be reassembled to support more remote jobs. The operator may alleviate the condition by submitting the CENOUT command. This command causes remotely submitted job output to be written at the central installation. If this is done, the user who submitted the job should be notified.

IHK016I RJE CLOSED DOWN

Explanation: The central RJE system has completed closedown procedures.

System Action: RJE operation is terminated until the next startup. All active work stations are notified of the central closedown and are logically detached from the system.

Operator Response: None.

IHK019I JOB WAITING DELIVERY jobname

Explanation: A CENOUT command was issued for a job (jobname) which has immediate output or has already been queued for delivery to the terminal.

System Action: The command is ignored.

Operator Response: None.

IHK025I START RJE REJECTED

Explanation: A START RJE is invalid at this time. No STOP RJE has been processed since the last START RJE.

System Action: The START RJE is not processed.

Operator Response: If the start of another RJE procedure is desired, the active RJE task must be stopped. Then the START command referencing another RJE procedure may be submitted and processed.

IHK026I CENOUT jobname (class,...,class)

Explanation: A request to have the output of the remotely submitted job (jobname) written at the central installation has been accepted. The job output is placed in the listed SYSOUT classes.

System Action: The job output is removed from the RJE SYSOUT class and placed in the indicated SYSOUT classes.

Operator Response: The operator starts output writers for these classes when the output is desired.

IHK027I { termid { I  
          { A unitname  
          { P unitname uuu }  
          NO ACTIVE WORK STATIONS }

Explanation: This is the response to a SHOW TERMS, SHOW TERMS, termid, or SHOW ACTIVE command:

where

termid

is the RJE work station identifier.

I

indicates the work station is in the inactive state. This never appears in response to SHOW ACTIVE.

A

indicates the work station is in the active state.

P

indicates the work station is in the processing state.

unitname

is the communication line being used by the work station.

uuu

is the userid of the user currently logged on the work station.

NO ACTIVE WORK STATIONS

is displayed in response to a SHOW ACTIVE request when all work stations are in the inactive state.

IHK028I { jobname uuu {aaa } {COMP } { I  
                  {N/A } {INCP } { D nnn }  
          NO DEFERRED OUTPUT uuu }

Explanation: This is a response to a SHOW JOBS, SHOW JOBS, jobname, SHOW DEFER, or SHOW DEFER,userid where:

jobname

is the name of the job.

uuu

is the source userid.

aaa

is the alternate userid.



N/A indicates there is no alternate specified for the output.

COMP indicates job has completed execution.

INCP indicates job has not completed execution.

I indicates job output is immediate. This never appears in response to the SHOW DEFER commands.

D indicates job output is deferred.

nnn is the number of normal central closedowns occurring since the job was received.

NO DEFERRED OUTPUT uuu is displayed in response to a SHOW DEFER request when no deferred output is available.

System Action: Reporting continues until all of the deferred job output addressed by the request is displayed.

Operator Response: None.

IHK030I DELETED FROM USER DIRECTORY userid key

Explanation: The request to delete the indicated userid-key pair from the user directory has been serviced. Deletion of this pair leaves space for another userid-key assignment.

System Action: All jobs submitted by this user are deleted.

Operator Response: None.

IHK031I ADDED TO USER DIRECTORY userid key

Explanation: A request to add the userid-key pair to the user directory has been serviced. The user assigned this userid-key can now gain access to the system.

System Action: The userid-key is placed in the user directory.

Operator Response: None.

IHK032I USER DIRECTORY FULL userid key

Explanation: A request to add the userid-key pair to the user directory cannot be serviced. The user directory already contains the maximum number of RJE users.

System Action: The request is ignored.

Operator Response: The operator might make space available by deleting a userid-key pair no longer being used. If this is not feasible, he may have the central RJE system reassembled to support more users.

IHK033I MSGS DELETED FOR WORK STATION termid

Explanation: A request to delete the messages waiting for work station (termid) startup has been serviced.

System Action: The pending messages are deleted from the central system.

Operator Response: None.

IHK034I MSG CANNOT BE ADDED { BRDCST } termid  
 { DELAYED }

Explanation: (BRDCST) A request to add or insert a message into the broadcast message data set could not be serviced. Either the data set was full, or if the message was to be inserted, there were no higher numbered inactive slots available.

(DELAYED) The messages which follow this header could not be added to the delayed message data set when an RJEND statement was processed for work station (termid) because the data set was full or because a disk error was detected. This occurs when the RJEND is submitted from the work station or simulated because of an error condition.

System Action: (BRDCST) The request is ignored.

(DELAYED) All messages which could not be added to the data set are printed on the central printer-keyboard.

Operator Response: (BRDCST) If the message was to be inserted, there may be inactive slots above the slot specified. If there are no inactive slots, no message can be added until one slot is made inactive.

(DELAYED) Inform the work station after its next RJSTART or telephone the work station (termid) and give its operator this information.

IHK035I INVALID SLOT NUMBER BRDCST

Explanation: A slot number not within the range of 0-99 was specified on the BRDCST command.

System Action: The command is ignored.

Operator Response: Probable user error. Correct the slot number and resubmit the command.

Problem Determination: Table I, items 2, 29.

IHK036I BRDCST { NONE }  
 { nn message }

Explanation: A display of the current broadcast messages has been requested. The slot number (nn) is followed by the message text contained in the slot. Only active slots are displayed. NONE indicates that the data set is empty.

System Action: Reporting continues until the contents of all active slots are displayed.

Operator Response: None.

IHK037I INFORM INACTIVE WORK STATION jobname  
userid termid { N }  
                  { O }

Explanation: The job (jobname) submitted by the user (userid) at the work station (termid) has completed. Either a notify message (N) or immediate job output (O) is directed to this inactive work station connected via a switched line to the central system.

System Action: The message or output is held at the central system until the work station (termid) submits an RJSTART command or the user (userid) logs on at another work station.

Operator Response: The operator may telephone the work station (termid) and give its operator this information.

IHK038I INVALID LINENAME SHOW

Explanation: A request to display error information for a particular line or line group specifies an invalid linename.

System Action: The request is ignored.

Operator Response: Probable user error. Supply the correct line name and resubmit the command.

Problem Determination: Table I, items 2, 17b, 29.

IHK040I INVALID USERID operation

Explanation: The command (operation) specifies a userid which is not contained in the user directory, or if the command requests addition of a userid to the user directory, the userid is already in the directory.

System Action: The command is ignored.

Operator Response: Probable user error. Correct the userid and resubmit the command.

Problem Determination: Table I, items 11, 17b, 29.

IHK041I INVALID PROTECTION KEY userid

Explanation: A request to delete a userid-key pair in the user directory cannot be serviced. The key specified in the command does not agree with the key contained in the user directory.

System Action: The command is ignored.

Operator Response: Probable user error. Supply the correct key and resubmit the command.

Problem Determination: Table I, items 2, 11, 17b, 29.

IHK042I INVALID TERMID operation

Explanation: The command (operation) specified a termid not assigned to a work station in the RJE system.

System Action: The command is rejected.

Operator Response: Probable user error. Correct the termid and resubmit the command.

Problem Determination: Table I, items 2, 17b, 29.

IHK047I REQD PARAMETER MISSING operation

Explanation: A required parameter in the operand field is missing or invalid in the statement (operation).

System Action: The command is rejected.

Operator Response: Probable user error. Examine the statement error. Correct the parameter and resubmit the command.

Problem Determination: Table I, items 2, 29.

IHK048I ILLEGAL DELIMITER operation

Explanation: A parameter in the operand field of the command (operation) is not delimited by a comma, or, if it is the last parameter, a blank.

System Action: The command is rejected.

Operator Response: Probable user error. Correct the command.

Problem Determination: Table I, items 2, 29.

IHK049I ILLEGAL CONTINUATION operation

Explanation: The command (operation) has continuation indicated with a non blank character in column 71. Commands may not be continued.

System Action: The command is rejected.

Operator Response: Probable user error. Correct the command.

Problem Determination: Table I, items 2, 29.

IHK050I UNDEFINED KEYWORD operation

Explanation: An undefined keyword is included in the command (operation).

System Action: The command is ignored.

Operator Response: Probable user error. Correct the error.

Problem Determination: Table I, items 2, 29.



- (2) Either an error occurred reading the RJE control tables into main storage, or all the required data sets were not allocated in the RJE procedure referenced by the START command.

System Action: RJE operation is terminated.

Operator Response: Have the procedure referenced in the START command checked to insure that the required RJE data sets were allocated. If the procedure is correct, move the disk pack on which the RJE tables reside to another drive and attempt to start RJE again. If the error persists, execute the RJE initialization program (IHKINTAB). The current status of the RJE system will be lost.

Problem Determination: Table I, items 18, 30.

- (3,4) An error occurred while writing to or reading from the BRDCST directory or data set.

System Action: No further broadcast processing is done on the command (BRDCST, BRDCSTR, RJSTART, SHOW) that detected the error. Other processing continues normally.

Operator Response: The central operator should enter SHOW MSGS, then STOP RJE. Before the next START RJE, the broadcast-message data sets should be reinitialized (IHKCDBMI). All old messages are lost.

- (5,6) An error occurred while writing to or reading from the delayed message directory or data set.

System Action: No further processing is done on the command (SHOW MSGS, MSG, MSGR) that triggered the error. If the error was incurred while processing RJSTART, all processing continues except the reading of delayed messages. If the error occurred during processing of RJEND, the messages are written to the central console, and processing continues.

Operator Response: The central operator should SHOW BRDCST, then STOP RJE. Before the next START RJE, the broadcast-message data sets should be reinitialized (IHKCDBMI). All old messages are lost.

- (7) An error occurred while writing to or reading from the JED table on disk. The job (jobname) is lost in the event of a read error. Write errors are indicated by no jobname.

PURGE SYSTEM indicates no recovery could be made from a write error.

System Action: On a read error, the job is lost and the submitter is notified. On a write error, recovery is attempted; the submitter is notified only if no recovery could be made. PURGE SYSTEM indicates no recovery could be made.

Operator Response: In the event of a read error, the operator may scratch these data sets associated with the jobname indicated in the message after RJE has closed down. Otherwise, they will be deleted at the next OS warmstart. If the system could not recover from a write error, the operator should inform the work stations that all output should be requested. He should stop RJE and reinitialize the RJE control tables before starting RJE.

- (8) The OS queue manager routine has encountered a permanent I/O error on SYS1.SYSJOBQE.

System Action: RJE operation is terminated.

Operator Response: To attempt recovery without losing jobs in the system, reload the system without reformatting the queues. If this is unsuccessful, reload the system and reformat the queues.

Problem Determination: Table I, items 8a, 29.

- (9) The OS queue manager has encountered a permanent I/O error on SYS1.SYSJOBQE on a READ or WRITE request of the RJE input or SYSOUT queues.

System Action: One or more of the following may occur:

- (a) An EOT is sent to the work station aborting input or ending the current output transmission with the work station if the error occurred during normal communication with the work station.
- (b) The job identified by jobname is canceled in OS and deleted in RJE. In addition, JECL statements following the deleted job and preceding the next job entry are lost if the error occurred while reading the job entry from the RJE input queue.
- (c) If the error occurred while reading the output from the RJE SYSOUT queue, the remaining output of the job is lost.

RJE processing continues.

Operator Response: Continue operation unless the disk error persists. Reformat queues at the next IPL.

Problem Determination: Table I, items 8a, 29.

- (10) A disk error occurred while writing SYSIN data or reading SYSOUT data.

System Action: If the error occurred on SYSIN data, an EOT is sent to the remote terminal and an attempt is made to send the disk error message. The job is deleted. If the error occurred on SYSOUT data, no further output from the data set is transmitted, and the terminal receives this message. Processing continues with the remainder of the job.

IHK

Operator Response: If the error persists, STOP RJE. The error may be corrected by changing the disk pack or drive.

- (11) During RJE closedown procedures, an ECB is not removed from the OS queue manager.

System Action: The closedown procedure continues.

Operator Response: Before the next START RJE reload OS without reformatting the queues.

- (12) An error occurred while accessing the RJE tables. The following information is provided:

addr device address  
dev device type  
ddname name on DD card for RJE table being accessed  
op type of operation being attempted  
err error description  
trkaddr actual track address (7 byte hex address in the form of bbcchhr)

where:

bb represents the bin number  
cc represents the cylinder number  
hh represents the head number  
r represents the record number

accmeth access method being used.

- (13) The DCB associated with the ddname displayed could not be opened.

System Action: The initialization program is terminated.

Operator Response: Probable user error. If this is the first time that the initialization program has been run, check to be sure that the SPACE and DISP parameters on the DD statement are correct.

Problem Determination: Table I, items 2, 17b, 29.

- (14) An uncorrectable I/O error occurred while performing a write operation to the data set associated with the ddname displayed.

System Action: The initialization program is terminated.

Operator Response: Probable hardware error. Move the disk pack containing the initialization program to another drive and retry the write operation.

Problem Determination: Table I, items 18, 30.

IHK064I LINE xxx NOT OPERATIONAL

Explanation: The control unit for this line is non-operational.

System Action: The line is not serviced during this period of RJE activity. The error is ignored and communication proceeds with work stations over existing, operational communication lines. An attempt is made to service the line the next time an RJE procedure which references the line is started.

Operator Response: Before calling IBM for hardware support, check to see if the control unit is operational.

IHK065I UNABLE TO OPEN DDNAME=xxxxxxxxx

Explanation: The DDNAME for the line specified in the RJE assembly cannot be found in the RJE procedure.

System Action: The line is not serviced for this and all subsequent RJE startups which reference this RJE procedure. The error is ignored and communication with the work stations proceeds over existing, operational communication lines.

Operator Response: Notify system programmer of error in the referenced procedure.

IHK066I termid NOW RESPONDING TO POLLING

Explanation: The identified work station (termid) attached via a multidrop line has resumed to respond to polling.

System Action: None.

Operator Response: None.

IHK067I termid NOT RESPONDING TO POLLING

Explanation: The identified work station (termid) attached via a multidrop line has failed to respond to polling.

System Action: None.

Operator Response: Have the programmer responsible for the RJE assembly insure that the power is on at the remote terminal and that the polling characters were correctly specified for the work station.

Problem Determination: Table I, items 2, 17b, 29.

IHK068I RJE SUBTASK ABENDED

Explanation: An RJE subtask has terminated abnormally.

System Action: RJE operation is terminated.

Operator Response: Restart RJE operation.

IHK069I LINE xxx DEFINED INCORRECTLY

Explanation: The LCB line type does not agree with the UCB line type for line xxx.

System Action: RJE operation is terminated.

Operator Response: Notify system programmer of error in line type definition. He can redefine the line type via the RJELINE macro so that it agrees with the line's type definition in the UCB, or he may redefine the line type in the UCB to agree with that specified in the RJELINE macro.

Conversational Remote Job Entry  
Messages Sent to the Central Operator

IHK200I LOGOFF userid

Explanation: The session of the terminal user identified by the userid has terminated. This message is informational and is issued only in response to a SHOW SESS command.

System Action: None.

Operator Response: None.

IHK201I ACTIVE CRJE USER userid lineaddress time

Explanation: The terminal user identified by the userid is currently logged on the CRJE system. This message is informational and is issued in response to a SHOW USERS, a SHOW ACTIVE, or a USERID D=(userid,password) command. Time is the total time in minutes that the specified user has been active on the line identified by the lineaddress displayed. The lineaddress and time will not be displayed for the USERID request since a CRJE user can not be deleted while he is active in the system.

System Action: None.

Operator Response: None.

IHK202I USERID INVALID/NOT FOUND { SHOW } userid  
                                          { MSG }  
                                          { USERID }

Explanation: Either an invalid CRJE userid (1-7 character alphameric user identifier) was specified in the command that is displayed, a new userid containing more than 7 characters or not beginning with an alphabetic character was specified in the USERID command, or a nonexistent userid was specified in any of the commands displayed except the USERID ADD command.

System Action: The command is rejected.

Operator Response: No response is required, but the operator may correct the userid and reenter the command if he wishes.

IHK203I START OF CRJE MESSAGES

Explanation: A list of all delayed messages that are waiting to be sent to the user identified by the userid displayed in the first seven bytes of each message has been requested. This message appears only once at the beginning of the listing of delayed messages, whether for a given, or for all, valid CRJE terminal users. This message is informational and is issued in reply to a SHOW MSGS command.

System Action: The requested messages are sent to the specified user, before the next command is entered, if he is currently logged on the system or, after the log on acknowledgment message, if he is not currently logged on, when he next logs on the system. The terminal user message codes begin with the characters IHK3xx or IHK4xx. When the IHK213I END OF CRJE MESSAGES message appears at the central installation, all delayed messages have been listed for the user specified in the SHOW MSGS command or for all the valid CRJE users if no userid has been specified in the SHOW command.

Operator Response: None.

IHK204I USERID PREVIOUSLY ASSIGNED userid

Explanation: The 1-7 character alphameric userid specified in the USERID command to be added to the list of qualified CRJE users has already been assigned to another user in the CRJE system

System Action: The command is rejected.

Operator Response: No action is required, but the operator may select a new userid and reenter the command if he wishes.

IHK205I INVALID PASSWORD password

Explanation: The password specified on the USERID command is invalid because it either contains more than 8 alphameric characters, it begins with a numeric character, or it does not match the one specified on a USERID DELETE command.

System Action: The command is rejected.

Operator Response: No action is required, but the operator may correct the password and reenter the command if he wishes.

IHK206I TEXT MUST BE 1 TO 40 CHARACTERS LONG  
          { BRDCST } chars  
          { MSG } }

Explanation: The length of the message text portion of a MSG or a BRDCST command (MSG or BRDCST displayed) either equals zero or exceeds 40 characters (including blanks). If the text exceeds 40 characters, the first ten characters of the message that was too long are displayed in the position specified as chars. If the text was blank, nothing appears in the chars position.





was attempting to save the global file identified by dsname. If dsname is displayed with CRJE.SYSLIB during ABNO start-up, the CRJE start-up procedures are terminated.

System Action: If START or dsname with CRJE.SYSLIB is displayed, CRJE start-up procedures are terminated. If dsname is displayed, the data set may be lost or damaged, not saved.

Operator Response: If START or dsname with CRJE.SYSLIB is displayed and the IHK223I CRJE NOW ACTIVE message is not received, do one of the following:

1. Restart the CRJE system using the same parameter on the START command as was used for the previous startup.
2. Reallocate CRJE.SYSLIB and restart CRJE using the ABNO parameter on the START command.

If dsname is displayed, the data set in the CRJE system library is either lost or damaged. Before restarting CRJE, scratch, reallocate, and reinitialize the system library by executing IHKINT.

Problem Determination: Table I, items 9, 11, 29

IHK217I CRJE BROADCAST MESSAGES START

Explanation: A listing of the CRJE broadcast messages follows this message. The broadcast message format is BRD nnnn, where nnnn is the number of the message. This message is informational and is issued only in reply to a SHOW BRDCST command.

System Action: None.

Operator Response: None.

IHK218I CRJE BROADCAST MESSAGES END

Explanation: The listing of CRJE broadcast messages is complete.

System Action: None.

Operator Response: None.

IHK219I OUT OF MAIN STORAGE [START]

Explanation: If START is displayed, the CRJE startup procedure was unable to allocate needed main storage space. Otherwise, a terminal user has issued a command that required the allocation of additional main storage space, and the needed space was not available.

System Action: If START is displayed, CRJE startup procedures are terminated. Otherwise, the terminal command being processed is rejected.

Operator Response: No action is required, but if this message appears frequently, the operator may wish to notify the installation system programmer to increase the size of the CRJE region requirement.

IHK220I nnn LINE NOT OPERATIONAL

Explanation: The teleprocessing line identified by nnn (the line number) is not operational and can no longer be serviced.

System Action: None.

Operator Response: No action is required, but the operator may enter a MODIFY command to activate the line if he wishes.

Problem Determination: Table I, items 11, 29.

Note: This message may be sent after a MODIFY command has been issued; after receiving this message, IHK243I LINE BEING ACTIVATED may be sent to the central operator. This problem may occur because the module containing message IHK220I is resident, whereas the module containing message IHK243I is not. Therefore, when this sequence occurs, wait for message IHK243I and continue processing.

IHK221I LOGONS SUPPRESSED

Explanation: A USERID command has been issued requesting that no additional CRJE terminal users be allowed to start their sessions.

System Action: No LOGON commands are accepted from terminal users attempting to start their sessions.

Operator Response: None.

IHK222I ABNORMAL CRJE CLOSDOWN

Explanation: An irrecoverable error has occurred that requires the termination of CRJE.

System Action: CRJE operation is terminated.

Operator Response: No action is required, but you may restart CRJE operation (specifying the ABNO parameter on the START command) if message IHK223I CRJE NOW ACTIVE has not been received.

Problem Determination: Table I, items 9, 11, 29.

IHK223I CRJE NOW ACTIVE

Explanation: CRJE system start-up procedures are complete, and both remote terminal and central operator commands may now be entered.

System Action: None.

Operator Response: None.



IHK234I ACTIVE AREA NOT ON 2311 OR 2314

Explanation: The CRJE active area has not been allocated on a 2311, 2314 or 2319 storage access storage device, and CRJE cannot be started.

System Action: CRJE system start-up procedures are terminated.

Operator Response: Notify the system programmer responsible for maintaining the system that the active area must be allocated on a 2311, 2314 or 2319 storage device before CRJE can be started.

IHK235I DD CARD NOT IN PROCEDURE ddname

Explanation: The CRJE procedure does not contain the necessary DD statement identified by ddname.

System Action: The terminal user request is rejected.

Operator Response: Notify the programmer responsible for maintaining the system to add the DD statement indicated in the message to the CRJE procedure.

IHK236I MAXIMUM NO. OF CRJE USER MESSAGES REACHED

Explanation: The maximum number of messages to be kept by CRJE (specified by the installation in the assembly of the CRJE system) has been reached, and no more messages can be added to the CRJE message data set, USRMSGs.

System Action: None.

Operator Response: The operator may issue a SHOW MSGS command to list the messages for a user not currently logged on the system and then a MSG command to delete the messages in order to make available more space in the message data set.

IHK237I MAXIMUM BRDCST IDENTIFIER EXCEEDED - LAST=nnnn

Explanation: A BRDCST 'text' command has been issued requesting that a broadcast message be added to the CRJE system library. The identifier for the new message (which resulted from adding 10 to the number of the highest existing message nnnn) exceeds 9999, which is the maximum allowable number of broadcast messages that may reside in the system library.

System Action: The central command is rejected.

Operator Response: The operator may issue a BRDCST nnnn, 'text' command for the broadcast message to be added to the CRJE system library, specifying the number of the message (nnnn) so that nnnn is larger than the last existing message number and less than or equal to 9999.

IHK238I SPECIFIC SHOW SESS MAXIMUM EXCEEDED-userid

Explanation: The maximum allowable number of SHOW SESS commands for a given user (3) has been exceeded as a result of a SHOW SESS command that has been submitted for the terminal user identified by the userid displayed. This situation occurs only when multiple console support (MCS) is present in the system.

System Action: The SHOW SESS command is rejected.

Operator Response: If the operator needs the session information, he can enter a SHOW SESS command that has no userid specified.

IHK234I SHOW SESS NOT IN EFFECT [userid]

Explanation: A SHOW SESSREL command has been issued for a SHOW SESS command request that has never been submitted. If the userid is displayed, the SHOW SESSREL command was issued for a specific terminal user.

System Action: None.

Operator Response: None.

IHK240I ACTIVE AREA OUT OF SPACE

Explanation: A terminal user or central operator has issued a command that required the allocation of additional space in the active area, and the needed space was not available. Entering the USERID S command will prevent any more users from logging on and should allow some space in the active area to be made available to current users.

System Action: The terminal or central command being processed is rejected.

Operator Response: Issue a USERID SUPPRESS command to prevent any more users from logging on and allow time for some additional active area space to be freed before resuming session initiation. If this message recurs, notify the programmer responsible for maintaining the system to check the IHK306 I/O ERROR ON LIB DURING ACTIVE AREA RECOVERY message. If terminal users have been overloading the active area, increase its size and reallocate it. Otherwise, the physical size limit of the active area (4,000 lines) has been reached and no more space can be allocated.

IHK241I LIBRARY I/O ERROR ddname CRJE.LIB.userid

Explanation: An I/O error has occurred in a CRJE user library during the session of the user identified by the userid displayed or during the session of another user who is making access to the library specified in this message, and access to the library can not be made during the remainder of this session. The ddname displayed is the name on the DD statement that defines the specified CRJE user library.

System Action: No further access is made to the library during this CRJE session.

Operator Response: Notify the programmer responsible for maintaining the system to check that the DD statement defining the specified user library is correct and is in the CRJE procedure.

Problem Determination: Mount the disk pack containing the user library on another disk drive and scratch and reallocate the user library. If that fails, use either the IBCDASDI or IEHDASDR utility program to reinitialize the disk pack and reallocate the user library.

IHK242I ACTIVE AREA I/O ERROR - ABNORMAL CRJE  
CLOSEDOWN

Explanation: An irrecoverable I/O error has occurred in the CRJE active area.

System Action: The CRJE system closes down.

Operator Response: Notify the system programmer responsible for maintaining the system to correct the error. If this

Problem Determination: Mount the disk pack containing the active area on another disk drive and scratch and reallocate the active area. If that fails, use either the IBCDASDI or IEHDASDR utility program to reinitialize the disk pack and reallocate the active area.

IHK243I LINE BEING ACTIVATED lineaddress

Explanation: The teleprocessing line identified by the line address displayed is being activated in reply to a MODIFY command.

System Action: None.

Operator Response: None.

IHK244I LINE DEACTIVATED lineaddress

Explanation: The teleprocessing line identified by the line address displayed has been deactivated in reply to a MODIFY command.

System Action: None.

Operator Response: None.

IHK245I { NO { ACTIVE CRJE USERS  
{ nnn }

Explanation: A listing of the number of all terminal users currently logged on the system has been requested as a result of a SHOW ACTIVE command or an MSG command has been issued for all active users and there are none. If nnn is displayed, nnn specifies the number of valid CRJE users currently active in the system. NO is displayed when there are no CRJE users currently logged on the system.

System Action: None.

Operator Response: None.

IHK246I QUEUE MANAGER DISK ERROR [jobname]

Explanation: The OS queue manager has encountered an I/O error during the processing of a CRJE central command. The job output requested by the command may be lost.

System Action: None.

Operator Response: No action is required, but the operator may notify the system programmer responsible for maintaining the system to correct the error. If this error recurs, restart CRJE operation (coldstart), specifying the NORM and FORM parameters on the START command.

IHK247I NO CRJE USERS

Explanation: A listing of all valid potential terminal users of the CRJE system has been requested by a SHOW USERS command and no users have been assigned userids.

System Action: None.

Operator Response: Issue USERID commands to define the valid users of CRJE.

IHK248I INACTIVE CRJE USER userid

Explanation: A listing of valid potential CRJE terminal users has been requested by a SHOW USERS, userd or by a SHOW USERS command, or an MSG command has been issued for a specific userid. If the user identified by the userid is inactive, the Q operand must be specified in the MSG command. If the Q is omitted, this message results. A separate message appears for each valid user in the system specifying each one by the userid that is displayed.

System Action: None.

Operator Response: None.

IHK249I SHOW SESS IN EFFECT [userid]

Explanation: Notification as CRJE users log on and log off the system has been requested by a central operator. This message is informational and is issued in reply to a SHOW SESS command. This message is also issued in response to a SHOW SESS or SHOW SESSREL request for a specific userid when a general SHOW SESS command is already in effect (no userid will be displayed). The userid is displayed only in reply to a SHOW SESS, userid command that has been submitted when a general SHOW SESS command is not already in effect.

System Action: None.

Operator Response: None.

IHK250I SHOW SESS RELEASED [userid]

Explanation: No notification will be given as CRJE users log on and off the system. This message is informational and is issued only in reply to a SHOW SESSREL or a SHOW SESSREL,userid (userid is displayed) command.

System Action: None.

Operator Response: None.

IHK251I LINE NOT ACTIVE lineaddress

Explanation: A MODIFY command has been issued to request that a line, which is not currently active, be deactivated.

System Action: None.

Operator Response: None.

IHK252I USER LIST FULL [userid]

Explanation: The terminal user identified by the userid displayed cannot be added to the list of valid CRJE users because the number of already authorized users equals the maximum number established at CRJE assembly time. If there is no userid displayed, the message indicates to the central installation that the number of valid CRJE users, specified in the CRJETABL macro instruction at CRJE assembly time, has been exceeded during the initiation of start-up procedures for the CRJE system.

System Action: If a userid is displayed, there is no system action. If there is no userid displayed, the CRJE system start-up procedures are terminated and CRJE closes down.

Operator Response: If a userid is displayed, there is no operator response. If a userid is not displayed, notify the system programmer responsible for maintaining the CRJE system to increase the number of CRJE users authorized to use the system (in the CRJETABL macro) and then to reassemble the system.

IHK253I JOB WAITING DELIVERY jobname

Explanation: The output for the job identified by the jobname displayed has been requested by the terminal user who submitted the job. This message is informational and results from a CENOUT command request.

System Action: None.

Operator Response: None.

IHK254I ILLEGAL DELIMITER command operand

Explanation: A required delimiter (comma, parenthesis, quotation mark or an equal sign) has been omitted from the command displayed.

System Action: The command is rejected.

Operator Response: No action is required, but the operator may correct the command and reenter it if he wishes.

IHK255I MESSAGES DELETED FOR userid

Explanation: All delayed messages that were to have been sent to the CRJE user identified by the userid displayed have been deleted in reply to a MSG command.

System Action: None.

Operator Response: None.

IHK256I MSG QUEUED FOR DELIVERY userid

Explanation: The operator message that is to be sent to the CRJE user identified by the userid displayed has been placed on the delivery queue preparatory to being sent to the user. This message is informational and is issued in response to a MSG command.

System Action: None.

Operator Response: None.

IHK257I JOB COMPLETE jobname userid

Explanation: A SHOW command has been issued to request the status of the job, identified by the jobname and userid displayed, which is complete. The userid identifies the terminal user that submitted the job.

System Action: None.

Operator Response: None.

IHK258I MODIFY BEING PROCESSED lineaddress

Explanation: A MODIFY command issued for the line identified by the lineaddress displayed is still being processed. Another MODIFY command for that line cannot be processed until the current command has been processed completely.

System Action: The second MODIFY command is ignored.

Operator Response: No action is required, but the operator may wait a few minutes and then reenter the command if he wishes.

IHK259I INVALID BRDCST IDENTIFIER operand

Explanation: An invalid broadcast message number has been specified by a BRDCST command. The maximum allowable CRJE broadcast message identifier value is 9999.

System Action: The command is rejected.

Operator Response: No action is required, but the operator may correct the command and reenter it, if he wishes.

IHK260I CRJE,aaa,bb,ccccccc,dddddd,  
eeeeeeeeeeeeee,fffffffffffff,  
gggggg,hhh

Explanation: This message is followed by another message further describing the situation that has occurred. This message contains I/O error information as follows:

aaa is the unit address  
bb is the device type  
ccccccc is the ddname of the data set in which the error occurred  
dddddd is the operation attempted  
eeeeeeeeeeeeee is the error description  
fffffffffffff is the relative track and record address in hexadecimal format  
gggggg is the access method  
hhh is the partition for CRJE operation.

System Action: Refer to the message(s) that follows this for the system action.

Operator Response: Refer to the message(s) that follows this for the correct operator response.

IHK261I ACTIVE AREA CONTAINS MULTIPLE EXTENTS

Explanation: A secondary space allocation that is not contiguous with the primary active area allocation has been assigned for the active area. CRJE system start-up procedures cannot be initiated.

System Action: CRJE start-up procedures are terminated.

Operator Response: Notify the system programmer responsible for maintaining the system to reallocate the active area.

IHK263I REQUIRED PARAMETER MISSING {START  
EXEC }

Explanation: If START is displayed, a required operand has been omitted from the START command issued to start CRJE operation. If EXEC is displayed, a required operand has been omitted from the EXEC statement in the CRJE procedure.

System Action: CRJE start-up procedures are terminated.

Operator Response: If START is displayed, correct the START command and reenter it. If EXEC is displayed, notify the system programmer responsible for maintaining the system to redefine the procedure.

IHK265I LINE ALREADY ACTIVE lineaddress

Explanation: A MODIFY command has been issued requesting that a telecommunications line that is already active be activated.

System Action: None.

Operator Response: None.

IHK267I MAXIMUM NO. OF CRJE BROADCAST MESSAGES REACHED

Explanation: The maximum number of broadcast messages to be retained by CRJE, specified by the installation in the assembly of the CRJE system, has been reached, and no more messages can be added to the broadcast message data set, BRDCST.

System Action: None.

Operator Response: The operator may issue a SHOW BRDCST command to list the broadcast messages and then issue a BRDCST DELETE command to delete all messages, or BRDCST nnnn to delete a specific message, no longer needed, thereby making available space for adding more messages.

IHK268I CRJE BRDCST MESSAGE ADDED nnnn

Explanation: A broadcast message identified by the number nnnn has been added to the broadcast message data set, BRDCST, in the CRJE system library. This message is informational and is issued in reply to a BRDCST nnnn, 'text' command.

System Action: None.

Operator Response: None.

IHK269I CRJE BRDCST MESSAGE REPLACED nnnn

Explanation: A broadcast message identified by the number nnnn has replaced an existing message also numbered nnnn in the broadcast message data set, BRDCST, in the CRJE system library. This message is informational and is issued in reply to a BRDCSTnnnn, 'text' command.

System Action: None.

Operator Response: None.

IHK270I ACTIVE AREA I/O ERROR

Explanation: An irrecoverable I/O error has occurred in the CRJE active area as a result of a command request issued from the central installation. However, the CRJE system does not begin closedown procedures and CRJE operation continues.

System Action: None.

Operator Response: None.

IHK272I JOB DELETED jobname

Explanation: Either of the following two situations has occurred and the job identified by the jobname displayed has been deleted from CRJE.  
1. A job, not a CRJE job, has been submitted from the central installation with the SYSOUT class for job output or system messages specified as the CRJE SYSOUT class.

2. A job, either from a remote terminal or from the central installation, with the same name as a job that has already completed processing has been submitted with output specified to be in the CRJE SYSOUT class.

System Action: The job is deleted from the system when processing is complete.

Operator Response: None.

IHK273I OUT OF SPACE CRJE.SYSLIB (dsname)

Explanation: CRJE has not been able to obtain the disk space needed to save a data set, identified by the dsname displayed, which is a member of the CRJE system library (CRJE.SYSLIB). This message may be displayed at CRJE system close-down or start-up (ABNO specified on the START command).

System Action: If this message appears at system start-up time (ABNO specified on START command), CRJE start-up procedures will continue. Otherwise, CRJE closedown procedures will be completed.

Operator Response: None.

Operator Response: Notify the programmer responsible for maintaining the system to increase the size of the CRJE system library (CRJE.SYSLIB) and to reallocate it. If this problem recurs, the system library space requirement must be increased again.

IHK274I CRJE SUBTASK ABEND xxx

Explanation: A CRJE subtask has abended, with the completion code indicated by the xxx displayed.

System Action: CRJE closes down.

Operator Response: Notify the programmer responsible for maintaining the system to correct the error indicated by the completion code displayed.

Problem Determination: Table I, items 1, 5a, 29.

IHK



## Generalized Trace Facility Messages (IHL)



|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component Name              | IHL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Program Producing Message   | Generalized Trace Facility                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Audience and Where Produced | For the programmer: in the system output listings.<br>For the operator: on the system console.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Message Format              | <p>IHLnnns text <span style="float: right;">(in listings)</span><br/>                 xx IHLnnns text Pnn <span style="float: right;">(on console)</span><br/>                 nnn<br/>                 Message serial number.<br/>                 text<br/>                 Message text.<br/>                 xx<br/>                 Message reply identification (absent, if operator reply not required).<br/>                 s<br/>                 Type code:<br/>                 A Action; operator must perform a specific action.<br/>                 D Decision; operator must choose an alternative.<br/>                 E Eventual action; operator must preform an action when he has time.<br/>                 I Information; no operator action is required.<br/>                 W Wait; processing stopped until action is determined and performed.<br/>                 Pnn<br/>                 Partition which issued the message (MFT only).</p> |
| Comments                    | None.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Problem Determination       | Refer to the fold-out in part VI of this publication for references problem determination instructions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

IHL001A INVALID KEYWORD. RESPECIFY PARAMETERS OR REPLY U

Explanation: A keyword specified on the start command for the Generalized Trace Facility (GTF) is not correct.

System Action: GTF initialization will not continue until the operator responds to this message.

Operator Response: Probable user error. Respecify all parameters, or reply 'U' to request default values.

Problem Determination: Table I, items 2, 3, 7a, 29.

IHL002A INVALID DELIMETER. RESPECIFY PARAMETERS OR REPLY U

Explanation: The start command parameters for the Generalized Trace Facility (GTF) have been incorrectly punctuated.

System Action: GTF initialization will not continue until the operator has responded to this message.

Operator Response: Probable user error. Respecify all parameters, or reply 'U' to request default values.

Problem Determination: Table I, items 2, 7a, 29.

IHL003A INVALID OPERAND. RESPECIFY PARAMETERS OR REPLY U

Explanation: An operand specified in the start command for the Generalized Trace Facility (GTF) has been incorrectly specified.

System Action: GTF initialization will not continue until the operator has responded to this message.

Operator Response: Probable user error. Respecify all parameters, or reply 'U' to request default values.

Problem Determination: Table I, items 2, 7a, 29.

IHL004A KEYWORD(S) REPEATED. RESPECIFY PARAMETERS OR REPLY U

Explanation: A keyword has been repeated in the specification of the start command for the Generalized Trace Facility (GTF).

System Action: GTF initialization will not continue until the operator has responded to this message.

Operator Response: Probable user error. Respecify all parameters, or reply 'U' to request default values.

Problem Determination: Table I, items 2, 7a, 29.

IHL005I NO TIMESTAMP -- TIMER NOT SUPPORTED

Explanation: The timer is not supported on this system, thus the trace buffers for the Generalized Trace Facility will not contain a timestamp.

System Action: GTF continues processing.

Operator Response: None.

IHL006I GTF ACKNOWLEDGES STOP COMMAND

Explanation: The operator has issued the STOP command for GTF.

System Action: GTF is terminated.

IHL007I GTF TERMINATING ON ERROR CONDITION

Explanation: The Generalized Trace Facility region monitor has detected an error condition and is terminating GTF.

System Action: Restart GTF.

Problem Determination: Table I, items 2, 3, 7a, 29. Restart GTF USING THE GTFSNP procedure, and save the dump that is produced upon termination of GTF.

IHL012I SYSPRINT DD STATEMENT NOT SUPPLIED

Explanation: A DD statement was not provided for the SYSPRINT data set.

System Action: GTF is terminated.

Programmer Response: Probable user error. Ensure that a SYSPRINT DD statement is provided.

Problem Determination: Table I, items 2, 3, 7a, 29.

IHL013I GTF ACTIVE FROM A PREVIOUS START COMMAND.

Explanation: The Generalized Trace Facility (GTF) has previously been started.

System Action: GTF is terminated. The GTF that was previously started remains active.

Operator Response: Probable user error. To start GTF again, the active GTF must be stopped.

Problem Determination: Table I, items 2, 3, 7a, 29.

IHL014I UNSUCCESSFUL OPEN SYSPRINT DATA SET

Explanation: The SYSPRINT data set was not successfully opened.

System Action: GTF is terminated.

Programmer Response: Probable user error. Check the parameters on the SYSPRINT DD statement.

Problem Determination: Table I, items 2, 3, 7a, 29.

IHL015I STAE REQUEST UNSECESSFUL

Explanation: The STAE request for the Generalized Trace Facility was not performed.

System Action: GTF is terminated.

Operator Response: Probable user error. Ensure that the region/partition size is adequate for executing GTF.

Problem Determination: Table I, items 2, 3, 7a, 29.

IHL016I GTF INITIALIZATION UNSUCCESSFUL

Explanation: The initialization of the Generalized Trace Facility (GTF) was not successful. The exact cause of termination is given in a previous message.

System Action: GTF is terminated.

Operator Response: Take the action required by the message indicating the cause of termination.

Problem Determination: If there is no preceding message, see Table I, items 2, 3, 7a, 29. Restart GTF using the GTFSNP procedure and save the dump that is produced upon termination of GTF.

IHL022I OPEN FAILURE FOR name DATA SET

Explanation: The data set specified in the message (name) failed to open.

System Action: GTF is terminated.

Programmer Response: Probable user error. Ensure that the parameters on the DD statement are correctly specified.

Problem Determination: Table I, items 2, 3, 7a, 29. Restart GTF using the GTFSNP procedure, and save the dump that is produced upon termination of GTF.

IHL023I INSUFFICIENT ALLOCATED BUFFER SIZE --  
DEFAULT ASSIGNED

Explanation: The buffer size specified in the GTF procedure is less than the default size. The default size will be used.

System Action: GTF continues processing.

Programmer Response: Probable user error. Increase the buffer size specified in the GTF procedure so that it is greater than, or equal to, the default size.

Problem Determination: Table I, items 2, 3, 7a, 29.

IHL031I GTF INITIALIZATION COMPLETE

Explanation: Initialization of the Generalized Trace Facility has been successfully completed.

System Action: GTF continues processing.

IHL034I WARNING -- INSUFFICIENT CORE FOR ABEND

Explanation: The core storage required for an ABEND dump is not available in the GTF region/partition.

System Action: GTF continues processing. A dump will not be provided upon abnormal termination of the GTF procedure.

IHL100A SPECIFY TRACE OPTIONS

Explanation: The trace options for the Generalized Trace Facility (GTF) are to be entered in response to this message.

System Action: GTF initialization will not continue until the operator has responded to this message.

Operator Response: Enter REPLY xx,'TRACE=option,option,...,option' for the desired trace options.

IHL101A SPECIFY TRACE EVENT  
KEYWORDS -- keyword,...,keyword

Explanation: The event keywords for the Generalized Trace Facility (GTF) which correspond to the trace options specified in response to message IHL100A are to be entered in response to this message. Only those event keywords appearing in the message text (keyword,...,keyword) may be specified in the response. The keyword(s) and their corresponding trace options (as specified in the reply to message IHL100A) are as follows:

- keyword IO= for option IOP
- keyword SIO= for option SIOP
- Keyword SVC= for option SVCP
- keyword PI= for option PIP
- keywords IO= ,PI= ,SVC= for option SYSP.

System Action: GTF initialization will not continue until the operator has responded to this message.

Operator Response: Enter REPLY id,'keyword=(value,...,value),keyword=(value,...value),...' for those keywords allowed.

IHL102A CONTINUE TRACE DEFINITION OR REPLY END

Explanation: Event keywords for the Generalized Trace Facility (GTF) are to be entered in response to this message to continue trace definition. END may be entered to terminate definition.

System Action: GTF initialization will not continue until the operator has responded to this message.

Operator Response: Enter REPLY. id,'keyword=(value,...,value),keyword=(value,...,value),...' for those keywords allowed.

IHL103I TRACE OPTIONS  
SELECTED -- value,value,...,value

Explanation: The trace options specified for the Generalized Trace Facility (GTF) are noted by value,...,value. The value(s) correspond to those options specified in the response to message IHL100A or in the control statements provided by the SYS1.PARMLIB data set. If additional trace definitions were requested, the values also indicate those keywords and values provided by the SYS1.PARMLIB data set or in response to messages IHL101A and IHL102A.

System Action: GTF initialization continues.

Operator Response: If the values do not indicate the desired trace options, the options may be respecified in the response to message IHL125A.

IHL104A TRACE= KEYWORD NOT SPECIFIED

Explanation: The TRACE= keyword was not specified in the response to message IKJ100A or in the control statements provided by the SYS1.PARMLIB data set.

System Action: The control statement is not accepted.

Operator Response: Probable user error. If control statements are being provided by the SYS1.PARMLIB data set, correct the statement in error and rerun the job. If control statements are being supplied by way of the master console, enter the response again.

Problem Determination: Table I, items 2, 3, 29.

IHL105A SYNTAX ERROR. IMPROPER DELIMITER

Explanation: The response to message IHL100A, IHL101A, IHL102A, or the control statement provided by the SYS1.PARMLIB data set is incorrectly punctuated.

IHL

System Action: The control statement is not accepted.

Operator Response: Probable user error. If control statements are being entered by way of the SYS1.PARMLIB data set, correct the statement in error and rerun the job. If the control statements are being entered by way of the system console, enter the response again.

Problem Determination: Table I, items 2, 3, 29.

IHL106A NO OPTIONS SPECIFIED

Explanation: In the response to message IHL100A or in the control statement provided by the SYS1.PARMLIB data set, the TRACE= keyword is either followed by a blank, which precedes the options, or is not followed by options.

System Action: The control statement is not accepted.

Operator Response: Probable user error. If control statement are being supplied by way of the SYS1.PARMLIB data set, correct the statement in error and rerun the job. If control statements are being supplied by way of the system console, enter the response again.

Problem Determination: Table I, items 2, 3, 29.

IHL107A SYNTAX ERROR. MISSING COMMA

Explanation: In response to message IHL100A, IHL101A, or IHL102A, or in the control statements provided by the SYS1.PARMLIB data set, a comma that should appear is missing.

System Action: The control statement is not accepted.

Operator Response: Probable user error. If control statements are being provided by the SYS1.PARMLIB data set, correct the statement in error and rerun the job. If control statements are being supplied by way of the system console, enter the response again.

Problem Determination: Table I, items 2, 3, 29.

IHL108A INVALID OPTION SPECIFIED -- opt

Explanation: In the response to message IHL100A or in the control statements provided by the SYS1.PARMLIB data set, an invalid Generalized Trace Facility (GTF) option was specified. The opt denotes the invalid specification.

System Action: The control statement is not accepted.

Operator Response: Probable user error. If control statement are being provided by the SYS1.PARMLIB data set, correct the statement in error and rerun the job. If

control statements are being supplied by way of the system console, enter the response again.

Problem Determination: Table I, items 2, 3, 29.

IHL109A INVALID DEVICE SPECIFIED -- cuu

Explanation: In the response to message IHL101A or IHL102A or in the control statements provided by the SYS1.PARMLIB data set, a device address was specified in the IO=, SIO=, or IO=SIO= parameter that was not included in the system at system generation.

System Action: The control statement is not accepted.

Operator Response: Probable user error. If control statements are being provided by the SYS1.PARMLIB data set, correct the statement in error and rerun the job. If control statements are being supplied by way of the system console, enter the response again.

Problem Determination: Table I, items 2, 3, 11, 29.

IHL110A INVALID EVENT KEYWORD SPECIFIED

Explanation: A keyword was incorrectly specified in the response to message IHL101A, IHL102A, or in the control statements provided by the SYS1.PARMLIB data set.

System Action: The response is not accepted.

Operator Response: Probable user error. If control statements are being provided by the SYS1.PARMLIB data set, correct the statement in error and rerun the job. If control statements are being supplied by way of the system console, enter the response again.

Problem Determination: Table I, items 2, 3, 29.

IHL111A UNBALANCED PARENTHESIS IN KEYWORD keyword

Explanation: A parenthesis is missing for the keyword keyword in the response to message IHL101A or IHL102A or in the control statements provided by the SYS1.PARMLIB data set.

System Action: The response is not accepted.

Operator Response: Probable user error. If control statements are being provided by the SYS1.PARMLIB data set, correct the statement in error and rerun the job. If control statements are being supplied by way of the system console, enter the response again.

Problem Determination: Table I, items 2, 3, 29.

IHL112A UNALLOWABLE KEYWORD FOR THE PROMPTING SEQUENCE -- keywd

Explanation: In response to message IHL101A or IHL102A or in the control statements provided by the SYS1.PARMLIB data set a keyword, keywd in the message text, was used that was not specified in the TRACE= options when starting the Generalized Trace Facility (GTF).

System Action: The response is not accepted.

Operator Response: Probable user error. If control statements are being provided by the SYS1.PARMLIB data set, correct the statement and rerun the job. If control statements are being supplied by way of the system console, enter the response again using only those keywords noted in message IHL101A.

Problem Determination: Table I, items 2, 3, 29.

IHL113A LMT ERROR. EXCEEDED 50 DEVICES FOR IO=

Explanation: In the response to message IHL101A or IHL102A or in the control statement provided by the SYS1.PARMLIB data set, more than 50 device addresses were specified for the IO= keyword.

System Action: The response is not accepted and all previous device addresses specified in the IO= keyword are disregarded.

Operator Response: Probable user error. If control statements are being provided by the SYS1.PARMLIB data set, correct the error and rerun the job. If control statements are being entered by way of the system console, reenter no more than 50 device addresses.

Problem Determination: Table I, items 2, 3, 29.

IHL114A LMT ERROR. EXCEEDED 50 DEVICES FOR SIO=

Explanation: In response to message IHL101A, IHL102A, or in the control statements being provided by the SYS1.PARMLIB data set, more than 50 device addresses were specified for the SIO= keyword.

System Action: The response is not accepted and all previous device addresses specified in the SIO= keyword are disregarded.

Operator Response: Probable user error. If the control statements are being provided by the SYS1.PARMLIB data set, correct the error and rerun the job. If control statements are being entered by way of the system console, reenter no more than 50 device addresses.

Problem Determination: Table I, items 2, 3, 29.

IHL115A INVALID INTERRUPT CODE SPECIFIED

Explanation: In the response to message IHL101A or IHL102A or in the control statements being provided by the system console, an invalid interruption code was specified for the PI= keyword.

System Action: The response is not accepted.

Operator Response: Probable user error. If control statements are being provided by the SYS1.PARMLIB data set, correct the error and rerun the job. If control statements are being entered by way of the system console, enter the response again specifying a valid interruption code.

Problem Determination: Table I, items 2, 3, 29.

IHL116A INVALID SVC NUMBER SPECIFIED

Explanation: In the response to message IHL101A or IHL102A or in the control statements provided by the SYS1.PARMLIB data set, an SVC number greater than 255 was specified in the SVC= keyword.

System Action: The response is not accepted.

Operator Response: Probable user error. If control statements are being provided by the SYS1.PARMLIB data set, correct the error and rerun the job. If control statements are being entered by way of the system console, enter the response again specifying a valid SVC number.

Problem Determination: Table I, items 2, 3, 29.

IHL117A LMT ERROR. EXCEEDED 50 SVC NUMBERS

Explanation: In the response to message IHL101A or IHL102A or in the control statements being provided by the SYS1.PARMLIB data set, more than 50 SVC numbers were specified for the SVC= keyword.

System Action: The response is not accepted and all previous SVC numbers specified are disregarded.

Operator Response: Probable user error. If the control statements are being provided by the SYS1.PARMLIB data set, correct the error and rerun the job. If control statements are being entered by way of the system console, all, but not more than 50, of the desired SVC numbers must be reentered.

Problem Determination: Table I, items 2, 29.

IHL

IHL118I ERROR IN IHLTxxxx. yyy DISABLED.  
TIME=hh.mm.ss

Explanation: An error has occurred in the Generalized Trace Facility (GTF) module IHLTxxxx. As a result, function yyy will no longer be traced or filtered.

System Action: If GTF is not in DEBUG mode, it remains active and all specified events, except yyy, will continue to be traced. If the module name is IHLTFIL, the filtering of event yyy has been disabled and all events of that type will be traced. If GTF is in DEBUG mode, it will be immediately terminated.

Operator Response: None.

Problem Determination: Table I, items 2, 3, 13, 16, 29. Stop GTF. Start the GTFSNP procedure, EXT mode, DEBUG=YES, and specifying the same trace options specified for GTF. Execute the IMDPRDMP service aid, specifying the EDIT verb. The trace data set is the input to the IMDPRDMP service aid.

IHL120I INVALID SYSTEM NOR GTF -- INITIALIZATION TERMINATED

Explanation: An attempt was made to start GTF on a system other than MFT, MVT or MVT Multiprocessing.

System Action: GTF initialization is terminated.

Operator Response: Probable system error.

Problem Determination: Table I, items 2, 11, 29.

IHL121I SYS1.PARMLIB INPUT INDICATED

Explanation: The user has indicated that the trace options for the Generalized Trace Facility (GTF) are to be provided by a member of the SYS1.PARMLIB data set.

System Action: GTF will receive trace options from the SYS1.PARMLIB

Operator Response: None.

IHL122I MEMBER NOT SPECIFIED. PARMLIB IGNORED

Explanation: A member was not found on the SYS1.PARMLIB DD statement.

System Action: The SYS1.PARMLIB data set will not be used to supply trace options to the Generalized Trace Facility. Trace options will be supplied through the master console.

Programmer Response: Probable user error. Include a valid member name in the SYS1.PARMLIB DD statement.

Problem Determination: Table I, items 2, 3, 29.

IHL123I MEMBER ddn NOT FOUND. PARMLIB IGNORED

Explanation: The member name on the SYS1.PARMLIB DD statement, ddn, was not found in the SYS1.PARMLIB data set.

System Action: The SYS1.PARMLIB data set will not be used to supply trace options to the Generalized Trace Facility. Trace options will be supplied only through the master console.

Programmer Response: Probable user error. Include a valid member name on the SYS1.PARMLIB DD statement.

Problem Determination: Table I, items 2, 3, 25c, 29.

IHL124I GTF PARMLIB INPUT ERROR

Explanation: An error has been found in the trace option parameters specified by the SYS1.PARMLIB data set.

System Action: The trace options specified on the SYS1.PARMLIB data set will be disregarded. Trace options will be requested from the master console.

Programmer Response: Probable user error. A message indicating the exact error is in the job stream list.

Problem Determination: Table I, items 2, 3, 26c, 29.

IHL125A RESPECIFY TRACE OPTIONS OR REPLY U

Explanation: Trace options for the Generalized Trace Facility (GTF) may be respecified at this point or a reply of U may be entered to continue initialization.

System Action: GTF initialization will not continue until the operator has responded to this message.

Operator Response: If message IHL103I does not indicate the trace options you desire, respecify the desired options, beginning with TRACE=. To continue initialization, reply U.

IHL126A ILLEGAL SPECIFICATION OF TRACE OPTIONS

Explanation: No trace options other than TRC, PCI and/or SSM have been specified.

System Action: The trace options specified have not been accepted.

Operator Response: Probable user error. Reenter the trace options qualifying the options previously specified.

Problem Determination: Table I, items 2, 3, 29.

IHL127I GTF PARMLIB I/O ERROR text

Explanation: GTF detected an input/output error while reading the SYS1.PARMLIB data set. The text of the message describes the error: device address, I/O operation, error condition, and access method used.

System Action: The trace options specified in the SYS1.PARMLIB data set are disregarded. Trace options must be supplied through the master console.

Operator Response: Enter the trace options from the master console.

Problem Determination: Table I, items 29. Have a listing of the SYS1.PARMLIB data set available.

IHL128I GTF MODULE mod NOT FOUND

Explanation: The GTF module, mod, was not found.

System Action: GTF is terminated.

Operator Response: Restart GTF.

Problem Determination: Table I, items 2, 13, 25c (SYS1.LINKLIB), 29.

IHL129I BLDL I/O ERROR LOADING GTF MODULE name

Explanation: An I/O error occurred during a BLDL for module (name).

System Action: GTF is terminated.

Operator Response: Restart GTF.

Problem Determination: Table I, items 2, 13, 25c (SYS1.LINKLIB), 29.

IHL130I INSUFFICIENT CORE FOR TRACE INITIALIZATION

Explanation: There is insufficient main storage space for GTF to continue initialization.

System Action: GTF is terminated.

Operator Response: Probable user error. Increase the region/partition size and restart GTF.

Problem Determination: Table I, items 2, 3, 7a, 29.

IHL131I GTF PARMLIB ERROR DURING OPEN -- ccc

Explanation: An error occurred while attempting to open the SYS1.PARMLIB data set. The completion code is given by cc.

System Action: Trace options will not be supplied to GTF by the SYS1.PARMLIB data set. All options must be specified from the master console.

Programmer Response: Follow the directions for the completion code - ccc.

IHL



## Emulator Messages (IIx)

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component name              | IIx                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Program Producing Message   | Emulator Programs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Audience and Where Produced | For programmer: SYSPRINT and SYSEMOUT data sets.<br>For operator: console.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Message Format              | <p>IIxnnnS text (for operator and programmer)<br/>id IIxnnns text (for operator)</p> <p>x</p> <p>N - IBM 709/7090/7094/7094 II Emulator Program on System/360 Model 85.<br/>O - IBM 7074 Emulator Program on System/370 Model 165.<br/>P - IBM 7080 Emulator Program on System/370 Model 165.<br/>Q - IBM 1401/1440/1460 Emulator Program on System/370 Models 135, 1458 and 155.<br/>R - IBM 1410/7010 Emulator Program on System/370 Models 145 and 155.<br/>T - IBM 709/7090/7094/7094 II Emulator Program on System/370 Model 165.<br/>V - IBM DOS Emulator Program on System/370 Models 135, 145, and 155.</p> <p>nnn</p> <p>Message Serial Number:<br/>000 to 299 Emulator Program<br/>300 to 399 Tape Formatting Programs<br/>400 to 499 Disk Formatting Program (where applicable)<br/>500 to 599 Emulator System Writer Routine (where applicable)<br/>600 to 899 Reserved<br/>900 to 999 Available for User-written Routines</p> <p>id</p> <p>Message reply identification<br/>(absent, if operator reply not required)</p> <p>s</p> <p>Type Code:<br/>A Action; operator must perform a specific action.<br/>D Decision; operator must choose an alternative.<br/>E Eventual action; operator must perform action when he has time.<br/>I Information; no operator action is required.<br/>W Wait; processing stopped until action is determined and performed.</p> <p>text</p> <p>Message text.</p> |
| Comments                    | The messages produced by the various emulator programs are not included in this publication, but can be found in the publications listed below. The index tab IIx is provided so that emulator messages can be inserted in this publication and found easily.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Associated Publications     | <p><u>Emulating the IBM 7094 on IBM Models 85 and 165 Using OS/360, GC27-6951;</u><br/> <u>Emulating the IBM 7074 on the IBM System/370 Models 165 Using OS/360, GC27-6948;</u><br/> <u>Emulating the IBM 7080 on the IBM System/370 Model 165 Using OS/360, GC27-6952;</u><br/> <u>Emulating the IBM 1401, 1440, and 1460 on the IBM System/370 Models 135, 145, and 155 Using OS/360, GC27-6945;</u><br/> <u>Emulating the IBM 1410 and 7010 on the IBM System/370 Models 145 and 155 Using OS/360, GC27-6946.</u><br/> <u>Emulating DOS on IBM System/370 Using OS/360, GC26-3777.</u></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

IIx



## Graphic Job Processor and Satellite Graphic Job Processor Messages (IKA)

|                             |                                                                                                                                                                                                                                                                                                                 |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component Name              | IKA                                                                                                                                                                                                                                                                                                             |
| Program Producing Message   | Graphic Job Processor and Satellite Graphic Job Processor.                                                                                                                                                                                                                                                      |
| Audience and Where Produced | For programmer: SYSPRINT data set.<br>For operator: console.                                                                                                                                                                                                                                                    |
| Message Format              | IKAnnnI text<br><br>nnn Message serial number.<br>text Message text.                                                                                                                                                                                                                                            |
| Comments                    | The PRINTED RECORD option on the LOG ON frame must be selected in order to insure the reception of all messages.                                                                                                                                                                                                |
| Associated Publications     | <u>IBM System/360 Operating System:</u><br><u>User's Guide for Job Control From the IBM 2250 Display Unit, GC27-6933</u><br><u>IBM System/360 Operating System and 1130 Disk Monitor System:</u><br><u>User's Guide for Job Control From an IBM 2250 Display Unit Attached to an IBM 1130 System, GC27-6938</u> |
| Problem Determination       | Refer to the fold-out in part VI of this publication for problem determination instructions.                                                                                                                                                                                                                    |



IKA001I utn - GWRITE REG 15 = dd

**Explanation:** The Display Output routine (IKADOR) or Internal Error routine (IKAIERR) (both members of SYS1INOIKLIB) detected an error during execution of a GWRITE macro instruction to write data into the 2250 buffer. In the message text, utn is the 2250 unit on which the error occurred. Register 15 contains a decimal code indicating the error condition. Possible codes are:

| Code | Meaning                                                                                                                     |
|------|-----------------------------------------------------------------------------------------------------------------------------|
| 04   | The limits of the buffer assignment are violated, or the buffer address is invalid.                                         |
| 08   | The byte count, as computed from the output area control block (OACB), is negative, or the length is incorrectly specified. |

This message appears on the 1052 and in the printed output.

**System Action:** The graphic job processor associated with the partition or region in which the error was detected is terminated, and then restarted.

**Operator Reponse:** Probable user error. Inform the 2250 user on utn to log on again and redefine the job. Inform the programmer of the error.

**Problem Determination:** Table I, items 2, 4, 25c, 29.

**2250 Programmer Response:** Cause initial attention, log on again, and redefine the job. Consult your programmer.

IKA002I utn - GCNTRL ALM, REG 15 = dd

**Explanation:** The Display Output routine (IKADOR) detected an error during execution of a GCNTRL macro instruction to sound the audible alarm. In the message text, utn is the 2250 unit on which the error occurred. Register 15 contains a decimal code indicating the error condition. Possible codes are:

| Code | Meaning                                                                                                                                                                                        |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 04   | The limits of the buffer assignment are violated, or the buffer address is invalid.                                                                                                            |
| 12   | In a GCNTRL macro instruction, the device associated with the "dcb2 address" operand is not attached to the same display control unit as the device associated with the "dcb address" operand. |

This message appears on the 1052 and in the printed output.

**System Action:** The graphic job processor associated with the partition or region in which the error was detected is terminated, and then restarted.

**Operator Response:** Probable user error. Inform the 2250 user on utn to log on again and redefine the job. Inform the programmer of the error.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: Cause initial attention, log on again, and redefine the job. Consult your programmer.

IKA003I utn - GCNTRL STR, REG 15 = dd

Explanation: The Display Output routine (IKADOR) detected an error during execution of a GCNTRL macro instruction to start 2250 buffer regeneration. In the message text, utn is the 2250 unit on which the error occurred. Register 15 contains a decimal code indicating the error condition. Possible codes are:

| Code | Meaning                                                                                                                                                                                        |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 04   | The limits of the buffer assignment are violated, or the buffer address is invalid.                                                                                                            |
| 12   | In a GCNTRL macro instruction, the device associated with the "dcb2 address" operand is not attached to the same display control unit as the device associated with the "dcb address" operand. |

This message appears on the 1052 and in the printed output.

System Action: The graphic job processor associated with the partition or region in which the error was detected is terminated, and then restarted.

Operator Response: Probable user error. Inform the 2250 user on utn to log on again and redefine the job. Inform the programmer of the error.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: Cause initial attention, log on again, and redefine the job. Consult your programmer.

IKA004I utn - GCNTRL RMV, REG 15 = dd

Explanation: The Display Output routine (IKADOR) detected an error during execution of a GCNTRL macro instruction to remove a cursor from the 2250 buffer. In the message text, utn is the 2250 unit on which the error occurred. Register 15 contains a decimal code indicating the error condition. Possible codes are:

| Code | Meaning                                                                                                                                                                                        |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 04   | The limits of the buffer assignment are violated, or the buffer address is invalid.                                                                                                            |
| 12   | In a GCNTRL macro instruction, the device associated with the "dcb2 address" operand is not attached to the same display control unit as the device associated with the "dcb address" operand. |

This message appears on the 1052 and in the printed output.

System Action: The graphic job processor associated with the partition or region in which the error was detected is terminated, and then restarted.

Operator Response: Probable user error. Inform the 2250 user on utn to log on again and redefine the job. Inform the programmer of the error.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: Cause initial attention, log on again, and redefine the job. Consult your programmer.

IKA005I utn - GREAD CUR, REG 15 = dd

Explanation: The Display Output routine (IKADOR) or Display Input routine (IKADIR) detected an error during execution of a GREAD macro instruction to insert a cursor into the 2250 buffer. In the message text, utn is the 2250 unit on which the error occurred. Register 15 contains a decimal code indicating the error condition. Possible codes are:

| Code | Meaning                                                                                                                     |
|------|-----------------------------------------------------------------------------------------------------------------------------|
| 04   | The limits of the buffer assignment are violated, or the buffer address is invalid.                                         |
| 08   | The byte count, as computed from the output area control block (OACB), is negative, or the length is incorrectly specified. |

This message appears on the 1052 and in the printed output.

System Action: The graphic job processor associated with the partition or region in which the error was detected is terminated, and then restarted.

Operator Response: Probable user error. Inform the 2250 user on utn to log on again and redefine the job. Inform the programmer of the error.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: Cause initial attention, log on again, and redefine the job. Consult your programmer.

IKA006I utn - BUF SEG OVFL

Explanation: The Display Output routine (IKADOR) or Internal Error routine (IKAIERR) made a request to place more orders and data in the 2250 buffer than there is space available for the receipt of orders and data. In the message text, utn is the 2250 unit on which the error occurred. This message appears on the 1052 and in the printed output.

System Action: The graphic job processor associated with the partition or region in which the error was detected is terminated, and then restarted.

Operator Response: Inform the 2250 user on utn to log on again and redefine the job. Inform the programmer of the error.

Programmer Response: Probable user error. Insure that there is enough buffer space to support the particular user. Lack of buffer space could be caused by recent installation modifications or by excessive user manipulation of a GJP frame.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: Cause initial attention, log on again, and redefine the job. Consult your programmer.

IKA007I utn - OF UNKNOWN ORIGIN

Explanation: The Enter Data Processor (IKAPENT0) detected an error of unknown origin. In the message text, utn is the unit name of the 2250 unit or 1130/2250 subsystem on which the error occurred. This message appears on the 1052 and in the printed output.

System Action: The graphic job processor or satellite graphic job processor associated with the partition or region in which the error was detected is terminated, and then restarted.

Operator Response: Probable user error. Inform the user on unit or subsystem utn to log on again and redefine the job. Inform the programmer of the error.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 or 1130/2250 Programmer Response: Cause initial attention, log on again, and redefine the job. Consult your programmer.

IKA008I utn - CST ENTRY NOT ON FULLWORD BOUNDARY

Explanation: The Display Generation and Manipulation routine (IKADGM) found an entry in the Command Selection Table that is not a multiple of four bytes. Since each entry in the table must begin on a fullword boundary, each entry must be a multiple of four bytes. In the message text, utn is the 2250 unit on which the error occurred. This message appears on the 1052 and in the printed output.

System Action: The graphic job processor associated with the partition or region in which the error was detected is terminated, and then restarted.

Operator Response: Inform the 2250 user on utn to log on again and redefine the job. Inform the programmer of the error.

Programmer Response: Probable user error. Examine the Command Selection Table (IKATCSR0) for recent installation modifications.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: Cause initial attention, log on again, and redefine the job. Consult your programmer.

IKA009I CST ENTRY OVERLAP TO NEXT LINE

Explanation: When it is expanded, an entry from the Command Selection Table would overlap to the next line on the 2250 screen. The Display Generation and Manipulation routine (IKADGM) detected this error. This message appears only in the printed output.

System Action: The entry is ignored and processing resumes with the next entry.

Programmer Response: Probable user error. Examine the Command Selection Table (IKATCSR0) for recent installation modifications. If the problem recurs, do modifications.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: Consult your programmer.

IKA010I CST ENTRY TOO SHORT

Explanation: An entry in the Command Selection Table is too short. Each entry must be at least 15 bytes long. The Display Generation and Manipulation routine (IKADGM) detected this error. This message appears only in the printed output.

System Action: The erroneous entry and all entries that follow it are ignored, images associated with graphic orders and data generated by preceding entries are displayed, and control is returned to the caller.

Programmer Response: Probable user error. Examine the Command Selection Table (IKATCSR0) for recent installation modifications.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: Consult your programmer.

IKA011I utn - lmd - OCTxxxxx ERR

Explanation: An entry in the Overall Control Table is incorrect. In the message text, OCTxxxxx is the field name of the incorrect entry, lmd is the module name of the routine that detected the error, and utn is the unit name of the 2250 unit or 1130/2250 subsystem on which the error occurred. This message appears on the 1052 and in the printed output.

System Action: The graphic job processor or satellite graphic job processor associated with the partition or region in

which the error was detected is terminated, and then restarted.

Operator Response: Inform the user on unit or subsystem utn to log on again and redefine the job. Inform the programmer of the error.

Programmer Response: Probable user error. Examine the Overall Control Table for recent installation modifications. Also, examine any routine, especially the Initialization routine (IKAINIT for GJP or IKDINIT for SGJP), that refers to the table.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 or 1130/2250 Programmer Response: Cause initial attention, log on again, and redefine the job. Consult your programmer.

IKA012I PSTENTRY LNG ZERO

Explanation: The Extract routine (IKAEXT) found that the PSTENTRY field of a Parameter Selection Table contains a value of zero. This message appears only in the printed output.

System Action: The erroneous entry and all entries that follow it are ignored.

Programmer Response: Check for recent installation modifications to the Parameter Selection Table (IKATxxx0) which corresponds to the operation most recently selected.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: Consult your programmer.

IKA013I prm BAD KEY

Explanation: An unrecognizable keyword has been entered in a START GFX command. In the message text, prm is the invalid keyword entered by the operator. The error was detected by the Classname Set-Up routine (IKASD081). This message appears only on the 1052.

System Action: The command is ignored.

Operator Response: Probable user error. Reenter the command correctly.

IKA014I NO CCT UNIT

Explanation: The Specify Job Step Processor (IKAPSPE0) found no 2250 unit address or 1130/2250 subsystem address in the Console Control Table (CCT). This message appears only in the printed output.

System Action: No Data Definition (DD) statement is generated for the 2250 unit or 1130/2250 subsystem.

Programmer Response: Probable user error. Examine the Overall Control Table and the Console Control Table for recent installation modifications.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 or 1130/2250 Programmer Response: Consult your programmer.

IKA015I NO CCTSOUT FIELD

Explanation: The Specify Job Step Processor (IKAPSPE0) found no system output class in the Console Control Table. This message appears only in the printed output.

System Action: A default system output class of A is used and processing continues.

Programmer Response: Probable user error. Examine the Overall Control Table and the Console Control Table for recent installation modifications. Also, examine any routine, especially the Initialization routine (IKAINIT for GJP or IKDINIT for SGJP), that refers to the Console Control Table. The operator can assign a system output class by issuing a STOP GFX command followed by a START GFX command in which the system output class is specified.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 or 1130/2250 Programmer Response: Consult your programmer.

IKA016I PSTINMAP.LT.3

Explanation: The Extract routine (IKAEXT) found that the input location field (PSTINMAP) of a Parameter Selection Table contains a value smaller than three. This message appears only in the printed output.

System Action: No input is accepted for this entry and processing resumes with the next entry.

Programmer Response: Probable user error. Check for recent installation modifications to the Parameter Selection Table (IKATxxx0) which corresponds to the operation most recently selected.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: Consult your programmer.

IKA017I PSTINMAP.GT.351

Explanation: The Extract routine (IKAEXT) found that the input location field (PSTINMAP) of a Parameter Selection Table contains a value greater than 351. This message appears only in the printed output.

System Action: No input is accepted for this entry and processing resumes with the next entry.

Programmer Response: Probable user error. Check for recent installation modifications to the Parameter Selection Table (IKATxxx0) which corresponds to the operation most recently selected.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: Consult your programmer.

IKA018I PSTINMAP + PSTINPLEN.GT.351

Explanation: The sum of the contents of the input location field (PSTINMAP) and the contents of the input length field (PSTINPLEN) of a Parameter Selection Table entry is greater than 351. The Extract routine (IKAEXT) detected this error. This message appears only in the printed output.

System Action: No input is accepted for this entry and processing resumes with the next entry.

Programmer Response: Probable user error. Check for recent installation modifications to the Parameter Selection Table (IKATxxx0) which corresponds to the operation most recently selected.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: Consult your programmer.

IKA019I DMSG INPUT NOT ON FULLWORD BOUND

Explanation: The input to the Display Message routine (IKADMSG for GJP or IKDMSG for SGJP) is not on a fullword boundary. This message appears only in the printed output.

System Action: The input is ignored and control is returned to the caller.

Programmer Response: Probable user error. Examine the most recently selected operation processor for recent installation modifications.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 or 1130/2250 Programmer Response: Consult your programmer.

IKA020I PSTPSTAT INVALID ENTRY IGNORED

Explanation: The Display Generation and Manipulation routine found that the status byte (PSTPSTAT field) of an entry in a Parameter Selection Table contains an invalid bit pattern. This message appears only in the printed output.

System Action: The entry is ignored and processing resumes with the next entry.

Programmer Response: Probable user error. Check for recent installation modifications to the Parameter Selection Table (IKATxxx0) which corresponds to the operation most recently selected.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: Consult your programmer.

IKA021I NO INTENSIFICATION

Explanation: The Display Message routine (IKADMSG) found a request to intensify an entry that had previously been removed from the 2250 screen. This message appears only in the printed output.

System Action: The request is ignored and control is returned to the caller.

Programmer Response: Probable user error. Examine the most recently selected operation processor for recent installation modifications. Also, examine the Parameter Selection Table (IKATxxx0) which corresponds to that processor.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: Consult your programmer.

IKA022I INVALID INPUT BITS

Explanation: The Display Message routine (IKADMSG) found that the input parameter list contained invalid bit codes. This message appears only in the printed output.

System Action: The input is ignored and control is returned to the caller.

Programmer Response: Probable user error. Obtain a main storage dump and check for recent installation modifications.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: Consult your programmer.

IKA023I lmd - IKAACCTG - UNKNOWN RETURN CODE

Explanation: The user's accounting routine passed an unrecognizable return code. In the message text, lmd is the module name of the routine that detected the error. This message appears only in the printed output.

System Action: The return code is ignored and processing resumes.

Programmer Response: Probable user error. Examine the structure of the installation accounting routine.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 or 1130/2250 Programmer Response: Consult your programmer.

IKA024I utn - EXTRACT RECORD, UNKNOWN KEY

Explanation: An extract record contained an unrecognizable processor key. (An extract record is data in the CCTPWKA field of the Console Control Table.) The Recall Processor (IKAPRECO for GJP or IKDPRECO for SGJP) found the record with the unknown key. In the message text, utn is the unit name of the 2250 unit or 1130/2250 subsystem on which the error occurred. This message appears on the 1052 and in the printed output.

System Action: The graphic job processor or satellite graphic job processor associated with the partition or region in which the error was detected is terminated, and then restarted.

Operator Response: Inform the user on unit or subsystem utn to log on again and redefine the job. Inform the programmer of the error.

Programmer Response: Probable user error. Look for an operation processor added by the installation and examine existing processors for recent installation modifications.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 or 1130/2250 Programmer Response: Cause initial attention, log on again, and redefine the job. Consult your programmer.

IKA025I PST LINE OR COL TOO HIGH

Explanation: The PST LINE or PST COL field in a Parameter Selection Table contains an invalid grid line specification. The field specifies a raster unit position that is too high for displaying the designated Parameter Selection Table entry. This error was detected by the Display Generation and Manipulation routine (IKADGM). This message appears only in the printed output.

System Action: The entry is ignored and processing resumes with the next entry.

Programmer Response: Probable user error. Check for recent installation modifications to the Parameter Selection Table (IKATxxx0) which corresponds to the operation most recently selected.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: Consult your programmer.

IKA026I MSG LINE EXCEEDED

Explanation: The Display Message routine (IKADMSG for GJP or IKDMSG for SGJP) found a message that is too large to display in the message area of the screen. This message appears only in the printed output.

System Action: The message is truncated and processing continues.

Programmer Response: Probable user error. Examine the most recently selected operation processor for recent installation modifications.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 or 1130/2250 Programmer Response: Consult your programmer.

IKA027I PSTTEXT BLANK

Explanation: The Display Generation and Manipulation routine (IKADGM) found a Parameter Selection Table entry containing all blanks. This message appears only in the printed output.

System Action: The entry is ignored and processing resumes with the next entry.

Programmer Response: Probable user error. Check for recent installation modifications to the Parameter Selection Table (IKATxxx0) which corresponds to the operation most recently selected.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: Consult your programmer.

IKA028I NO PST ENTRY FOR REQUESTED INTENSIFICATION

Explanation: The Display Generation and Manipulation routine (IKADGM) found a request to intensify graphic orders and data that were not represented by a Parameter Selection Table entry. This message appears only in the printed output.

System Action: The request is ignored and control is returned to the caller.

Programmer Response: Probable user error. Examine the most recently selected operation processor for recent installation modifications.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: Consult your programmer.

IKA029I utn - lmd - BAD POST CODE

Explanation: An invalid post code was placed in the processor event control block. (The processor event control block

is the CCTPECB field of the Console Control Table.) The bad post code was placed in the block by the Display Attention routine (IKADAT) for GJP or by the Input Output routine (IKDIOR) for SGJP. In the message text, lmd is the module name of the routine that detected the error and utn is the unit name of the 2250 unit or 1130/2250 subsystem on which the error occurred. This message appears on the 1052 and in the printed output.

System Action: The graphic job processor or satellite graphic job processor associated with the partition or region in which the condition was detected is terminated, and then restarted.

Operator Response: Inform the user on unit or subsystem utn to log on again and redefine the job. Inform the programmer of the error.

Programmer Response: Probable user error. Examine the Display Attention routine (IKADAT) for GJP or the Input Output routine (IKDIOR) for SGJP for recent installation modifications.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 or 1130/2250 Programmer Response: Cause initial attention, log on again, and redefine the job. Consult your programmer.

IKA030I NO SPACE FOR PST ENTRY

Explanation: The Display Generation and Manipulation routine (IKADGM) does not have enough space on the 2250 screen to display a Parameter Selection Table entry. This message appears only in the printed output.

System Action: The entry is ignored and processing resumes with the next entry.

Programmer Response: Probable user error. Check for recent installation modifications to the Parameter Selection Table (IKATxxx0) which corresponds to the operation most recently selected.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: Consult your programmer.

IKA031I PST LINE IN KEY AREA

Explanation: The Display Generation and Manipulation routine (IKADGM) found a Parameter Selection Table entry that has the logical line in the area normally occupied by the END and CANCEL boxes. This message appears only in the printed output.

System Action: The entry is ignored and processing resumes with the next entry.

Programmer Response: Probable user error. Check for recent installation modifications to the Parameter Selection Table (IKATxxx0) which corresponds to the operation most recently selected.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: Consult your programmer.

IKA032I utn PSTENTRY LNG INVALID

Explanation: The Display Generation and Manipulation routine (IKADGM) found a Parameter Selection Table entry of incorrect length. In the message text, utn is the 2250 unit on which the error occurred. This message appears on the 1052 and in the printed output.

System Action: The graphic job processor associated with the partition or region in which the condition was detected is terminated, and then restarted.

Operator Response: Inform the 2250 user on utn to log on again and redefine the job. Inform the programmer of the error.

Programmer Response: Probable user error. Check for recent installation modifications to the Parameter Selection Table (IKATxxx0) which corresponds to the operation most recently selected.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: Cause initial attention, log on again, and redefine the job. Consult your programmer.

IKA033I PSTTEXT OVERFLOW

Explanation: The Display Generation and Manipulation routine (IKADGM) found that the text of a Parameter Selection Table entry is too long to display on one line of the 2250 screen. This message appears only in the printed output.

System Action: Orders are generated to display only the amount of text necessary to fill one of the lines on the 2250 screen, the request to display the remaining text is ignored, and processing resumes with the next entry.

Programmer Response: Probable user error. Check for recent installation modifications to the Parameter Selection Table (IKATxxx0) which corresponds to the operation most recently selected.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: Consult your programmer.

IKA034I PSTINPLEN ERR

Explanation: The Display Generation and Manipulation routine (IKADGM) found that the PSTINPLEN field in the Parameter Selection Table contains an invalid input length for its associated entry. The field contains either a zero for an entry that requires input or a value less than two for a multiple choice entry. Each multiple-choice entry should have an input length of at least two. This message appears only in the printed output.

System Action: In the first case, only the text portion of the entry will appear on the screen. In the second case, the entry is ignored and processing resumes with the next entry.

Programmer Response: Probable user error. Check for recent installation modifications to the Parameter Selection Table (IKATxxx0) which corresponds to the operation most recently selected.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: Consult your programmer.

IKA035I utn - lmd - CCTCCR VIOLATION

Explanation: The CCTCCR field in the Console Control Table contains an unrecognizable keyword. The keyword does not match any of the keywords in the Command Selection Table, indicating that a request has been made for a processor routine that the graphic job processor or satellite graphic job processor does not recognize. In the message text, lmd is the module name of the routine that detected the error and utn is the unit name of the 2250 unit or 1130/2250 subsystem on which the error occurred. This message appears on the 1052 and in the printed output.

System Action: The graphic job processor or satellite graphic job processor associated with the partition or region where the error was detected is terminated, and then restarted.

Operator Response: Inform the user on unit or subsystem utn to log on again and redefine the job. Inform the programmer of the error.

Programmer Response: Probable user error. Examine any operation processor recently added by the installation. Examine existing operation processors and the Command Selection Table (IKATCSTO) for GJP or the 1130 PCNTL routine for SGJP for recent installation modifications. Determine whether a routine added or modified by the installation has destroyed information in the Console Control Table.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 or 1130/2250 Programmer Response: Cause initial attention, log on again, and redefine the job. Consult your programmer.

IKA036I IKAXxxxx - INPUT MAP ERR

Explanation: A request has been made to intensify a Parameter Selection Table entry. However, the input map of the parameter list passed to the GENINT subroutine in the Display Message routine (IKADMSG) does not match the contents of the input map field (PSTINMAP) for any entry. In the message text, IKAXxxxx is the name of the routine that detected the error. This message appears only in the printed output.

System Action: The intensification request is ignored and control is returned to the caller.

Programmer Response: Probable user error. Check for recent installation modifications to the Parameter Selection Table (IKATxxx0) which corresponds to the operation most recently selected. Determine whether an operation processor was recently added or modified by the installation.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: Consult your programmer.

IKA037I utn LOG ON

Explanation: The user has completed a LOG ON frame, thus beginning a session at the 2250 unit or 1130/2250 subsystem indicated in the message text by utn. This message does not indicate an error, but is additional information to help the operator control the multiprogramming environment. This message appears only on the 1052.

Operator Response: None.

IKA038I SGSYS INVAL, MVT ASSUMED

Explanation: The JCL Generator (IKAJCL) found an invalid value in the SGSYS field in the System Generation Data module (IKASGD). This field indicates whether the MVT or MFT option of the operating system is being used. This message appears only on the printed output.

System Action: The graphic job processor or satellite graphic job processor assumes that it is being used with the MVT option of the operating system.

Programmer Response: Probable user error. Check the system generation output to ensure that the IKASGD module has the correct information. This condition could be caused by an installation routine destroying information in the Console Control Table or the Overall Control Table.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 or 1130/2250 Programmer Response:  
Consult your programmer.

IKA039I PROCESSOR INPUT ERROR

Explanation: The JCL Generator (IKAJCL) found invalid input. This message appears only in the printed output.

System Action: The input is ignored and processing resumes.

Programmer Response: Probable user error. Examine the most recently selected operation processor and the Display Attention routine (IKADAT) for GJP or the 1130 PCNTL routine for SGJP for recent installation modifications.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 or 1130/2250 Programmer Response:  
Consult your programmer.

IKA040I prm PARM LNG INVALID

Explanation: In a START GFX command, a subparameter of keyword parameter prm is invalid. The parameter is longer than permitted. The error was detected by the Classname Set-Up routine (IKASD081). This message appears only on the 1052.

System Action: The command is ignored.

Operator Response: Probable user error. Reenter the command correctly.

IKA041I MAKE prm { ALPHA  
                  NUMERIC  
                  A THRU O }

Explanation: In a START GFX command, a subparameter of keyword parameter prm is invalid. According to the message text, the parameter is either: (1) not alphabetic when it should be, (2) not numeric when it should be, or (3) does not consist of a letter A thru O. The error was detected by the Classname Set-Up routine (IKASD081). This message appears only on the 1052.

System Action: The command is ignored.

Operator Response: Probable user error. Reenter the command correctly.

IKA042I prm INVALID

Explanation: In a START GFX command, a subparameter of keyword parameter prm is invalid. The error was detected by the Classname Set-Up routine (IKASD081). This message appears only on the 1052.

System Action: The command is ignored.

Operator Response: Reenter the command correctly.

IKA043I DONT USE MODIFY

Explanation: The Command Processing routine (IKASD083) has encountered a MODIFY GFX command. This command is not supported by the Graphics Interface Task. This message appears only on the 1052.

System Action: The command is ignored.

Operator Response: None.

IKA044I I/O ERR, GFX

Explanation: The Graphics Interface Task (GFX) has detected a severe Queue Manager input/output error which has caused GFX to be terminated. No job can be defined using the graphic job processor until GFX is restarted. This message appears only on the 1052.

System Action: The user's foreground jobs are allowed to complete processing. However, the users on 2250 units or 1130/2250 subsystems will receive no notification when processing is completed and no system messages will be displayed.

Operator Response: None. However, be prepared for subsequent related messages which will require action.

Programmer Response: The GFX message class parameter in the START GFX command can be respecified to assign GFX messages to a different queue.

Problem Determination: Table I, items 2, 4, 25c, 29.

IKA045E INFORM USER ON utn

Explanation: This message adds related information to message IKA044I. It does not indicate an error, but provides information to help the operator control the multiprogramming environment. In the message text, utn is the unit name of the 2250 unit or 1130/2250 subsystem affected. This message appears only on the 1052.

Operator Response: Use the telephone or some other method to inform the user that:

- A severe input/output error has occurred and the graphic job processor or satellite graphic job processor is no longer available.
- His problem program will be completed, but he will receive no notification of completion.
- No new job may be defined via the graphic job processor or satellite graphic job processor until GFX is restarted.

Restart GFX and inform the user on unit or subsystem utn that he may initiate a new session at the 2250 unit or 1130/2250 subsystem.

2250 or 1130/2250 Programmer Response:  
Cause initial attention, log on again, and redefine the job.

IKA046I START GFX IGNORED

Explanation: The Graphic Interface Task was processing when a START GFX command was entered. The condition was detected by the GFX Initialization routine (IKASD080). This message appears only on the 1052.

System Action: The command is ignored.

Operator Response: None.

IKA047I jjj - SYSOUT FOR Y DELETED

Explanation: An output queue entry (consisting of either a system message block, a data set block, or both) for a job that was not started via the graphic job processor or satellite graphic job processor at this session used the same output class assigned to the Graphic Interface Task (GFX). An I/O error occurred when GFX attempted to enqueue this output on sysout class Y. In the message text, jjj is the name of the job whose output was deleted. This message appears only on the 1052.

System Action: The sysout is deleted and no hard copy output is available.

Operator Response: Follow shop practice to ensure that non-graphic jobs do not use the GFX output class.

Programmer Response: Design and set up the system to support shop practice for output classes, or instruct the operator to issue a STOP GFX command and restart GFX specifying a different queue for GFX messages.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 or 1130/2250 Programmer Response: Follow programmer instructions concerning printed output.

IKA048I jjj SYSOUT ON Y

Explanation: An output queue entry (consisting of either a system message block, a data set block, or both) for a job that was not started via the graphic job processor or satellite graphic job processor at this session used the same system output class previously assigned to the Graphics Interface Task (GFX). In the message text, jjj is the name of the job containing the improper system output class. This message appears only on the 1052.

System Action: The output queue entry is enqueued for print output class Y.

Operator Response: Follow shop practice to ensure that non-graphic jobs do not use the GFX output class.

Programmer Response: Design and set up system to support shop practice for output classes.

Problem Determination: Table I, items 2, 29.

IKA049I DEQ ERR, CODE=hh

Explanation: The Main Logic routine (IKASD082) encountered an unrecognizable code that was passed to it by the QUEUE Manager Dequeue routine after that routine attempted to dequeue a system output job. The code is shown in the message. This message appears only on the 1052.

System Action: Processing continues with the next job.

Operator Response: If the situation recurs, consult the programmer.

Programmer Response: Examine the Main Logic routine (IKASD082) and the Enque in Print Class routine (IKASDENQ) for recent installation modifications or Operating System/360 changes.

Problem Determination: Table I, items 2, 25c, 29.

IKA050I utn LOG OFF

Explanation: The user has completed a LOG OFF frame, thus ending his session at the 2250 unit or 1130/2250 subsystem indicated in the message by utn. This message does not indicate an error, but is additional information to help the operator control the multiprogramming environment. This message appears only on the 1052.

Operator Response: None.

IKA051E GFX READY

Explanation: This message notifies the operator that processing of the START GFX command has been completed and that the Graphics Interface Task is now functioning. This message does not indicate an error, but is additional information to help the operator control the multiprogramming environment. This message appears only on the 1052.

Operator Response: Enter one or more VARY ONGFX commands to enable 2250(s) for graphic job processor operations or 1130/2250 subsystem(s) for satellite graphic job processor operations. If no VARY ONGFX command is issued, no user will be able to perform graphic job processor or satellite graphic job processor operations.

IKA052I utn - lmd - BAD RETURN CODE

Explanation: An unrecognizable return code was encountered. The module lmd received the return code from a subroutine to which it had given control. In the message text, utn is the unit name of the 2250 unit or 1130/2250 subsystem on which the error occurred. This message appears only in the printed output.

System Action: The graphic job processor or satellite graphic job processor associated with the partition or region in which the error was detected is terminated, and then restarted.

Programmer Response: Probable user error. Examine the routine which detected the error for recent installation

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 or 1130/2250 Programmer Response: Cause initial attention, log on again, and redefine the job. Consult your programmer.

IKA053I MAKE MSGF UNIQUE

Explanation: After a START GFX command, the message class (MSGF=) assigned to GJP foreground jobs was found to be equal to the message class (PRT=) assigned to the print output class. The error was detected by the Classname Set-Up routine (IKASD081). This message appears only on the console issuing the command.

System Action: The command is ignored.

Operator Response: Reenter the command, making sure that message class MSGF is not equal to message class PRT.

IKA054I GFX STOPPED

Explanation: The Graphic Interface Task (GFX) has been terminated as a result of a STOP GFX command or a serious internal error. This is not an error message, but is additional information to help the operator control the multiprogramming environment. This message appears only on the 1052.

Operator Response: GFX may be restarted, if desired, by following standard starting procedure. Until GFX is restarted, users on the 2250 units or 1130/2250 subsystems cannot define jobs via the graphic job processor or satellite graphic job processor.

IKA055I utn UNSUCCESSFUL SPAR dd

Explanation: An attempt to specify the attention routine for the graphic job processor using the SPAR macro instruction was unsuccessful. In the message text, utn is the 2250 unit on which the error occurred and dd is a decimal code indicating the error. Possible codes are:

| Code | Meaning                                                                                                        |
|------|----------------------------------------------------------------------------------------------------------------|
| 04   | The graphic attention control block (GACB) does not contain the address of a graphic data control block (DCB). |
| 08   | The GACB was specified by a previous SPAR macro instruction.                                                   |
| 12   | Parameter list is less than two full words.                                                                    |
| 20   | (MVT only) The SPAR macro instruction was issued by a task                                                     |

other than the one that opened the DCB, or one of its subtasks.

This message appears only on the 1052.

System Action: The graphic job processor associated with the partition or region in which the error was detected is terminated, and control is returned to the operating system.

Operator Response: Inform the 2250 user that GJP has terminated and that he should begin a new session. Inform the programmer of the error.

Programmer Response: Probable user error. Examine the GACB and the graphic DCB for recent installation modifications.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: Cause initial attention, log on again, and redefine the job.

IKA056I utn OPEN ddn DCB UNSUCCESSFUL

Explanation: An attempt to open a data control block (DCB) was unsuccessful. In the message text, ddn is the ddname and utn is the unit name of the 2250 unit or 1130/2250 subsystem on which the error occurred. This message appears only on the 1052.

System Action: The graphic job processor or satellite graphic job processor associated with the partition or region in which the error was detected is terminated, and control is returned to the operating system.

Operator Response: Inform the user on unit or subsystem utn that GJP or SGJP has terminated and that he should begin a new session. Inform the programmer of the error.

Programmer Response: Probable user error. Examine the GJP cataloged procedure or the specified DCB for recent installation modifications.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 or 1130/2250 Programmer Response: Cause initial attention, log on again, and redefine the job.

IKA057I utn INSUFF BUFFER

Explanation: There is insufficient buffer space available to support the graphic job processor. In the message text, utn is the 2250 unit on which the error occurred. This message appears only on the 1052.

System Action: The graphic job processor associated with the partition or region in which the error was detected is terminated, and control is returned to the operating system.

Operator Response: Request other 2250 users to release buffer space. Inform the 2250 user to begin a new session.

Programmer Response: Probable user error.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: Cause initial attention, log on again, and redefine the job.

IKA058I utn ASGNBFR ERR dd

Explanation: The buffer space requested could not be assigned to the graphic job processor. In the message text, utn is the 2250 unit on which the error occurred and dd is a decimal code indicating the error condition. Possible codes are:

| Code | Meaning                                                          |
|------|------------------------------------------------------------------|
| 04   | Number of sections requested exceeds number presently available. |
| 08   | Contiguous sections not available to satisfy request.            |
| 12   | Invalid or unopened data control block (DCB).                    |
| 24   | Invalid 'byte count address' operand.                            |

This message appears only on the 1052.

System Action: The graphic job processor associated with the partition or region in which the error was detected is terminated, and control is returned to the operating system.

Operator Response: For codes 04 and 08, request other users to release buffer space. For all codes, inform the 2250 user that GJP has terminated and that he should begin a new session.

Programmer Response: Probable user error. Examine the Initialization routine (IKAINIT) for recent installation modifications

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: Cause initial attention, log on again, and redefine the job.

IKA059I utn INVALID UNIT ADDRESS IN CIB

Explanation: An invalid 2250 unit or 1130/2250 subsystem address was specified. The START GFP utn command or START SGJP utn command does not have a valid unit or subsystem address, and GJP or SGJP has been started without one. In the message text, utn is the unit name of the 2250 unit or 1130/2250 subsystem that could not be started. This message appears only on the 1052.

System Action: The graphic job processor or satellite graphic job processor associated with the partition or region in which the error was detected is

terminated, and control is returned to the operating system.

Operator Response: Inform the programmer of the error.

Programmer Response: Probable user error. Examine the Overall Control Table and routines referencing it for recent installation modifications. Also examine the cataloged procedure used to start GJP

Problem Determination: Table I, items 2, 4, 25c, 29.

IKA060I lmd GETMAIN UNSUCCESSFUL

Explanation: Main storage space requested by a GJP or SGJP routine via a GETMAIN macro instruction was not allocated. In the message text, lmd is the module name of the routine which detected the error. This message appears only on the 1052.

System Action: The graphic job processor or satellite graphic job processor associated with the partition or region in which the error was detected is terminated, and control is returned to the operating system.

Operator Response: Inform the user on unit or subsystem utn that GJP or SGJP has terminated and that he should begin a new session. Allocate more space to the partition in which the error occurred. If the error recurs, inform programmer.

Programmer Response: Probable user error. Examine the Initialization routine (IKAINIT for GJP or IKDINIT for SGJP) for recent installation modifications.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 or 1130/2250 Programmer Response: Cause initial attention, log on again, and redefine the job.

IRA061I utn END OF DATA ON dsn

Explanation: An end of data condition was found on the data set dsn. The Initialization routine (IKAINIT for GJP or IKDINIT for SGJP) detected the condition. In the message text, utn is the unit name of the 2250 unit or 1130/2250 subsystem on which the error occurred. This message appears only on the 1052.

System Action: The graphic job processor or satellite graphic job processor associated with the partition or region in which the error was detected is terminated, and control is returned to the operating system.

Operator Response: Inform the user on unit or subsystem utn that GJP or SGJP has terminated and that he should begin a new session. If the error recurs, inform the programmer.

Programmer Response: Probable user error. Examine the Initialization routine (IKAINIT for GJP or IKDINIT for SGJP) for recent installation modifications.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 or 1130/2250 Programmer Response: Cause initial attention, log on again, and redefine the job.

IKA062I utn I/O ERR READING dsn

Explanation: An input/output error occurred while reading from data set dsn. In the message text, utn is the unit name of the 2250 unit or 1130/2250 subsystem on which the error occurred. This message appears only on the 1052.

System Action: The graphic job processor or satellite graphic job processor associated with the partition or region in which the error was detected is terminated, and control is returned to the operating system.

Operator Response: Inform the user on unit or subsystem utn that GJP or SGJP has terminated and that he should begin a new session. If the error recurs, inform the programmer.

Programmer Response: Probable user error. Examine the Initialization routine (IKAINIT for GJP or IKDINIT for SGJP) for recent installation modifications. problem recurs; do the following before

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 or 1130/2250 Programmer Response: Cause initial attention, log on again, and redefine the job.

IKA063I utn - NO JOBCLASS Y,  $\left. \begin{matrix} I \\ R \\ S \end{matrix} \right\}$

Explanation: There are no partitions defined for jobclass Y. As a result, the graphic job processor, the satellite graphic job processor, or the initial processor for SGJP cannot be started. In the message text, utn is the unit name of the 2250 unit or 1130/2250 subsystem for which the error occurred. The letter I indicates that the error occurred on the initial attempt to start GJP or SGJP; R indicates that the error occurred on an attempt to restart GJP or SGJP after execution of the user's problem program; S indicates that the error occurred on an attempt to start the initial processor for SGJP. The restart (R) error is the result of improper redefinition of partitions by the operator, as is the start (S) error (except after a VARY ONGFX command).

System Action: When no jobclass was defined for Y, the system ignores the initial (I) request to start GJP or SGJP, assumes log off for a request (R) to

restart GJP or SGJP, and assumes a VARY OFFGFX command for a request (S) to start the initial processor for SGJP. The user receives no printed record of his job if GJP or SGJP cannot be restarted.

GJP can be started by an attention from the 2250 unit. SGJP can be started from the 1130/2250 subsystem, provided the proper initialization has taken place. Starting the initial processor for SGJP requires that a VARY ONGFX command be issued again for the 1130/2250 subsystem.

Operator Response: Specify partitions for the GJP or SGJP jobclass Y. This can be done either by using the DEFINE command or by using a STOP GFX command and a START GFX command specifying an existing jobclass for GJP or SGJP.

Notify the user on unit or subsystem utn that the error occurred and that he should attempt to start GJP or SGJP by causing an initial attention. If R appeared in the message text, inform the user that the result of his job is unavailable and that he should redefine the job.

Problem Determination: Table I, items 2, 29.

2250 or 1130/2250 Programmer Response: Respond as directed by the operator.

IKA064I utn - PARTITION SIZE TOO SMALL FOR Y,  $\left. \begin{matrix} I \\ R \\ S \end{matrix} \right\}$

Explanation: The partitions defined for jobclass Y are too small to accommodate GJP, SGJP, or the initial processor for SGJP. In the message text, utn is the unit name of the 2250 unit or 1130/2250 subsystem for which the error occurred. The letter I indicates that the error occurred on the initial attempt to start GJP or SGJP; R indicates that the error occurred on an attempt to restart GJP or SGJP after execution of the user's problem program; S indicates that the error occurred on an attempt to start the initial processor for SGJP. The restart (R) error is the result of improper redefinition of partitions by the operator, as is the start (S) error (except after a VARY ONGFX command).

System Action: When the partitions for Y are too small, the system ignores the initial (I) request to start GJP or SGJP, assumes log off for a request (R) to restart GJP or SGJP, and assumes a VARY OFFGFX command for a request (S) to start the initial processor for SGJP. The user receives no printed record of his job if GJP or SGJP cannot be restarted.

GJP can be started by an attention from the 2250 unit. SGJP can be started from the 1130/2250 subsystem, provided the proper initialization has taken place. Starting the initial processor for SGJP

requires that a VARY ONGFX command be issued again for the 1130/2250 subsystem.

Operator Response: Specify larger partitions for the GJP or SGJP jobclass Y. This can be done either by using the DEFINE command or by using a STOP GFX command and a START GFX command specifying an existing jobclass for GJP or SGJP.

Notify the user on unit or subsystem utn that the error occurred and that he should attempt to start GJP or SGJP by causing an initial attention. If R appeared in the message text, inform the user that the result of his job is unavailable and that he should redefine the job.

Problem Determination: Table I, items 2, 29.

2250 or 1130/2250 Programmer Response: Respond as directed by the operator.

IKA065I utn - PARTITIONS FOR Y BUSY  $\begin{pmatrix} I \\ R \\ S \end{pmatrix}$

Explanation: The partitions defined for jobclass Y are busy. These partitions were assigned via jobclass Y for use by the graphic job processor, satellite graphic job processor, or initial processor for SGJP. Either non-GJP or non-SGJP programs are executing there or the partitions are not arranged for efficient use. In the message text, utn is the unit name of the 2250 unit or 1130/2250 subsystem for which the error occurred. The letter I indicates that the error occurred on the initial attempt to start GJP or SGJP; R indicates that the error occurred on an attempt to restart GJP or SGJP after execution of the user's problem program; S indicates that the error occurred on an attempt to start the initial processor for SGJP. The restart (R) error is the result of improper redefinition of partitions by the operator, as is the start (S) error (except after a VARY ONGFX command).

System Action: When the partitions for Y are busy, the system ignores the initial (I) request to start GJP or SGJP, assumes log off for a request (R) to restart GJP or SGJP, and assumes a VARY OFFGFX command for a request (S) to start the initial processor for SGJP. The user receives no printed record of his job if GJP or SGJP cannot be restarted.

GJP can be started by an attention from the 2250 unit. SGJP can be started from the 1130/2250 subsystem, provided the proper initialization has taken place. Starting the initial processor for SGJP requires that a VARY ONGFX command be issued again for the 1130/2250 subsystem.

Operator Response: Assign individual partitions or check for multiple jobclasses. For efficient use of GJP or SGJP, each 2250 unit or 1130/2250 subsystem (active for GJP or SGJP) should

have its own partition. If each does not have its own partition, use the DEFINE command to specify a partition for each 2250 unit or 1130/2250 subsystem not already assigned a partition. If each has its own partition, inspect the jobclass for the GJP or SGJP partitions to determine whether multiple jobclasses are assigned to these partitions. If multiple jobclasses are assigned, either use the DEFINE command to specify partitions for the GJP or SGJP jobclass only or ensure that the jobstream does not contain jobs that use the GJP or SGJP jobclass (or other jobclasses associated with the GJP or SGJP partitions) while GJP or SGJP is running. Notify the user on unit or subsystem utn that GJP or SGJP was not started and that he should attempt to start GJP or SGJP using the standard procedure.

Problem Determination: Table I, items 2, 29.

2250 or 1130/2250 Programmer Response: Respond as directed by the operator.

IKA066I utn QUEUED ON Pnn

Explanation: An attempt to restart GJP or SGJP in a partition defined for GJP or SGJP jobclass Y has been made, but all partitions assigned to GJP or SGJP are busy. Either non-GJP or non-SGJP programs are executing in the partitions or the partitions are not properly set up for efficient use. In the message text, utn is the unitname of the 2250 unit or 1130/2250 subsystem for which GJP or SGJP cannot be restarted and Pnn indicates the partition on which it is being queued.

System Action: The request is queued on a partition assigned for GJP or SGJP use. When that partition is free, GJP or SGJP will be restarted.

Operator Response: For efficient use of GJP or SGJP, each 2250 unit or 1130/2250 subsystem (active for GJP or SGJP) should have its own partition. If each does not have its own partition, use the DEFINE command to specify a partition for each 2250 unit or 1130/2250 subsystem not already assigned a partition.

If each has its own partition, inspect the jobclass for the GJP or SGJP partitions to determine whether multiple job classes are assigned to these partitions. If multiple jobclasses are assigned, use the DEFINE command to specify partitions for the GJP or SGJP jobclass only, or ensure that the jobstream does not contain jobs that use the GJP or SGJP jobclass or other jobclasses associated with the GJP or SGJP partition while GJP is running.

Notify the user on unit or subsystem utn that GJP or SGJP will be restarted when a partition becomes free.

2250 or 1130/2250 Programmer Response: Respond as directed by the operator.

IKA067I utn - NO PARTITION OF SCHEDULER SIZE FOR  
Y, { I }  
      { R }

Explanation: No problem program partitions are available large enough to contain the scheduler. As a result, GJP or SGJP cannot be started.

In the message text, utn is the unit name of the 2250 unit or 1130/2250 subsystem for which the error occurred. The letter I indicates that the error occurred on the initial attempt to start GJP or SGJP; R indicates that the error occurred on an attempt to restart GJP or SGJP after execution of the user's problem program.

System Action: The system ignores an initial (I) request to start GJP or SGJP, and assumes log off for a request (R) to restart GJP or SGJP. The user receives no printed record of his job if GJP or SGJP cannot be restarted.

Operator Response: Specify problem program partitions of scheduler size for GJP or SGJP job class Y by using the DEFINE command. Notify the user on unit or subsystem utn that the error occurred and that he should restart GJP or SGJP. If R appeared in the message text, inform the user that the results of his job are unavailable and that he should redefine his job.

Problem Determination: Table I, items 2, 29.

2250 or 1130/2250 Programmer Response: Respond as directed by the operator.

IKA068I utn - L/O ERROR - xxxx

Explanation: One of the following error conditions occurred:

- If xxxx is GWRITE, the Display Output routine (IKADOR) or Internal Error routine (IKAERR) detected an error during execution of a GWRITE macro instruction to write data into the 2250 buffer.
- If xxxx is GCNTRL ALM, the Display Output routine (IKADOR) detected an error during execution of a GCNTRL macro instruction to sound the audible alarm.
- If xxxx is GCNTRL STR, the Display Output routine (IKADOR) detected an error during execution of a GCNTRL macro instruction to start 2250 buffer regeneration.
- If xxxx is GCNTRL RMV, the Display Output routine (IKADOR) detected an error during execution of a GCNTRL macro instruction to remove a cursor from the 2250 buffer.
- If xxxx is GREAD CUR, the Display Output routine (IKADOR) or Display Input routine (IKADIR) detected an error during execution of a GREAD macro instruction to insert a cursor into the 2250 buffer.

In the message text, utn is the 2250 unit on which the error occurred. This message appears on the 1052 and in the printed output.

System Action: The graphic job processor associated with the partition or region in which the error occurred is terminated, and then restarted.

Operator Response: Inform the 2250 user on utn to log on again and redefine the job. If the error recurs, inform the programmer.

Programmer Response: This message should have been preceded by an input/output error message for utn.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: Cause initial attention, log on again, and redefine the job. Consult your programmer.

IKA070I utn - GWRITE SYSOUT REG 15 = dd

Explanation: The Sysout Display routine (IKAPDIS0) detected an error during execution of a GWRITE macro instruction to write data into the 2250 buffer. In the message text, utn is the 2250 unit on which the error occurred. Register 15 contains a decimal code indicating the error condition. Possible codes are:

| Code | Meaning                                                                                          |
|------|--------------------------------------------------------------------------------------------------|
| 04   | The limits of the buffer assignment are violated, or the buffer address is invalid.              |
| 08   | The byte count, as computed from the output area control block (OACB), is incorrectly specified. |

This message appears only in the printed output.

System Action: The SYSOUT display is ended, but the graphic job processor attempts to continue.

Programmer Response: Probable user error. Check for recent installation modifications to the Sysout Display routine (IKAPDIS0).

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: The user may wish to rerun his jobs, using either the PRINT or PUNCH option rather than the DISPLAY option.

IKA071I utn - GREAD SYSOUT REG 15 = dd

Explanation: The Sysout Display routine (IKAPDIS0) detected an error during execution of a GREAD macro instruction to read data from the 2250 buffer. In the message text, utn is the 2250 unit on which the error occurred. Register 15 contains a decimal code indicating the error condition. Possible codes are:

| Code | Meaning                                                                                          |
|------|--------------------------------------------------------------------------------------------------|
| 04   | The limits of the buffer assignment are violated, or the buffer address is invalid.              |
| 08   | The byte count, as computed from the output area control block (OACB), is incorrectly specified. |

This message appears only in the printed output.

System Action: The SYSOUT display is ended, but the graphic job processor attempts to continue.

Programmer Response: Probable user error. Check for recent installation modifications to the Sysout Display routine (IKAPDIS0). If the problem recurs, do the following before calling

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: The user may wish to rerun his jobs, using either the PRINT or PUNCH option rather than the DISPLAY option.

IKA072I utn - GCNTRL STR SYSOUT REG 15 = dd

Explanation: The Sysout Display routine (IKAPDIS0) detected an error during execution of the GCNTRL macro instruction to start 2250 buffer regeneration. In the message text, utn is the 2250 unit on which the error occurred. Register 15 contains a decimal code indicating the error condition. Possible codes are:

| Code | Meaning                                                                                                                                                                                          |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 04   | The limits of the buffer assignment are violated, or the buffer address is invalid.                                                                                                              |
| 12   | In the GCNTRL macro instruction, the device associated with the "dcb2 address" operand is not attached to the same display control unit as the device associated with the "dcb address" operand. |

This message appears only in the printed output.

System Action: The SYSOUT display is ended, but the graphic job processor attempts to continue.

Programmer Response: Probable user error. Check for recent installation modifications to the Sysout Display routine (IKAPDIS0). If the problem recurs, do the following before calling

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: The user may wish to rerun his jobs, using either the PRINT or PUNCH option rather than the DISPLAY option.

IKA073I utn - GCNTRL INS SYSOUT REG 15 = dd

Explanation: The Sysout Display routine (IKAPDIS0) detected an error during execution of the GCNTRL macro instruction to insert the cursor in the 2250 buffer. In the message text, utn is the 2250 unit on which the error occurred. Register 15 contains a decimal code indicating the error condition. Possible codes are:

| Code | Meaning                                                                                                                                                                                          |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 04   | The limits of the buffer assignment are violated, or the buffer address is invalid.                                                                                                              |
| 12   | In the GCNTRL macro instruction, the device associated with the "dcb2 address" operand is not attached to the same display control unit as the device associated with the "dcb address" operand. |

This message appears only in the printed output.

System Action: The SYSOUT display is ended, but the graphic job processor attempts to continue.

Programmer Response: Probable user error. Check for recent installation modifications to the Sysout Display routine (IKAPDIS0).

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: The user may wish to rerun his jobs, using either the PRINT or PUNCH option rather than the DISPLAY option.

IKA074I utn - UNSUCCESSFUL OPEN FOR SYSOUT ddn

Explanation: An attempt by the Sysout Display routine (IKAPDIS0) to open a data control block (DCB) to display a SYSOUT data set was unsuccessful. In the message text, ddn is the name of the DD card and utn is the 2250 on which the error occurred. This message appears only in the printed output.

System Action: The SYSOUT display is ended, but the graphic job processor attempts to continue.

Programmer Response: Probable user error. Check for recent installation modifications to the Sysout Display routine (IKAPDIS0).

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: The user may wish to rerun his jobs, using either the PRINT or PUNCH option rather than the DISPLAY option.

IKA075I utn UNSUCCESSFUL ENQ FOR SYSOUT ddn

Explanation: An attempt by the Sysout Display routine (IKAPDIS0) to enqueue a SYSOUT data set was unsuccessful. In the message text, ddn is the name of the DD card, and utn is the 2250 unit on which the error occurred. This message appears only in the printed output.

System Action: The SYSOUT display is ended, but the graphic job processor will continue.

Programmer Response: Probable user error. Check for recent installation modification to the Sysout Display routine (IKAPDIS0).

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: The user may wish to rerun his jobs, using either the PRINT or PUNCH option rather than the DISPLAY option.

IKA076I utn UNSUCCESSFUL DEL FOR SYSOUT ddn

Explanation: The Sysout Display routine (IKAPDIS0) made an unsuccessful attempt to delete a SYSOUT data set. In the message text, ddn is the name of the DD card, and utn is the 2250 unit on which the error occurred. This message appears only in the printed output.

System Action: The SYSOUT display is ended, but the graphic job processor will continue.

Programmer Response: Probable user error. Check for recent installation modifications to the Sysout Display routine (IKAPDIS0).

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 Programmer Response: The user may wish to rerun his jobs, using either the PRINT or PUNCH option rather than the DISPLAY option.

IKA999I utn lmd ddd

Explanation: The Internal Error Routine (IKAIERR) was entered by the module lmd with message number ddd, in decimal. This message number could not be located in the Internal Error message module (IKAMERR0). In the message text, utn is the unit name of the 2250 unit or 1130/2250 subsystem on which the error occurred. This message appears on the 1052 and in the printed output.

System Action: The graphic job processor or satellite graphic job processor associated with the partition or region in which the error was detected is terminated and then restarted.

Operator Response: Inform the user on unit or subsystem utn to log on again and redefine the job. Inform the programmer of the error.

Programmer Response: Examine the module lmd and the Internal Error Message module (IKAMERR0) for recent installation modifications.

Problem Determination: Table I, items 2, 4, 25c, 29.

2250 or 1130/2250 Programmer Response: Cause initial attention, log on again, and redefine the job. Consult your programmer.

IKA



## Satellite Graphic Job Processor Messages (IKD)

|                             |                                                                                                                                                                           |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component Name              | IKD                                                                                                                                                                       |
| Program Producing Message   | Satellite Graphic Job Processor.                                                                                                                                          |
| Audience and Where Produced | For programmer: 1130/2250 subsystem or SYSPRINT data set.<br>For operator: console.                                                                                       |
| Message Format              | IKDnnnI text<br><br>nnn Message serial number.<br>text Message text.                                                                                                      |
| Comments                    | The PRINTED RECORD option on the LOG ON frame must be selected in order to insure the reception of all messages.                                                          |
| Associated Publications     | <u>IBM System/360 Operating System and 1130 Disk Monitor System: User's Guide for Job Control From an IBM 2250 Display Unit Attached to an IBM 1130 System, GC27-6938</u> |
| Problem Determination       | Refer to the fold-out in part VI of this publication for problem determination instructions.                                                                              |

### IKD001D utn - INITIALIZATION FAILURE

Explanation: Communication was not established with SGJP in the 1130/2250 subsystem. The failure resulted from either mismatched passwords or transmission-line errors. If SGJP had control, this condition was indicated by a return code from the data transmission subroutine that performs initialization (GTNIT). In the message text, utn is the unit name of the 1130/2250 subsystem on which the error occurred. This message appears on the 1052; if SGJP had control, it also appears in the printed output.

System Action: The initial processor or SGJP waits for a response from the operator.

Operator Response: Enter either an R to retry the operation or a C to cancel SGJP or the initial processor. If the SGJP is to be canceled, first ensure that it is in operation in subsystem utn. If the initial processor is canceled, a VARY ONGFX command for the unit must be issued to restart the initial processor.

Programmer Response: Examine the initial processor or satellite graphic job processor routines for recent installation modifications.

Problem Determination: Table I, items 2, 4, 25c, 29.

### IKD002D utn - LINE ERROR

Explanation: An input/output error occurred, and standard error recovery

procedures were unsuccessful. If SGJP had control, this condition was indicated by a return code from the data transmission subroutine that tests read and write requests (GTCLT). In the message text, utn is the unit name of the 1130/2250 subsystem on which the error occurred. This message appears on the 1052; if SGJP had control, it also appears in the printed output.

System Action: The initial processor or SGJP waits for a response from the operator.

Operator Response: Enter either an R to retry the operation or a C to cancel SGJP or the initial processor. (This message is preceded by an input/output error message which, in certain cases, requests operator intervention.) If the initial processor is canceled, a VARY ONGFX command for the unit must be issued to restart the initial processor.

Programmer Response: Examine the initial processor or satellite graphic job processor routines for recent installation modifications.

Problem Determination: Table I, items 2, 4, 25c, 29.

### IKD003D utn - SYNCHRONIZATION ERROR

Explanation: The requested operation was not completed. This error occurred either because both the System/360 and the 1130/2250 subsystem were in read mode, or because the 1130/2250 subsystem terminated communication. The condition was

IKD

indicated by a return code from the data transmission subroutine that tests read and write requests (GTCLT). In the message text, utn is the unitname of the 1130/2250 subsystem on which the error occurred. This message appears on the 1052 and in the printed output.

System Action: SGJP waits for a response from the operator.

Operator Response: Enter either an R to retry the operation or a C to cancel SGJP.

Programmer Response: Probable user error. Examine the satellite graphic job processor routines for recent installation modifications.

Problem Determination: Table I, items 2, 4, 25c, 29.

IKD004I utn - CANCELED BY OPERATOR

Explanation: In response to message IKD001D, IKD002D, or IKD003D, the operator entered a C to cancel SGJP. In the message text, utn is the unit name of the 1130/2250 subsystem for which SGJP was canceled. This message appears only in the printed output.

System Action: SGJP is terminated for subsystem utn.

Programmer Response: None, if the operator canceled SGJP in response to a preceding message. Otherwise, examine the satellite graphic job processor routines for recent installation modifications.

IKD005I utn - DCB NOT OPENED

Explanation: An attempt to open the data control block (DCB) for the 1130/2250 subsystem used by the initial processor for SGJP was unsuccessful. In the message text, utn is the unit name of the 1130/2250 subsystem. This message appears only on the 1052.

System Action: The initial processor for SGJP is terminated.

Operator Response: None. However, in order to start the initial processor again, a VARY ONGFX command must be issued for the unit.

Programmer Response: Probable user error. Examine the initial processor for SGJP (IKDINPRO) and the cataloged procedure SGJPutn for recent installation modifications.

Problem Determination: Table I, items 2, 4, 25c, 29.

## American National Standard COBOL Messages (IKF)

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component Name              | IKF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Program Producing Message   | American national standard COBOL compiler.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Audience and Where Produced | For programmer: compiler listing in SYSPRINT data set.<br>For operator: console.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Message Format              | <p>yyy IKFnnnnI-x sentence1. sentence2. (in SYSPRINT)</p> <p>xx IKFnnns text (on console)</p> <p>yyy<br/>Card number of statement where error was detected.</p> <p>nnnn<br/>Message serial number.</p> <p>x<br/>Severity code indicating effect of error on execution of American National Standard COBOL program being compiled:</p> <p>W Warning message; successful execution is probable.<br/>C Conditional message; the compiler made a corrective assumption; compilation was continued to permit debugging; execution may fail.<br/>E Error message; serious error was found; the compiler did not make a corrective assumption; the erroneous statement was omitted from the compilation; execution should not be attempted.<br/>D Disastrous error message; compilation was terminated; execution would produce unpredictable results.</p> <p>sentence1.<br/>Message text describing the error.</p> <p>sentence2.<br/>Message text describing the compiler action as a result of the error. Sentence2 is not present in messages with 3nnn serial numbers; 3nnn messages appear with other messages that describe compiler action.</p> <p>xx<br/>Message reply identification (absent, if operator reply not required).</p> <p>s<br/>Type code:</p> <p>A Action; operator must perform a specific action.<br/>D Decision; operator must choose an alternative.<br/>I Information; no operator action is required.</p> <p>text<br/>Message text.</p> |
| Comments                    | <p>IKF messages are not included in this publication. They are documented in the publication <u>IBM System/360 Operating System: American National Standard COBOL Programmer's Guide, GC28-6399</u>. If your installation uses American National Standard COBOL frequently, you may prefer to have the IKF messages in this publication; the index tab on this page is provided so that you can remove the IKF messages from the Programmer's Guide and insert them here.</p> <p>For routing and descriptor codes of IKF messages, see Table 31 in Part V of this publication: "Routing and Descriptor Codes."</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Associated Publications     | <p><u>IBM System/360 Operating System:</u><br/><u>American National Standard COBOL Programmer's Guide, GC28-6399</u></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

IKF



## Time Sharing Option (TSO) Messages (IKJ)

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component Name              | IKJ                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Program Producing Message   | Time Sharing Option                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Audience and Where Produced | For Programmer: SYSOUT data set.<br>For Operator: console.                                                                                                                                                                                                                                                                                                                                                                                                         |
| Message Format              | IKJnnnI text (on SYSOUT)<br>xx IKJnnns text (on console)<br>nnn<br>Message serial number.<br>text<br>Message text.<br>xx<br>Message reply identification (absent, if operator reply not required).<br>s<br>Type code:<br>A Action; the operator must perform a specific action.<br>D Decision; operator must choose an alternative.<br>E Eventual action; operator must perform a specific action when he has time.<br>I Information; no operator action required. |
| Comments                    | TSO messages directed to the terminal user are self-documenting and are therefore not included in this section; those that require installation action in correcting an error condition, however, are listed at the end of this section.                                                                                                                                                                                                                           |
| Problem Determination       | Refer to the fold-out in part VI of this publication for problem determination instructions.                                                                                                                                                                                                                                                                                                                                                                       |

IKJ000I cm userid

Explanation: The command verb and operand identified by cm were entered from a TSO terminal by a user identified by userid.

System Action: The command, cm, is processed.

Operator Response: None.

IKJ001D START ERROR - REPLY 'MEMBER NAME', 'U' OR 'CANCEL'

Explanation: Either the member name specified in the START command or default member IKJPRM00 could be found in SYS1.PARMLIB.

System Action: The system waits for the operator to respond.

Operator Response: Probable user error.

Do one of the following:

- Enter REPLY xx, 'member name' making sure that the correct member name is specified.
- Enter REPLY xx, 'U' to indicate that default member IKJPRM00 should be used.
- Enter REPLY xx, 'CANCEL' to terminate the START TS job step.

Problem Determination: Table I, items 2, 4, 29. Execute the IEHLIST utility

program with the LISTPDS parameter to obtain a list of all SYS1.PARMLIB members.

IKJ002D START ERROR - REPLY 'LIST', 'U', OR 'CANCEL'

Explanation: The LIST parameter of the START command (the second positional keyword within the parentheses) is specified incorrectly.

System Action: The system waits for the operator to respond.

Operator Response: Probable user error. Do one of the following:

- Enter REPLY xx, 'LIST' to obtain a list of the parameter area.
- Enter REPLY xx, 'U' to indicate the default value, NO LIST.
- Enter REPLY xx, 'CANCEL' to terminate the START TS job step.

Problem Determination: Table I, items 2, 4, 29.

IKJ003D START ERROR - REPLY 'FORM', 'FORM=ALL', 'U', OR 'CANCEL'

Explanation: The FORM parameter of the START command (the third positional keyword within the parentheses) is specified incorrectly.

IKJ

System Action: The system waits for the operator to respond.

Operator Response: Probable user error. Do one of the following:

- Enter REPLY xx, 'FORM' to format a specific swap data set.
- Enter REPLY xx, 'FORM=ALL' to format all the swap data sets.
- Enter REPLY xx, 'U' to indicate the default value, NO FORM.
- Enter REPLY xx, 'CANCEL' to terminate the START TS job step.

Problem Determination: Table I, items 2, 4, 29.

IKJ004I START REJECTED - OPEN FAILED FOR SYS.PARMLIB

Explanation: An I/O error prevented the opening of the SYS1.PARMLIB data set.

System Action: The START TS job step is terminated.

Operator Response: Reenter the START command.

Problem Determination: Table I, items 2, 4, 29.

IKJ005I MEMBER OF SYS1.PARMLIB NOT FOUND

Explanation: Neither the member name specified in the START command nor default member IKJPRM00 could be found in SYS1.PARMLIB.

System Action: The system waits until the operator responds to message IKJ001D which follows this message.

Operator Response: None.

IKJ006I START REJECTED - I/O ERROR READING SYS1.PARMLIB

Explanation: An I/O error occurred when an attempt was made to read a member of SYS1.PARMLIB.

System Action: The START TS job step is terminated.

Operator Response: Reenter the START TS command. If the problem recurs, restore the disk pack containing the SYS1.PARMLIB data set onto another pack and issue the START TS command again.

Problem Determination: Table I, items 2, 4, 29.

IKJ007I START REJECTED - TIME SHARING IS IN PROGRESS

Explanation: A START TS command was entered when the time sharing option was already active. Only one START command is accepted for the time sharing option at a time.

System Action: The second START TS command will be rejected.

IKJ008I BLDL FAILED FOR MODULE mod FOR TSO LINK PACK AREA

Explanation: A BLDL macro instruction module mod in the Time Sharing Link Pack Area list failed.

System Action: Module mod is ignored. The START TS job step continues.

Operator Response: Probable user error. Report the problem to the installation's systems programmer.

Programmer Response: Execute the IEHLIST utility program, specifying the LISTPDS option, to ensure that there is a copy of module mod in SYS1.LINKLIB. If the module is in SYS1.LINKLIB, instruct the operator to reenter the START TS command.

Problem Determination: Table I, items 2, 4, 13, 29. Execute the IEBPTPCH utility program to list the member of SYS1.PARMLIB which was specified in the START TS command.

IKJ009I START REJECTED - BLDL FAILED FOR A TSO MODULE

Explanation: A BLDL macro instruction which was issued for all TSO modules failed for one of the modules.

System Action: The START TS job step is terminated.

Operator Response: Probable user error. Report the problem to the installation's systems programmer.

Programmer Response: Execute the IEHLIST utility program, specifying the LISTPDS option, to ensure that there are copies of all the TSO modules for which the BLDL macro instruction was issued in SYS1.LINKLIB. If the required modules are in SYS1.LINKLIB, instruct the operator to reenter the START TS command.

Problem Determination: Table I, items 2, 4, 13, 29. Execute the IEBPTPCH utility program to list the member of SYS1.PARMLIB which was specified in the START TS command.

IKJ010I START REJECTED - BLDL FAILED FOR A TSO DRIVER MODULE, mod

Explanation: A BLDL macro instruction which was invoked for the TSO driver modules, failed for module mod.

System Action: The START TS job step is terminated.

Operator Response: Probable user error. Report the problem to the installation's systems programmer.

Programmer Response: Execute the IEHLIST utility program, specifying the LISTPDS option, to ensure that module mod is in SYS1.LINKLIB. If the module is in

SYS1.LINKLIB, instruct the operator to reenter the START TS command.

Problem Determination: Table I, items 2, 4, 29. Execute the IEBTPCH utility program to list the member of SYS1.PARMLIB which was specified in the START TS command.

IKJ011I START REJECTED - MODULE, mod, COULD NOT INITIALIZE

Explanation: Module mod was not able to compute the amount of main storage it needed for initialization.

System Action: The START TS job step is terminated.

Operator Response: If no messages have been issued by module mod indicating failure to compare the amount of main storage needed for initialization,

Problem Determination: Table I, items 2, 4, 29.

IKJ012I DRIVER=( PARAMETER DOES NOT HAVE A RIGHT PARENTHESIS

Explanation: A right parenthesis was omitted from the DRIVER= parameter of the START TS command.

System Action: Message IKJ067I is issued to indicate that the keyword (DRIVER) will be ignored. Execution of the START TS job step continues.

Operator Response: None required. To prevent the problem from recurring, place a right parenthesis after the DRIVER= parameter when the START TS command is reentered.

IKJ013I { LPA= } PARAMETER IS NOT ALLOWED ON THE  
{ DUMP= }  
START COMMAND

Explanation: LPA= and DUMP= parameters are not valid in the START TS command.

System Action: Message IKJ067I is issued to indicate that the keyword (LPA or DUMP) will be ignored. Execution of the START TS job step continues.

Operator Response: None required.

IKJ014I START REJECTED - I/O ERROR SEARCHING

Explanation: An I/O error occurred while the directory of SYS1.LINKLIB was being searched. As a result, the TSO modules cannot be loaded into main storage.

System Action: The START TS job step is terminated.

Operator Response: Reenter the START TS command.

Problem Determination: Table I, items 2, 4, 29.

IKJ015I THE TIME SHARING SYSTEM CANNOT BE INITIALIZED

Explanation: A return code of 8 was received by the Time Sharing Control (TSC) task from either the SWAP, Terminal Input/Output Control (TIOC), Driver or TSO Dump initialization routines. The routine sending the return code could not complete initialization.

System Action: The START TS job step is terminated.

Operator Response: If no messages dealing with this problem have been issued by the module which could not complete initialization.

Problem Determination: Table I, items 2, 4, 29.

IKJ016I REGNMAX=nn - REGIONS STARTING=xx

Explanation: In the message text, nn is the maximum number of regions specified for this START TS command. The operator has started xx of these regions at this time.

System Action: The system continues executing the START TS command.

Operator Response: None required. If more regions are to be started the MODIFY command can be entered when TSO initialization is completed.

IKJ017I SMF NOT ACTIVE, SMF PARAMETER IGNORED

Explanation: SMF foreground options cannot be set because SMF is not active.

System Action: The system will continue executing the START TS command, or the MODIFY TS command, but the SMF parameters in SYS1.PARMLIB on the command are ignored.

Operator Response: None.

IKJ018I SMF OPI BIT IS SET - SMF PARAMETER IGNORED

Explanation: The operator intervention bit (OPI) is set to 1. Values assigned to SMF at system generation time may not be overridden by the operator in the START TS command or the MODIFY TS command.

System Action: The keyword (SMF) will be ignored. Execution of the START TS or MODIFY TS command continues.

Operator Response: None required.

IKJ019I TSO IS INITIALIZED

Explanation: The time sharing system initialization is complete. The system will now accept MODIFY and STOP commands, or LOGONS.

System Action: The Time Sharing System waits until a MODIFY or STOP command or a LOGON is issued.

Operator Response: None.

IKJ021I START REJECTED - INVALID CORE REQUEST FOR TSC REGION

Explanation: The main storage size computed for the TSC region or specified by the installation is larger than the dynamic main storage allocated for the machine.

System Action: That START TSO command is rejected.

Operator Response: Probable user error. Reenter the Start TSO command.

Problem Determination: Table I, items 2, 11, 29.

IKJ024D TSO STOP IN PROGRESS, REPLY 'U', OR 'FSTOP'

Explanation: The operator has entered a STOP command and normal STOP processing is in progress.

System Action: The TSO subsystem continues normal STOP processing until a reply is received.

Operator Response: If the TSO subsystem appears to be terminating normally, a reply is not necessary. Reply 'U' if you wish TSO to continue normal STOP processing and would like message repeated as a reminder. After consulting your installation's system programmer, reply 'FSTOP' if TSO appears to be unable to terminate normally. This will cause Out-of-Core-ABEND to be initiated for each user still active. When all regions have been terminated, the Time Sharing Control task will terminate. Note: This method of abnormally terminating users may leave data sets open and some data sets allocated.

Problem Determination: Table I, items 2, 7ab, 11, 29. Execute the IEBTPCH utility to obtain a list of the SYS1.PARMLIB member specified in the START TSO command. Execute the IMDPRDMP service aid program with the TSO option to produce a SWAP dump. Execute the IMDPRMP service aid program with the TSO control statement to produce a SWAP dump.

IKJ025I TSO UNABLE TO TERMINATE DUE TO REGION FAILURE

Explanation: During STOP processing, the Time Sharing Control task encountered one or more regions that had failed. (Message IKJ055I will have been issued at the time the region failed.)

System Action: The TSO subsystem will terminate all active regions, but will be unable to terminate the entire subsystem.

Operator Response: None.

Problem Determination: Table I, items 2, 7ab, 11, 29. Execute the IEHLIST utility

program with the LISTPDS option to obtain a list of all the members of SYS1.PARMLIB. Execute the IMDPRDMP service aid program with the TSO control statement to produce a swap dump.

IKJ026I HOL AND REGSIZE SPECIFIED FOR SAME REGION=n

Explanation: A MODIFY command was entered specifying both the HOLD and REGSIZE options for the same region number "n".

System Action: No action is taken to modify any region. Message IKJ027D is issued.

Operator Response: None.

IKJ027D REPLY 'HOLD', 'REGSIZE', 'U', OR 'CANCEL'

Explanation: A MODIFY command was entered specifying both the HOLD and REGSIZE options for the same region.

System Action: No action is taken to modify any region until after the reply is received.

Operator Response: Reply HOLD if you want the HOLD function to be processed for this region. Reply REGSIZE if you want the REGSIZE function to be processed for this region. Reply U if you want both keywords to be ignored for this region. Reply CANCEL if you want the whole MODIFY command to be cancelled.

IKJ030I ddname,xxxxx,yyyyy SWAP DATA SET FORMAT

Explanation: The SWAP data set related to ddname has been formatted. In the message text, xxxxx is the total number of SWAP allocation units available on the data set, and yyyyy is the total number of SWAP allocation units formatted without error.

System Action: Processing continues.

Operator Response: None.

IKJ031I SWAP DATA SET(S) ARE FULL

Explanation: All the space on the SWAP data set(s) has been allocated to TSO users. There are either too few SWAP data sets, or the SWAP data sets which exist are not large enough for the current load of TSO users.

System Action: Processing continues.

Operator Response: Probable user error. No action is required, but you may reduce the number of logged on TSO users to relieve the overload, or STOP TS and START TS with more or larger SWAP data sets.

Problem Determination: Table I, items 2, 29.

IKJ032I ERROR SWAPPING IN USER, TJID=nnnn

Explanation: An I/O error has occurred swapping in TSO user nnnn.

System Action: This user is disconnected from the system. Other users in this region can continue to process and other users can be logged on specifying this region.

Operator Response: None.

IKJ033I ddname SWAP DATA SET OPEN FAILED

Explanation: An OPEN macro instruction for the SWAP data set related to ddname has failed or the swap data set allocation was invalid.

System Action: The START TS job step is terminated.

Operator Response: Reenter the START TS command. If the message recurs, check for proper swap data set allocation. If the allocation is correct, report the problem to the installation's system programmer.

Programmer Response: None.

Problem Determination: Table I, items 2, 4, 7ab, 29.

IKJ034D FORMAT ddname SWAP DATA SET, REPLY 'YES' OR 'NO'

Explanation: The operator has entered the FORM parameter in the START TS command. The SWAP data set related to ddname is now formatted. The operator has the option of reformatting this SWAP data set.

System Action: The system waits for the operator to respond.

Operator Response: Enter one of the following:

- Enter REPLY xx, 'YES' to indicate that the SWAP data set is to be formatted.
- Enter REPLY xx, 'NO' to indicate that the SWAP data set is not to be formatted.

IKJ035I ddd INVALID SWAP DEVICE, ddname

Explanation: A SWAP data set related to ddname was allocated to device ddd which is not supported by TSO SWAP. TSO SWAP supports only the 2311 Disk Storage Drive, the 2314 Direct Access Storage Facility, and the 2301 and 2303 Drum Storage Devices.

System Action: The START TS job step is terminated.

Operator Response: Probable user error. Report this message to the installation's system programmer.

Programmer Response: Ensure that the job control statements used in this START of TSO specify the correct UNIT parameter for the SWAP data sets.

Problem Determination: Table I, items 2, 4, 29.

IKJ036I SWAP DATA SET STRUCTURE INVALID

Explanation: The structure of serial and/or parallel SWAP data sets is invalid.

System Action: The START TS job step is terminated.

Operator Response: Probable user error. Report this message to the installation's systems programmer.

Programmer Response: Ensure that the job control statements for the SWAP data sets used in the START of TSO are correct. Possible errors are:

- A missing DD card for the SWAP data sets.
- Missing serial levels.
- Multiple parallel levels.
- SWAP data sets at a parallel level do not have the same device type specified.

Problem Determination: Table I, items 2, 4, 29.

IKJ037I I/O ERROR WHILE SWAPPING OUT TJID=xxxx

Explanation: A permanent I/O error was encountered while attempting to swap out the user whose TJID is "xxxx".

System Action: The system will mark the failing unit of the swap data set as unavailable and will attempt to swap the user out to a different part of the data set.

Operator Response: None. The next time TSO is started, the FORM=ALL option should be specified on the START command or the problem may recur.

Problem Determination: Table I, items 2, 4, 29.

IKJ040D RESPECIFY 'BACKGROUND=nn' OR 'CANCEL'

Explanation: The BACKGROUND=nn Driver keyword was specified incorrectly in the MODIFY TS command issued at the operator's console for the IBM-supplied Driver. In the message text nn is the percentage of available TSO time guaranteed for processing background jobs. Message IKJ041I precedes this message.

System Action: The system waits for the operator to respond.

Operator Response: Probable user error. Enter one of the following:

- Enter REPLY xx, 'BACKGROUND=nn' to specify the percentage of available TSO time which will be guaranteed for processing background jobs.
- Enter REPLY xx, 'CANCEL' to nullify the incorrect MODIFY TS command.

Problem Determination: Table I, items 2, 29.

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IKJ041I BACKGROUND PERCENTAGE INVALID

Explanation: The BACKGROUND=nn Driver keyword was specified incorrectly in the MODIFY TS command issued by the operator for the IBM-supplied TSO Driver.

System Action: The system issues message IKJ040D.

Operator Response: Probable user error. Reply to message IKJ040D.

Problem Determination: Table I, items 2, 29.

IKJ043D RQEL PARM NOT SUPPLIED FOR REGION nn SPECIFY OR CANCEL

Explanation: The keyword SUBQUEUES(nn)=xxx for region number nn was not specified for the IBM-supplied TSO Driver. Each TSO region must have the number of Region Queue Elements (RQELs) (from 1-15) specified. If this information is not in SYS1.PARMLIB, the driver initialization routine requests the information from the operator.

System Action: The system waits for the operator to respond.

Operator Response: Probable user error.

Enter one of the following:

- Enter REPLY xx, 'subqueues(nn)=x' where n is the region number and x is the number of RQELs for region n.
- Enter REPLY xx, 'CANCEL' to terminate the START TS job step.

Problem Determination: Table I, items 2, 29.

IKJ050I UNABLE TO START TS REGION nn - PROTECTION KEY UNAVAILABLE

Explanation: Time sharing region nn could not be started because all protection keys were assigned.

System Action: Time sharing region nn is not started.

Operator Response: To make a protection key available stop an initiator or allow an initiator to terminate. Then reenter the START or MODIFY TS command.

IKJ051I TIME SHARING REGION nn HAS TERMINATED

Explanation: The time sharing region numbered nn has terminated.

System Action: Processing continues.

Operator Response: None. The MODIFY TS command can be used to restart time sharing region nn unless the region has terminated as the result of a STOP TSO command.

IKJ052I TIME SHARING REGION nn HAS STARTED

Explanation: The time sharing region numbered nn has started.

System Action: Processing continues.

Operator Response: None.

IKJ053I INSUFFICIENT MAIN STORAGE AVAILABLE FOR TS REGION nn

Explanation: At the time the request to start time sharing region nn was received, there was not enough unallocated main storage to satisfy the request. Message IKJ054D will follow this message.

System Action: The system issues message IKJ054D.

Operator Response: Reply to message IKJ054D.

IKJ054D REPLY 'RETRY' OR 'CANCEL'

Explanation: There was not enough contiguous unallocated main storage to satisfy a user's request for a time sharing region. Message IKJ053I, which precedes this message, indicates which region could not be started.

System Action: The system waits for the operator to respond.

Operator Response: Do one of the following:

- Enter REPLY xx, 'RETRY' if, after entering a DISPLAY ACTIVE command, it appears that there is enough contiguous unallocated main storage for a region of the size requested.
- Enter REPLY xx, 'CANCEL' if there is not enough contiguous unallocated main storage to satisfy the time sharing region request. Wait for an initiator or job to terminate. Then enter a DISPLAY ACTIVE command to determine the amount of contiguous unallocated main storage, before trying to restart the region.

Problem Determination: Table I, items 2, 4, 29. Enter DISPLAY ACTIVE.

IKJ055I TIME SHARING REGION xx HAS FAILED-TSO CANNOT BE TERMINATED

Explanation: Time sharing region xx has terminated itself as a result of an unrecoverable error. Users of the region have been terminated and notified, if the failure did not preclude notification.

System Action: The region control task (RCT) TCB for the region that failed is set permanently nondispatchable. The region can be recovered only by repeating IPL procedures.

A message is transmitted to each terminal assigned to the region to notify users that the region has failed. All users are removed from the region.

All user terminals are disconnected from TSO, and the region enters a permanent wait condition.

In a multiregion TSO subsystem, other regions may continue to operate normally. MODIFY and STOP/MODIFY commands may be entered for the remaining active regions. However, the STOP TSO command will not terminate TSO since the RCT for the region that failed cannot be stopped and the TSC (time sharing control task) will not terminate until all RCTs have terminated. IPL procedures must be repeated before TSO may be started again.

Operator Response: The system should be allowed to quiesce in an orderly manner.

Problem Determination: Table I, items 2, 7a, 29. Make sure that a TSO Dump DD statement was included for failing start TSO procedures. Execute the IMDPRDMP service aid, specifying TSO options. The input to IMDPRDMP is the dump tape from TSO Dump. Save the formatted output.

IKJ060I START REJECTED - UNABLE TO ESTABLISH A STAE ENVIRONMENT

Explanation: The START command for the Time Sharing Option is rejected because a nonzero code was returned after a STAE macro instruction was issued to establish STAE exit protection during TSO initialization.

System Action: The START TSO processing is terminated.

Operator Response: Reenter the START command for TSO.

Problem Determination: Table I, items 1, 2, 4, 7a, 29.

IKJ061I THIS KEYWORD IS INVALID - ccccccc=nnnn

Explanation: Keyword ccccccc is not one of the acceptable time sharing time keywords. The keyword and its value nnnn are ignored.

System Action: The system issues message IKJ067I indicating that keyword ccccccc and its value nnnn will be ignored. If the MODIFY keyword is specified in the message text, the system will issue message IKJ081I.

Operator Response: Probable user error. No operator response is required. If a valid MODIFY keyword was misspelled, the MODIFY command for the correctly spelled keyword can be entered without having to reenter a START TS command. If keyword ccccccc is not included in the SYS1.PARMLIB member specified in the START TS command, request the installation's systems programmer to update the SYS1.PARMLIB member to include the keyword. Then reenter the START TS command.

IKJ062I TSO REGION nn NO LONGER AVAILABLE FOR LOGONS

Explanation: A user was unable to log on to the time sharing system because an input/output error occurred when the LOGON image for TSO user region nn was being swapped in, or because the time sharing region control task was unable to restore the LOGON image.

System Action: The TSO user currently logging on to TSO is disconnected. The TSO users currently running in region nn are allowed to run to normal completion.

Operator Response: When the current users of the region have completed, you may enter MODIFY commands to stop the region; then restart the region to give new users access to it.

IKJ063I THIS KEYWORD IS MISSING - ccccccc

Explanation: Keyword ccccccc is missing from the SYS1.PARMLIB member specified in the START TS command, or from the START TS command.

System Action: The system will issue message IKJ066D.

Operator Response: Probable user error. No operator response is required. Message IKJ066D, which will follow this message, provides the operator with the opportunity of supplying a value for the missing keyword. To avoid this problem in the future either ask the installation's system programmer to include the keyword in the SYS1.PARMLIB member specified in the START TS command, or enter the keyword in the START TS command.

Problem Determination: Table I, items 2, 29.

IKJ064I THE VALUE OF THIS KEYWORD IS INVALID - ccccccc=nnnn

Explanation: Either the value nnnn of keyword ccccccc is not within required limits or there is an error in its syntax. In some cases, the correct value will be requested by message IKJ065D or IKJ066D, which will follow this message. In all other cases, message IKJ067I will follow, indicating that keyword ccccccc and its value nnnn will be ignored.

System Action: Message IKJ066D or IKJ067I will be issued by the system. If the MODIFY TS command was issued from a TSO terminal in the operator mode, the MODIFY command is rejected and message IKJ081I is issued.

Operator Response: Probable user error. No operator response is required. Response to the message which follows this message (IKJ066D, IKJ067I, or IKJ081I).

Problem Determination: Table I, items 2, 29.

IKJ066D REPLY 'keyword=value', ['U'] OR 'CANCEL''

Explanation: This message may follow message IKJ061I (which indicates that a keyword is invalid), message IKJ063I (which indicates that a keyword is missing), or message IKJ064I (which indicates that the value of a keyword is invalid).

System Action: The system waits for the operator to respond.

Operator Response: Do one of the following:

- Enter REPLY xx, 'keyword=value' if the value attached to the missing keyword or the value of the incorrectly specified keyword is known.
- If U appears in the message text:
  1. If the message is for a START command, enter REPLY xx, 'U' if the last value previously specified (either on the START command or in the PARMLIB) is to be used.
  2. If the message is for a command other than START, enter REPLY xx, 'U' if this value and all previously specified values of the keyword are to be ignored.
- Enter REPLY xx, 'CANCEL' to terminate the START TS job step.

IKJ067I THE ABOVE KEYWORD AND ITS VALUE WILL BE IGNORED

Explanation: This message may follow message IKJ061I or message IKJ064I, each of which indicates that a keyword is invalid. The START TS job step continues but the keyword is ignored.

System Action: The system continues executing the START TS job step.

Operator Response: Probable user error. No operator response is required. Report this message to the programmer responsible for the installation.

Programmer Response: To make the ignored keyword valid, do one of the following:

- Update the SYS1.PARMLIB member specified in the START TS command to include the keyword.
- Ask the operator to reenter the START TS command and include the keyword.
- If the keyword is acceptable in the MODIFY TS command, it is possible to include this keyword in the MODIFY TS command without reissuing a START TS command.

IKJ068I SMF DSA BIT IS SET - OPT=2 MUST BE USED.

Explanation: SMF data set accounting bit is set to 1; OPT=1 or OPT=OFF was specified but is not valid; the system has defaulted to OPT=2.

System Action: Processing continues.

Operator Response: None.

IKJ072I ccccccc=nnnn EXCEEDS MAXIMUM OF max

Explanation: Value nnnn or keyword ccccccc exceeds a stated or implied maximum, max, in a MODIFY TS command.

System Action: If the MODIFY TS command was entered from an operator console, message IKJ066D is issued. If the MODIFY TS command was entered from a TSO terminal in the operator mode, the MODIFY command is rejected and message IKJ081I is issued.

Operator Response: Probable user error. Respond to message IKJ066D or IKJ081I.

Problem Determination: Table I, items 2, 29.

IKJ073I REGIN nn NOT ACTIVE, RESIZE/HOLD IGNORED

Explanation: A MODIFY TS command attempted to STOP the TSO user region nn, which was not currently active.

System Action: The system continues normal processing. No modification is made to region nn.

Operator Response: Probable user error. Respond to message IKJ066D or IKJ081I.

Problem Determination: Table I, items 2, 29.

IKJ074I nn DOES NOT EXIST, RESIZE INVALID

Explanation: A MODIFY TS command has attempted to STOP and/or START a TSO user region (nn) that was not defined at START TS time.

System Action: If the MODIFY TS command was entered from an operator console, message IKJ066D is issued. If the MODIFY TS command was entered from a TSO terminal in the operator mode, the MODIFY command is rejected and message IKJ081I is issued.

Operator Response: Probable user error. Respond to message IKJ066D or IKJ081I.

Problem Determination: Table I, items 2, 29.

IKJ075I TSO/SMF OPTIONS CANNOT EXCEED aaaaa bbbbb

Explanation: A MODIFY TS command has specified options for TSO that exceed the current SMF options for the background. In the message text, aaaaa and bbbbb are the current background options.

System Action: If the MODIFY TS command was issued from an operator console, message IKJ066D is issued. If the MODIFY TSO command was issued from a TSO terminal in the operator mode, the MODIFY command is rejected and message IKJ081I is issued.

Operator Response: Probable user error. Respond to message IKJ066D or IKJ081I.

Problem Determination: Table I, items 2, 29.

IKJ076I SUM OF REGSIZE AND LSQA EXCEEDS MAX -  
16382

Explanation: A MODIFY command was entered with the REGSIZE parameter specifying a region size and LSQA size that total over 16382K.

System Action: The system issues message IKJ066D.

Operator Response: None. Reply to subsequent message.

IKJ078I jjj sss TSO IS STOPPING

Explanation: As a result of a STOP TS command, step sss of TSO job jjj is in the process of stopping.

System Action: Processing continues until the STOP has completed.

Operator Response: None.

IKJ079I jjj sss TSO HAS BEEN MODIFIED

Explanation: Step sss of TSO job jjj has been modified.

System Action: Processing continues.

Operator Response: None.

IKJ080I TSO MODIFY CANCELLED BY OPERATOR

Explanation: The operator's 'CANCEL' reply to message IKJ066D is being acknowledged.

System Action: Processing continues.

Operator Response: None.

IKJ081I TSO MODIFY REJECTED

Explanation: An invalid MODIFY TS command was entered from a TSO terminal in the operator mode. One of the following messages preceded this message: IKJ061I, IKJ064I, IKJ072I, IKJ073I, IKJ074I, IKJ0752, or IKJ083I.

System Action: Processing continues.

Operator Response: Probable user error. A corrected MODIFY TS command may be entered.

Problem Determination: Table I, items 2, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.

IKJ082I SMF IS OPI=NO, TSO CANNOT MODIFY

Explanation: The keyword SMF was used in a MODIFY TS command. At system generation time, it was specified that operator intervention with SMF was not allowed.

System Action: The system ignores the SMF keyword.

Operator Response: Probable user error. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.

Problem Determination: Table I, items 2, 29.

IKJ085I TSO MODIFY/STOP SUBTASK TERMINATED

Explanation: The TSO MODIFY/STOP subtask has terminated, and TSO can no longer accept operator MODIFY or STOP commands. If this capability is needed, IPL procedures must be repeated, and a new START command entered.

Operator Response: None

Problem Determination: Table I, items 2, 7a, 11, 29. If a TSO dump has been taken, execute the IMDPRDMP service aid program. The input to IMDPRDMP is the TSO dump. Save the formatted output.

IKJ086I REGION nn HAS FAILED, REGSIZE/HOLD IGNORED

Explanation: A MODIFY or STOP command has been entered for TSO region nn. This region has previously failed and has been set permanently nondispatchable. Message IKJ055I should have been issued previously for this message.

System Action: The system continues normal processing. No modification is made to region nn.

Operator Response: Probable user error. Respond to message IKJ066D or IKJ081I.

Problem Determination: Table I, items 2, 29.

IKJ090I TSO DUMP FUNCTION INOPERATIVE

Explanation: The DD statement for the dump data set was omitted from the subsystem job control statement, or the dump data set could not be opened.

System Action: Processing continues, but the DUMP function is inoperative.

Operator Response: Probable user error. Include the proper DD statement for the dump data set and reenter the START TS command. If the dump function is not desired, the DD statement describing the dump data set should not be included in the job control statements, and the message should be ignored.

Problem Determination: Table I, items 5b, 29. Restart TSO and save the job control statements.

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IKJ091I TSO DUMP DATA SET ON INVALID DEVICE

Explanation: A DD statement for the dump data set specifies a device not supported by TSO DUMP (SVC DUMP). Valid devices are magnetic tape devices and direct access storage devices with the exception of the 2321 data cell device.

System Action: The system ignores the DD statement. SVC DUMP is inoperative.

Operator Response: Probable user error. Correct the DD statement for the dump data set and restart the job. Make sure the UNIT parameter on the DD statement for the dump data set specifies a device support by TSO DUMP (SVC DUMP).

Problem Determination: Table I, items 1, 13, 29.

IKJ092I TSO DUMP INCOMPLETE - UNABLE TO DUMP ALL OF STORAGE

Explanation: The dump writing routine (SVC DUMP) returned a code indicating that only a partial dump could be taken.

System Action: Processing continues.

Operator Response: Execute the IMDPRDMP service aid to print the dump data set.

Problem Determination: Table I, items 13, 29. Save the job control language referring to the dump data set.

IKJ093I TSO MAIN STORAGE DUMP COMPLETE [SWAP UNITS RESERVED]

Explanation: A complete dump of main storage has been taken to the dump data set. When swap units are reserved, 'SWAP UNITS RESERVED' will appear in the message.

System Action: Processing continues.

Operator Response: If the dump data set is on a direct access storage device, execute the IMDPRDMP service aid immediately so that more dumps can be taken if necessary. If the dump data set is on tape and the tape is not full, more dumps can be taken before IMDPRDMP is executed.

IKJ094I TSO DUMP OF MAIN STORAGE BYPASSED

Explanation: The SVC DUMP routine could not take a dump due to a permanent input/output error or an invalid parameter list, or because a dump is currently being taken.

System Action: The system bypasses the dumping of main storage.

Problem Determination: If a DD statement describing the dump data set has been included in the job control statements for the start of TSO, check Table I, items 2, 29. Make sure that no previous message was issued indicating that the dump function is inactive. Save the job control statements referring to the dump data set.

IKJ095I ddd TSO UNIT, DUMP DATA SET FULL

Explanation: When a dump was requested, the SVC DUMP routine found that the dump data set on device ddd was full. No dump was taken.

System Action: The dump data set is closed.

Operator Response: If the data set is on tape, mount a fresh tape. If the data set is on a direct access storage device, execute the IMDPRDMP service aid to print the dump data set.

IKJ401I START TCAM BEFORE TSO

Explanation: This message is the result of a START TSO command being issued, but a TCAM procedure was not started before TSO was started.

System Action: The TSO operations are terminated.

Operator Response: Start a TCAM procedure that supports TSO; then start TSO. If there is no TCAM procedure in the system which supports TSO, report this message to the installation programmer.

Problem Determination Aid: If this message appears when a TCAM procedure is started and ready, see Table I, items 26d, 29.

IKJ402I TCAM PROCEDURE DOES NOT SUPPORT TSO

Explanation: This message is a result of a START TSO command being issued, but the TCAM procedure that was started by the operator does not support TSO.

System Action: TSO is not started, but whatever TCAM procedure was executing will continue to execute.

Operator Response: To start TSO do the following:

- Stop the currently executing TCAM procedure.
- Start a TCAM procedure which supports TSO.
- Start TSO.

If there is no TCAM procedure in the system that supports TSO, report this message to the installation programmer.

Programmer Response: Make certain that the system has a TCAM procedure that supports TSO. Check the STARTMH macro in your Message Control Program (MCP). It must have the operand ENVIRON=TSO to support TSO.

IKJ403I LINEGROUP FOR DD ddn NOT OPENED

Explanation: The IBM supplied TSO-TCAM Message Control Program was unable to open the data control block (DCB) for the line group data set that specified ddn as its DDNAME.

System Action: Execution of the Message Control Program continues with the telecommunications line defined in this line group unavailable for use.

Operator Response: Check the Job Control Language used to execute the Message Control Program to be sure that no desired DD statements were missing.

IKJ500I BRDB OPEN ERROR code

Explanation: An error occurred while an input data set was being opened for the background reader. In the message text, code is the error code returned by the OPEN macro instruction.

System Action: The input entry is deleted from the BRDR queue, and the background reader terminates.

Operator Response: Enter the DISPLAY command to list the jobs currently in the BRDR queue. Then start the background reader task again.

Problem Determination: Table I, items 2, 29.

IKJ501I BRDR INVALID INPUT

Explanation: The background reader found invalid records in an input data set.

System Action: The entry is deleted from the input queue, and the background reader continues processing. (If the error occurs after processing of a job has been started, the job is terminated and a message is issued to inform the programmer of the failure.)

Operator Response: Issue the DISPLAY command to list the jobs in the SYS1.SYSJOBQE data set. Then start the Background Reader and issue the Display command again, to give a 'before and after' listing.

Problem Determination: Table I, items 2, 7a, 29.

IKJ502I BRDR SYNAD synad

Explanation: An asynchronous error occurred while an input data set was being processed for the background reader. In the message text, synad represents the error analysis data supplied by the SYNADAF macro instruction.

System Action: The entry is deleted from the input queue, and the background reader continues processing. If the error caused termination of a job, a message is issued to inform the programmer of the failure.

Operator Response: Probable hardware error. Issue the DISPLAY command to list the jobs in the SYS1.SYSJOBQE data set. Then start the Background Reader and issue the DISPLAY command again, to give a 'before and after' listing.

Problem Determination: Table I, items 2, 8a, 29.

IKJ503I BRDR REQUIRED DD MISSING FROM PROC

Explanation: A required DD statement is not present in the procedure used to start the background reader.

System Action: The background reader terminates.

Operator Response: Probable user error. The background reader procedure should be corrected and the task started again.

Problem Determination: Table I, items 2, 26d, 29.

IKJ504I BRDR R/I ERROR code

Explanation: An error occurred in the reader/interpreter subroutine of the background reader. In the message text, code is the return code describing the error.

System Action: The background reader terminates.

Operator Response: Enter the DISPLAY command to list the jobs currently in the BRDR queue. Then start the background reader task again. Issue the DISPLAY command to list the jobs in the SYS1.SYSJOBQE data set. Then start the Background Reader and issue the DISPLAY command again, to give a 'before and after' listing.

Problem Determination: Table I, items 2, 8a, 29.

IKJ505I BRDR PARAMETER MISSING

Explanation: The parameter field is missing from the procedure used to start the background reader.

System Action: The background reader terminates.

IKJ

Operator Response: Probable user error. Correct the background reader procedure and start the task again. Issue the DISPLAY command to list the jobs in the SYS1.SYSJOBQE data set. Then start the Background Reader and issue the DISPLAY command again to give a 'before and after' listing.

Problem Determination: Table I, items 2, 8a, 26d, 29.

IKJ506I BRDR MISSING VOL volser FOR JOB jjj

Explanation: The background reader was unable to find a volume serial containing the input data set for job jjj.

System Action: The input entry is put back on the queue, and the background reader terminates.

Operator Response: Probable user error. Make sure that the volume volser is mounted properly. Then start the background reader again. Issue the DISPLAY command to list the jobs in the SYS1.SYSJOBQE data set. Then start the Background Reader and issue the DISPLAY command again, to give a 'before and after' listing.

Problem Determination: Table I, items 2, 8a, 29.

IKJ507I BRDR INCONSISTENT VOLSER/DEVICE volser devtype

Explanation: The background reader found that a volume serial was given for an incorrect device type.

System Action: The input entry is deleted, and the background reader terminates.

Operator Response: Probable user error. Make sure that devices of different types also have different volume serial numbers. Then start the background reader again. Issue the DISPLAY command to list the jobs in the SYS1.SYSJOBQE data set. Then start the Background Reader and issue the DISPLAY command again, to give a 'before and after' listing.

Problem Determination: Table I, items 2, 8a, 29.

IKJ508I BRDR DATA SET NOT FOUND ON VOL volser FOR JOB jjj

Explanation: The background reader was unable to find an input data set for job jjj the volume with serial number volser. This error may arise if there is more than one volume with the same volume serial number being used in the installation. The output data set from the TSO SUBMIT command may, as a result of duplicate serial numbers, be on a different volume than the one being used at the time the background reader is processing. The error may also arise if the data set or the volume VTOC have been scratched.

System Action: The input entry is deleted. The background reader continues processing.

Operator Response: Probable user error. If the error is caused by duplicate volume serial numbers, stop the background reader and mount the correct volume.

Problem Determination: Table I, items 25a, 29.

IKJ509I BRDR QUEUE READ ERROR

Explanation: The background reader encountered an error while reading from the job queue.

System Action: The background reader terminates.

Operator Response: The background reader task may be started again if there have been no other messages indicating errors in the system job queue.

Problem Determination: Table I, items 2, 8a, 29.

IKJ510I BRDR QUEUE DELETE ERROR

Explanation: The background reader encountered an error while deleting an entry in the job queue.

System Action: The background reader terminates.

Operator Response: The background reader task may be started again if there have been no other messages indicating errors in the system job queue.

Problem Determination: Table I, items 2, 8a, 29.

IKJ511I BRDR QUEUE DEQUEUE ERROR

Explanation: The background reader encountered an error while dequeuing an entry from the job queue.

System Action: The background reader terminates.

Operator Response: The background reader task may be started again if there have been no other messages indicating errors in the system job queue.

Problem Determination: Table I, items 2, 8a, 29.

IKJ512I BRDR QUEUE ENQUEUE ERROR

Explanation: The background reader encountered an error while enqueueing an entry on the input queue.

System Action: The background reader terminates.

Operator Response: The background reader task maybe started again if there have been no other messages indicating errors in the system job queue.

Problem Determination: Table I, items 2, 8a, 29.

IKJ513I BRDR JOB jjj WAS CANCELLED

Explanation: The background reader did not interpret job jjj because job jjj had been previously cancelled while on the input queue.

System Action: The entry is deleted. The background reader continues processing.

Operator Response: None.

IKJ514I BRDR INVALID VOLUME FOR JOB jjj

Explanation: The background reader found that job jjj resided on an invalid volume.

System Action: The entry is deleted. The background reader continues processing.

Operator Response: None.

Problem Determination: Table I, items 2, 8a, 29.

IKJ520I SUBMIT QUEUE FULL

Explanation: The system jobqueue does not contain sufficient space for a submitted job.

System Action: Submit processing is terminated in the foreground. There is no background action.

Operator Response: The operator may wish to take action to free jobqueue records for use in the submit queue. He may do one of the following:

- Enter the MODIFY TS command to increase the maximum number of jobs that the system may contain at one time.
- Start a background reader task.
- Stop background input readers.
- Start background initiators and writers.
- Increase the percentage of CPU time available to background tasks.
- Decrease the number and sizes of foreground regions to allow for more tasks in the background.

IKJ549I TIME SHARING JOB jjj CANCELLED

Explanation: The job jjj was cancelled from a foreground terminal by a user who specified the cancel command processor.

System Action: Processing continues.

Operator Response: None.

IKJ570I SEND NOT SUPPORTED IN THIS SYSTEM

Explanation: A SEND command was issued; however, the time sharing option was not included in the system at system

generation time. Therefore, the SEND command is not operative.

System Action: The SEND command is rejected.

Operator Response: None.

IKJ571I INVALID USERID(s) userid, userid,...

Explanation: The userid(s) specified in the SEND command is invalid for one of the following reasons:

- The first character is not alphabetic or national.
- The userid contains a character (other than the first character) which is invalid. The only characters that are valid are alphabetic, numeric, or national (\$ # @) characters.
- The userid is not contained in the list of valid userids in the Broadcast data set.

System Action: The SEND command is rejected.

Operator Response: Reenter the SEND command specifying the correct userid. If the error persists, check the validity of the userid with the system manager.

Problem Determination: Table I, item 29. If the userid is valid, execute the IEBPTPCH utility program to obtain a listing of the SYS1.BROADCAST data set. The SYSUT1 DD statement should specify DSN=SYS1.BROADCAST,DISP=OLD,DCB=(RECFM=F,LRECL=130,BLKSIZE=130). Save the output listing of the Broadcast data set.

IKJ572I USER(S) userid NOT LOGGED ON, MESSAGE CANCELED

Explanation: In a SEND command which does not include the LOGON parameter, a userid was specified which is not currently logged on the time sharing system. The message specified in the SEND command is not issued to the user with the userid specified in the message text. The message is issued to those users with userids which are logged on.

System Action: The message specified in the SEND command is issued to the users, with userids specified in the SEND command, who are currently logged on.

Operator Response: No response is required. If a message is to be sent to users with userids which are not logged on, enter the SEND command and include the LOGON parameter.

IKJ573I SEND SYNTAX ERROR. COMMAND REJECTED

Explanation: The SEND command is invalid for one of the following reasons:

- The command contains embedded blanks.
- A delimiter is missing such as a comma after the message text, an equal sign after the keyword 'USER', or a parenthesis around the userid list.

- The command contains an unidentifiable keyword.
- Quotation marks around the message text are missing.
- The length of the message text is less than one character.

System Action: The SEND command is rejected.

Operator Response: Reenter the SEND command correctly.

IKJ574I NO SPACE IN BROADCAST DATA SET FOR  
 {MAIL  
 {NOTICES}

Explanation: The portion of the Broadcast data set needed to contain a SEND message record is full:

1. MAIL - The SEND command specifies 'USER' and 'LOGON', but no free space is available in the user mail section of the Broadcast data set to contain the SEND message.
2. NOTICES - The SEND command specifies 'LOGON' and does not specify 'USER', no free space is available in the Broadcast notice section to contain the SEND message.

System Action: The SEND message is sent to all specified users currently logged on however, the message is not saved in the Broadcast data set for those users not currently logged on.

Operator Response: Case 1 is a temporary situation. Space will be available in the mail section of the Broadcast data set as soon as a user for whom a message is intended enters a LOGON or LISTBC command. For case 2, it is necessary to free a Broadcast message number by issuing a SEND command with the 'DELETE' parameter specified.

IKJ575I DATA SET SYS1.BROADCAST NOT USABLE

Explanation: A SEND command was issued but the Broadcast data set could not be used for one of the following reasons:

1. The volume containing the SYS1.BROADCAST data set was not mounted.
2. An input/output error occurred during send processing of the SYS1.BROADCAST data set.

System Action: If 'USER' was specified in the SEND command, the message is issued to the specified users currently logged on to the time sharing system. Otherwise, processing in the Broadcast data set is terminated at the point the error is detected.

Operator Response: For case 1, make sure that the volume containing the SYS1.BROADCAST data set is mounted. For case 2, reenter the SEND command.

Problem Determination: Table I, items 25a, 29.

IKJ576I NO BROADCAST MESSAGE(S)

Explanation: One of the following occurred when a SEND command was issued:

- If the parameter msgno was specified, either there was no Broadcast notice message for the particular message number specified, or the message number specified exceeded the maximum value set at system generation time.
- If the 'LIST' parameter was specified (without msgno) there were no Broadcast notice messages in the Broadcast data set.

System Action: None.

Operator Response: None.

IKJ578I BROADCAST MSGNO=nn

Explanation: A SEND command has been issued with the 'LOGON' parameter specified. The SEND message text is entered in the Broadcast data set with the message number nn.

System Action: A message is entered in the Broadcast data set and is assigned message number nn.

Operator Response: None.

IKJ579I CANNOT EXECUTE SEND

Explanation: The SEND command handling routines are unable to perform their functions for one of the following reasons:

- There is an insufficient amount of core available.
- An internal error has occurred in one of the Send modules.

System Action: Send processing is terminated at the point the error is detected.

Operator Response: Reenter the SEND command.

Problem Determination: Table I, items 11, 29.

IKJ580I MESSAGE TRUNCATED TO 115 CHARACTERS

Explanation: A SEND command specified message text that was greater than the maximum of 115 characters allowed.

System Action: The message text is truncated to 115 characters.

Operator Response: None.

IKJ600I TSOLOGON { I/O  
OBTAIN  
OPEN } ERROR,DDNAME ddname,  
USER { userid } , PROC { procname }  
          { UNKNOWN }            { UNKNOWN }

Explanation: TSO LOGON was unsuccessful in performing one of the indicated operations (I/O, OBTAIN, or OPEN). In the message text, ddname refers to the DD statement defining the data set being referenced when the error occurred. The message text also includes the user identification (userid) of the user being serviced when the error occurred and the procedure name, procname, which the user had selected unless they are unknown to TSO LOGON at the time of the error.

System Action: The system disconnects the user from the TSO subsystem after transmitting message IKJ56452I to the user's terminal and invoking the TSO Dump facility to provide a dump for error analysis.

Operator Response: Probable hardware error.

Problem Determination: Table I, items 2, 4, 7a, 29. Make sure that a SYSTSDP DD statement was included in the time sharing procedure. Execute the IMDPRDMP service aid for the dump data set to obtain a formatted listing of the dump, and save the output.

IKJ601I TSOLOGON ABEND nnn,USER {userid } ,  
PROC {procname }  
          { UNKNOWN }

Explanation: Conditions leading to an abnormal termination with code nnn have arisen in a TSO LOGON module. In the message text, userid is the identification of the user being serviced by TSO LOGON when the abnormal termination occurred, and procname is the name of the procedure that the user requested. If the userid or procedure name are not known, UNKNOWN appears in the message text.

System Action: The system terminates the TSO LOGON function in which the abnormal termination occurred after attempting to transmit message IKJ56452I to the terminal on whose behalf TSO LOGON was operating. It then disconnects the terminal from the TSO subsystem after invoking the TSO Dump facility to provide a dump for error analysis.

Operator Response: None.

Problem Determination: Table I, items 2, 4, 7a, 29. Make sure that a SYSTSDP DD statement was included in the time sharing procedure. Execute the IMDPRDMP service aid for the dump data set to obtain a formatted listing of the dump, and save the output.

IKJ602I INCONSISTENT AUTHORIZATION DATA FOR userid

Explanation: A data or control field within the User Attribute Data Set (UADS) for the user with the userid specified in the message is incorrect. The authorization data cannot be used for LOGON processing.

System Action: The system offers the terminal user the choice of logging on with a different userid, or logging off.

Operator Response: For diagnostic purposes it is desirable to freeze the UADS data for 'userid' until the cause of the difficulty has been isolated. However, if rapid restoration of the authorization data for 'userid' is necessary, it can be restored by performing the following recovery operations:

- Use the DELETE subcommand of the ACCOUNT command to purge the damaged data for 'userid' from the UADS.
- Use the ADD subcommand of the ACCOUNT command to reenter valid authorization data.

Problem Determination: Table I, items 29. Execute the IMASPZAP service aid to obtain a dump for the directory blocks of the UADS and all members of UADS which contain 'userid' as the first characters of the member name. Execute the LISTIDR function of IMBLIST for SYS1.LINKLIB and SYS1.OMDLIB to obtain a list of all members with a PTF or local fix. Have a listing available of any local programs or procedures used to access or modify the UADS.

IKJ603I TSOLOGON TERMINATED. INSTALLATION EXIT  
{ ABEND } nnn  
{ ERROR }

Explanation: A routine provided by the installations's systems programmer to augment or modify IBM's standard LOGON processing has failed. If the failure took the form of a system abnormal termination, the word ABEND appears in the message text, and code nnn is the system completion code. Otherwise, the word ERROR appears in the message text, and code nnn is the error code developed by TSO LOGON upon analysis of the parameters returned by an exit routine. These error codes and their meanings are as follows:

Code Explanation

- 004 The address of the control switch buffer passed to the Pre-Prompt Exit was altered during exit execution.
- 008 The control switches buffer length passed to the Pre-Prompt Exit was altered during exit execution.
- 012 The length of the control switches returned by the Pre-Prompt Exit was longer than the buffer or less than zero.
- 016 The address of the command buffer passed to the Pre-Prompt Exit was altered during exit execution.

- 020 The command buffer length passed to the Pre-Prompt Exit was altered during exit execution.
- 024 The length of the command returned by the Pre-Prompt Exit was longer than the buffer or less than zero.
- 028 The address of the userid buffer passed to the Pre-Prompt Exit was altered during exit execution.
- 032 The userid buffer length passed to the Pre-Prompt Exit was altered during exit execution.
- 036 The length of the userid returned by the Pre-Prompt Exit was longer than the buffer or less than zero.
- 040 The Pre-Prompt Exit returned a zero length userid for LOGON processor use.
- 044 The Pre-Prompt Exit returned an unauthorized userid for LOGON processor use.
- 048 The address of the password buffer passed to the Pre-Prompt Exit was altered during exit execution.
- 052 The password buffer length passed to the Pre-Prompt Exit was altered during exit execution.
- 056 The length of the password returned by the Pre-Prompt Exit was longer than the buffer or less than zero.
- 060 The Pre-Prompt Exit returned an unauthorized password for LOGON PROCESSOR USE.
- 064 The address of the account buffer passed to the Pre-Prompt Exit was altered during exit execution.
- 068 The account buffer length passed to the Pre-Prompt Exit was altered during exit execution.
- 072 The length of the account returned by the Pre-Prompt Exit was longer than the buffer or less than zero.
- 076 The Pre-Prompt Exit returned an unauthorized account for LOGON processor use.
- 080 The address of the procedure name buffer passed to the Pre-Prompt Exit was altered during exit execution.
- 084 The procedure name buffer length passed to the Pre-Prompt Exit was altered during exit execution.
- 088 The length of the procedure name returned by the Pre-Prompt Exit was longer than the buffer or less than zero.
- 092 The Pre-Prompt Exit returned a zero length name for LOGON processor use.
- 096 The Pre-Prompt Exit returned an unauthorized procedure name for LOGON processor use.
- 100 The Pre-Prompt Exit returned a region size outside the bounds supported by TSO for LOGON processor use.
- 104 The Pre-Prompt Exit returned an unauthorized region size for LOGON processor use.
- 108 The address of the JCL buffer passed to the Pre-Prompt Exit was altered during exit execution.
- 112 The JCL buffer length passed to the Pre-Prompt Exit was altered during exit execution.
- 116 The length of the JCL returned by the Pre-Prompt Exit was longer than the buffer or less than zero.
- 120 The Pre-Prompt Exit returned less than two JCL card images for LOGON processor use.
- 124 The Pre-Prompt Exit returned a partial JCL card image for LOGON processor use.
- 128 The address of the PSCB accounting data buffer passed to the Pre-Prompt Exit was altered during exit execution.
- 132 The PSCB accounting data buffer length passed to the Pre-Prompt Exit was altered during exit execution.
- 136 The length of the PSCB accounting data returned by the Pre-Prompt Exit was longer than the buffer or less than zero.
- 140 The address of the First Attribute buffer passed to the Pre-Prompt Exit was altered during exit execution.
- 144 The First Attribute buffer length passed to the Pre-Prompt Exit was altered during exit execution.
- 148 The length of the First Attribute returned by the Pre-Prompt Exit was longer than the buffer or less than zero.
- 152 The address of the Second Attribute buffer passed to the Pre-Prompt Exit was altered during exit execution.
- 156 The Second Attribute buffer length passed to the Pre-Prompt Exit was altered during exit execution.
- 160 The length of the Second Attribute returned by the Pre-Prompt Exit was longer than the buffer or less than zero.
- 164 The address of the Generic Group buffer passed to the Pre-Prompt Exit was altered during exit execution.
- 168 The Generic Group buffer length passed to the Pre-Prompt Exit was altered during exit execution.
- 172 The length of the Generic Group returned by the Pre-Prompt Exit was longer than the buffer or less than zero.
- 176 The address of the UPT buffer passed to the Pre-Prompt Exit was altered during exit execution.
- 180 The UPT buffer length passed to the Pre-Prompt Exit was altered during exit execution.
- 184 The length of the UPT returned by the Pre-Prompt Exit was longer than the buffer or less than zero.
- 188 The address of the ECT buffer passed to the Pre-Prompt Exit was altered during exit execution.
- 192 The ECT buffer length passed to the Pre-Prompt Exit was altered during exit execution.
- 196 The length of the ECT returned by the Pre-Prompt Exit was longer than the buffer or less than zero.
- System Action:** The system transmits message IKJ56451I to the terminal of the user whose LOGON failed. It then disconnects the terminal from the TSO subsystem after invoking the TSO Dump facility to provide a dump for error analysis.

Operator Response: Report the problem to the installation's systems programmer.

Program Response: Probable user error. Verify that the exit module supplied by the installation complies with interface requirements.

Problem Determination: Table I, items 2, 4, 7a, 29. output. Make sure that a SYSTSDP DD statement was included in the time sharing procedure. Execute the IMDPRDMP service aid program for the dump data set to obtain a formatted listing of the dump, and save the output. Have a listing of the installation exit routine available.

IKJ605I TSOLOGON TERMINATED. TOO MANY ATTEMPTS. USER {userid} {UNKNOWN}

Explanation: TSO LOGON denied a user with the identification userid access to the TSO subsystem because the user exceeded the limit, specified at system generation time, of attempts to enter a valid set of LOGON operands.

System Action: The system transmits message IKJ56428I to the terminal of the user, and disconnects the terminal from the TSO subsystem.

Operator Response: None required. However, if this situation recurs frequently, inform your installation manager since some individual may be attempting to obtain unauthorized access to the TSO subsystem.

IKJ606I TSOLOGON REJECTED. USERID, userid, IN USE

Explanation: TSO LOGON denied a LOGON request of a user for one of two reasons:

- Another user was currently logged on under the same userid.
- A member of the installation management staff was using the TSO ACCOUNT command to alter the authorization of the user to utilize the TSO subsystem.

System Action: The system transmits a message to the terminal of the user who was unable to log on.

Operator Response: None required. If your installation requires that each individual using the TSO subsystem have his own unique userid, then the userid of the individual involved may be in use by an unauthorized individual. If there is any reason to suspect that this is the case, make sure that the installation manager is informed of the incident.

IKJ607I TSOLOGON REJECTED. nnnnK REGION NOT AVAILABLE. USER userid

Explanation: TSO LOGON denied the LOGON request of a user because the time sharing driver could not make a region of the indicate size available. In the message

test, userid is the identification number of the user whose LOGON request was denied, and nnnnK is the size of the region.

System Action: The system transmits message IKJ56426I to the terminal of the user whose LOGON request was denied.

Operator Response: None.

IKJ608I TSOLOGON TERMINATED. {sname} {ERROR} {macname} nnn.USER {userid} {PROC} {procname} {UNKNOWN} {UNKNOWN}

Explanation: The TSO service routine (sname) or the macro instruction (macname) returned the abnormal return code nnn, which indicates that a situation had arisen from which TSO LOGON could not recover. The userid of the user being serviced by TSO LOGON when the incident occurred and the name of the procedure requested appear in the message text.

System Action: The system transmits message IKJ56454I to the terminal for which TSO LOGON was operating. It then disconnects the terminal from the TSO subsystem.

Operator Response: None.

Problem Determination: Table I, items 2, 4, 7a, 29. Make sure that a SYSTSDP DD statement was included in the time sharing procedure. Execute the IMDPRDMP service aid for the dump data set to obtain a formatted listing of the dump, and save the output.

IKJ609I TSOLOGON REQUIRED DDNAME, ddname, MISSING

Explanation: The DDNAME specified in the message text is required in the time sharing procedure. One message is issued for each DD statement missing. The following list of DDNAMEs is currently required:

SYSUADS - This ddname specified in the to the User Attribute Data Set unless the TSO LOGON Pre-Prompt Exit Routine provides all LOGON information and indicates that no UADS access is to be made. In the latter case this ddname must, nonetheless, be present although TSO LOGON will never reference the data set.

SYSLBC - This ddname is used for access to the Broadcast Data Set unless NOMAIL and NONOTICES are both indicated to TSO LOGON.

IEFPDSI - This ddname is used for access to the TSO procedure library unless the TSO LOGON Pre-Prompt Exit Routine provides a JCL input stream which specifies no catalogued procedure.



IEPDATA - This ddname specifies spooling information for the Reader/Interpreter and is used if the input stream constructed by the TSO LOGON Pre-Prompt Exit Routine contains in-line data (DD \* or DD DATA).

System Action: Continue scanning for any other ddnames which are required in the time sharing procedure but are missing. When all required ddnames have been checked, message IKJ610I is issued.

Operator Response: If possible, start another Time Sharing procedure that contains the required DD statements. If no other procedure is available, inform the installation programmer of this message.

Programmer Response: Probable user error. Correct the time sharing procedure by supplying the required DD statements, and update the SYS1.PROCLIB with the corrected procedure.

Problem Determination: Table I, items 2, 4, 7a, 29.

IKJ610I TSOLOGON REGION NOT INITIALIZED

Explanation: A condition, separately identified via a previously issued error message, has arisen during TSO LOGON region initialization processing that precludes successful operation of the region.

System Action: Terminate initialization for the region.

Operator Response: None.

IKJ650D TSO NOT ACTIVE. TSTRACE WAITING.

Explanation: The trace writer task was ready before a START TS command had been entered.

System Action: The trace writer task waits until TSO has been started or until a STOP TSTRACE command has been entered.

Operator Response: Enter a START TS or STOP TSTRACE command.

IKJ651I NO VALUE SPECIFIED FOR TRACE WRITER TRPARAM

Explanation: TRPARAM was neither included in the TSTRACE procedure nor given a value in the START TSTRACE command.

System Action: The trace writer task is terminated.

Operator Response: Probable user error. Reenter the START command for TSTRACE, specifying a value for the TRPARAM parameter.

Problem Determination: Table I, items 2, 4, 29.

IKJ652I ZERO VALUE SPECIFIED FOR TRACE WRITER TRPARAM

Explanation: An invalid value of 0 was specified for the TRPARAM parameter of the START TSTRACE command.

System Action: The trace writer task is terminated.

Operator Response: Probable user error. Reenter the START command for TSTRACE, specifying a valid value for the TRPARAM parameter.

Problem Determination: Table I, items 2, 4, 29.

IKJ653I TRACE WRITER ALREADY ACTIVE.

Explanation: A start TSTRACE command was issued, but a trace writer task was already active. Only one trace writer task may be active at any one time.

System Action: The second trace writer task is not started.

Operator Response: None.

IKJ654D TSO STOPPED, TSTRACE WAITING.

Explanation: Time sharing operations have terminated.

System Action: The trace writer task waits until TSO has been restarted or until a STOP TSTRACE command has been entered.

Operator Response: Enter the STOP TSTRACE or START TS command.

IKJ655I TRACE WRITER CANNOT ESTABLISH STAE ENVIRONMENT

Explanation: The STAE service routine returned a non-zero return code to the trace writer task.

System Action: The trace writer task is terminated.

Operator Response: Rerun the job during which the failure occurred.

Problem Determination: Table I, items 7a, 29.

IKJ656I INSUFFICIENT SPACE AVAILABLE FOR TRACE WRITER BUFFER

Explanation: The core available for the trace writer buffers is less than 3 x (BLKSIZE+36).

System Action: The trace writer task is terminated.

Operator Response: Enter the DISPLAY ACTIVE command to determine the amount of core available for the trace writer. Adjust the REGION and BLKSIZE parameters accordingly. For detailed information on

region and buffer requirements, refer to IBM System/360 Operating System: Storage Estimates, GC28-6551.

IKJ657I NO DD STATEMENT FOR TRACE DATA SET

Explanation: There was no DD statement for the trace data set in the TSTRACE procedure, and the START TSTRACE command did not contain a device name parameter. Therefore, a DD statement could not be generated.

System Action: The trace writer task is terminated.

Operator Response: Probable user error. Reenter the START TSTRACE command, specifying a device name, or have the installation's systems programmer add the required DD statement to the TSTRACE procedure.

IKJ658I I/O ERROR ON TRACE DATA SET

Explanation: A input/output error occurred when the trace data set was being created.

Problem Determination: Table I, items 29.

System Action: The trace data set is closed and the trace writer task is terminated. Information from the SYNADAF analysis will supplement this message.

Operator Response: Probable hardware error. Retry the job with another device and/or tape volume.

Problem Determination: Table I, items 2, 29.

IKJ659I TRACE DATA SET BLKSIZE LESS THAN MINIMUM ALLOWED

Explanation: The BLKSIZE parameter for the trace data set specified less than the minimum of 128 bytes required by the trace writer.

System Action: The trace writer task is terminated.

Operator Response: Probable user error. Reenter the START TSTRACE command, specifying a larger value for the BLKSIZE parameter. If the error is in the TSTRACE procedure, report this message to the installation's systems programmer.

Problem Determination: Table I, items 29.

IKJ660I TRACE WRITER TRPARM VALUE EXCEEDS MAXIMUM ALLOWED

Explanation: The maximum value for TRPARM (the estimated rate at which entries will be transferred to allocated buffers) exceeds the limit of  $2^{31}-1$  (2,147,483,647).

System Action: The trace writer task is terminated.

Operator Response: Probable user error. Reenter the START TSTRACE command, specifying a smaller value for the TRPARM parameter.

Problem Determination: Table I, items 2, 4, 29.

IKJ661I NON-NUMBERIC CHARACTER IN TRACE WRITER TRPARM

Explanation: The value specified in the TRPARM parameter of the START TSTRACE command contained a non-numeric character.

System Action: The trace writer task is terminated.

Operator Response: Probable user error. Reenter the START command for TSTRACE, specifying a valid value for the TRPARM parameter.

Problem Determination: Table I, items 2, 4, 29.

IKJ662I TSTRACE TERMINATED

Explanation: The trace writer has terminated processing. If an error caused the termination, this message is preceded by an appropriate diagnostic message. This message is also issued in response to a STOP TSTRACE command.

Operator Response: None.

IKJ663I TSO ACTIVE, TSTRACE RECORDING

Explanation: TSO has started and the trace writer has begun processing.

System Action: Processing continues.

Operator Response: None.

IKJ680I INVALID PARAMETER IN PARM FIELD

Explanation: An option is specified in the PARM field of the EXEC statement invoking the trace processor which is not available, is misspelled, or has a missing equal sign (=).

System Action: The trace processor routine is terminated.

Programmer Response: Probable user error. Correct the error and execute the job step again.

Problem Determination: Table I, items 1, 2, 4, 29.

IKJ681I I/O ERROR DURING TRACE PROCESSOR PROGRAM

Explanation: A permanent input/output error has occurred during Trace Data Set processing.

IKJ

System Action: The trace processor routine is terminated. Information from the SYNADAF analysis will supplement this message.

Operator Response: Probable hardware error. Execute the job step again with another device and/or tape volume.

Problem Determination: Table I, items 1, 2, 4, 29.

IKJ682I UNABLE TO OPEN SYSPRINT DATA SET

Explanation: An attempt by the trace processor routine to open the output data set has failed because no SYSPRINT DD statement was supplied.

SYSTEM Action: The trace processor routine is terminated.

Programmer Response: Probable user error. Supply a SYSPRINT DD statement and execute the job step again.

Problem Determination: Table I, items 1, 2, 4, 29.

IKJ683I UNABLE TO OPEN TRACEDD DATA SET

Explanation: An attempt to open the input data set has failed because no DD statement for the TRACEDD data set was supplied.

System Action: The trace processor routine is terminated.

Programmer Response: Probable user error. Supply a TRACEDD DD statement and execute the job step again.

Problem Determination: Table I, items 1, 2, 4, 29.

IKJ684I INVALID INPUT DATA SET

Explanation: The first entry in the TRACEDD data set is not a type 'A' entry. The trace processor assumes that the data set was not created by the trace writer.

System Action: The trace processor routine is terminated.

Programmer Response: Probable user error. Make sure that the input data set is a TRACEDD data set.

Problem Determination: Table I, items 1, 4, 26b, 29.

IKJ685I TRACE PROCESSOR ENDED

Explanation: Trace processing of all input data, according to the options specified (or the default values) is complete, or processing has ended because of an error. If an error caused processing to terminate, an appropriate diagnostic message preceded this message.

System Action: None.

Programmer Response: None.

IKJ686I INVALID CHARACTER(S) IN THE CODES PARAMETER FIELD

Explanation: Embedded blank(s) or delimiter(s) appear in the CODES parameter field of the EXEC statement which invokes the trace processor.

System Action: The trace processor routine is terminated.

Programmer Response: Probable user error. Correct the error and execute the job step again.

Problem Determination: Table I, items 1, 2, 4, 29.

IKJ687I INVALID OPTION CODES PARAMETER

Explanation: An option other than S, T, or D is specified in the trace processor.

System Action: The trace processor routine is terminated.

Programmer Response: Probable user error. Correct the error and execute the job step again.

Problem Determination: Table I, items 1, 2, 4, 29.

IKJ688I INVALID CHARACTER(S) IN THE TJID PARAMETER FIELD

Explanation: Embedded blank(s), invalid delimiter(s), or nondecimal value(s) appear in the TJID parameter field of the EXEC statement which invokes the trace processor.

System Action: The trace processor routine is terminated.

Programmer Response: Probable user error. Correct the error and execute the job step again.

Problem Determination: Table I, items 1, 2, 4, 29.

IKJ689I TJID PARAMETER FIELD IS TOO LONG

Explanation: Either a hyphen is missing or a decimal value greater than three digits in length has been specified in the TJID parameter field of the EXEC statement which invokes the trace processor.

System Action: The trace processor routine is terminated.

Programmer Response: Probable user error. Correct the error and execute the job step again.

Problem Determination: Table I, items 1, 2, 4, 29.

IKJ690I INVALID CHARACTER(S) IN THE CLOCK  
PARAMETER FIELD

Explanation: Embedded blank(s), invalid  
delimiter(s), or non-decimal value(s)  
appear in the CLOCK parameter field of the  
EXEC statement which invokes the trace  
processor.

System Action: The trace processor  
routine is terminated.

Programmer Response: Probable user error.  
Correct the error and execute the job step  
again.

Problem Determination: Table I, items 1,  
2, 4, 29.

IKJ691I CLOCK PARAMETER FIELD IS TOO LONG

Explanation: Either a hyphen is missing  
or a decimal value greater than seven  
digits in length has been specified in the  
CLOCK parameter field of the EXEC  
statement which invokes the trace  
processor.

System Action: The trace processor  
routine is terminated.

Programmer Response: Probable user error.  
Correct the error and execute the job step  
again.

Problem Determination: Table I, items 1,  
2, 4, 29.

IKJ692I TRACE DATA SET DOES NOT CONTAIN DATA IN  
THE RANGE COMPUTED FROM PARM OPTIONS

Explanation: In the EXEC statement which  
invokes the trace processor, the TJID  
option specifies an ID number or ID  
numbers which do not exist in the input  
data set, and/or the CLOCK option  
specifies a time limit which is not within  
the input data set active time range.

System Action: The trace processor  
routine is terminated.

Programmer Response: Probable user error.  
Correct the error and execute the job step  
again.

Problem Determination: Table I, items 1,  
2, 29.

IKJ693I LOWER LIMIT IS MISSING IN THE CLOCK OR  
TJID PARAMETER

Explanation: An upper limit is given in  
the TJID or CLOCK parameter in the EXEC  
statement of the Trace Processor and an  
expected lower limit is missing.

System Action: The Trace Processor  
Program is terminated.

Programmer Response: Probable user error.  
Specify a lower limit or limit or delete  
the hyphen.

Problem Determination: Table I, items 13,  
23, 29.

IKJ694I EXPECTED UPPER LIMIT IS MISSING IN THE  
CLOCK OR TJID PARAMETER

Explanation: A lower limit is given in  
the TJID or CLOCK parameter in the EXEC  
statement of the Trace Processor and a  
hyphen was found in the parameter  
indicating an upper limit which is  
missing.

System Action: The Trace Processor  
Program is terminated.

Programmer Action: Probable User Error.  
Specify an upper limit or delete the  
hyphen.

Problem Determination: Table I, items 13,  
23, 29.

IKJ695I UNBALANCED PARENTHESES IN PARAMETER FIELD

Explanation: A left parenthesis appears  
in the PARM field in the EXEC statement of  
the Trace Processor or a right parenthesis  
appears outside the sub-parameter field.

System Action: The Trace Processor  
Program is terminated.

Programmer Action: Probable User Error.  
Correct the number of right and/or left  
parentheses.

Problem Determination: Table I, items 13,  
23, 29.

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TERMINAL MESSAGES REQUIRING INSTALLATION ACTION

The following section contains those TSO terminal messages that are generated for the terminal user but that require designated installation personnel to perform certain diagnostic measures before calling IBM for programming support. The messages are not listed by message number but are listed alphabetically according to message text; the additional messages associated with each initial message are listed alphabetically under each message. The KEY indicated at the left of the message denotes the appropriate response for that message; the responses are listed in numeric order following the list of messages.

In the message texts, the variables are designated by lower case letters -- dsn denotes data set name, hhh denotes system completion code (in hexadecimal), cm denotes command, and xxxx denotes error analysis information provided by the SYNADAF macro instruction.

| <u>KEY</u> | <u>MESSAGE</u>                                            | <u>KEY</u> | <u>MESSAGE</u>                                       |
|------------|-----------------------------------------------------------|------------|------------------------------------------------------|
|            |                                                           | 13         | DADSM ERROR CODE 4738                                |
|            |                                                           | 5          | DYNAMIC ALLOCATION ERROR 104                         |
|            |                                                           | 5          | DYNAMIC ALLOCATION ERROR 108                         |
|            |                                                           | 5          | DYNAMIC ALLOCATION ERROR 10C                         |
|            |                                                           | 6          | DYNAMIC ALLOCATION ERROR 208                         |
|            |                                                           | 7          | DYNAMIC ALLOCATION ERROR 214                         |
|            |                                                           | 8          | DYNAMIC ALLOCATION ERROR 21C                         |
|            |                                                           | 2          | DYNAMIC ALLOCATION ERROR 1704                        |
|            |                                                           | 4          | DYNAMIC ALLOCATION ERROR 1718                        |
|            |                                                           |            | DATA SET dsn NOT USABLE+                             |
|            |                                                           | 16         | BLDL I/O ERROR                                       |
|            |                                                           | 16         | FIND I/O ERROR                                       |
|            |                                                           | 14         | I/O SYNAD ERROR xxxx                                 |
|            |                                                           | 15         | OPEN ERROR CODE hhh                                  |
|            |                                                           | 16         | STOW I/O ERROR                                       |
|            |                                                           |            | DATA SET dsn RENAMED BUT dsn STILL CATALOGED+        |
|            |                                                           | 2          | CATALOG ERROR CODE 4                                 |
|            |                                                           | 3          | CATALOGED ERROR CODE 20                              |
|            |                                                           | 4          | CATALOG ERROR CODE 28                                |
|            |                                                           |            | FILE SYSPROC NOT USABLE+                             |
|            |                                                           | 16         | FIND I/O ERROR                                       |
|            |                                                           | 14         | I/O SYNAD ERROR xxxx                                 |
|            |                                                           | 15         | OPEN ERROR CODE hhh                                  |
|            |                                                           |            | HELP DATA SET NOT ALLOCATED, DATA SET NOT ON VOLUME+ |
|            |                                                           | 1          | CATALOG INFORMATION INCORRECT                        |
|            |                                                           |            | HELP DATA SET NOT ALLOCATED, SYSTEM ERROR+           |
|            |                                                           | 2          | CATALOG ERROR 4                                      |
|            |                                                           | 2          | CATALOG ERROR 20                                     |
|            |                                                           | 3          | CATALOG ERROR 20                                     |
|            |                                                           | 4          | CATALOG ERROR 28                                     |
|            |                                                           | 5          | DYNAMIC ALLOCATION ERROR 104                         |
|            |                                                           | 5          | DYNAMIC ALLOCATION ERROR 108                         |
|            |                                                           | 5          | DYNAMIC ALLOCATION ERROR 10C                         |
|            |                                                           | 5          | DYNAMIC ALLOCATION ERROR 10C                         |
|            |                                                           | 6          | DYNAMIC ALLOCATION ERROR 208                         |
|            |                                                           | 6          | DYNAMIC ALLOCATION ERROR 208                         |
|            |                                                           | 7          | DYNAMIC ALLOCATION ERROR 214                         |
|            |                                                           | 7          | DYNAMIC ALLOCATION ERROR 214                         |
|            |                                                           | 8          | DYNAMIC ALLOCATION ERROR 21C                         |
|            |                                                           | 8          | DYNAMIC ALLOCATION ERROR 21C                         |
|            |                                                           | 2          | DYNAMIC ALLOCATION ERROR 1704                        |
|            |                                                           | 2          | DYNAMIC ALLOCATION ERROR 1704                        |
|            |                                                           | 4          | DYNAMIC ALLOCATION ERROR 1718                        |
|            |                                                           | 4          | DYNAMIC ALLOCATION ERROR 1718                        |
|            |                                                           |            | HELP DATA SET NOT USABLE+                            |
|            |                                                           | 16         | FIND I/O ERROR                                       |
|            |                                                           | 14         | I/O SYNAD ERROR xxxx                                 |
|            |                                                           | 15         | OPEN ERROR CODE hhh                                  |
|            |                                                           |            | HISTORY NOT AVAILABLE+                               |
|            |                                                           | 1          | DATA SET NOT ON VOLUME                               |
|            |                                                           | 17         | I/O ERROR DURING OBTAIN                              |
|            |                                                           | 2          | LOCATE ERROR CODE 4                                  |
|            |                                                           | 4          | LOCATE ERROR CODE 24                                 |
|            |                                                           |            | LOGON TERMINATED - SYSTEM ERROR                      |
|            |                                                           |            | MEMBERS NOT AVAILABLE+                               |
|            |                                                           | 16         | DIRECTORY STRUCTURE ERROR                            |
|            |                                                           | 16         | I/O SYNAD ERROR DURING DIRECTORY SEARCH xxx          |
|            |                                                           |            | SYSTEM ERROR+                                        |
|            |                                                           | 16         | DATA SET dsn NOT UNALLOCATED, CATALOG ERROR CODE 28  |
|            |                                                           | 18         | SYSTEM FAILURE - ALL USERS TERMINATED                |
| <u>KEY</u> | <u>MESSAGE</u>                                            |            |                                                      |
|            | BROADCAST DATA SET NOT ALLOCATED, DATA SET NOT ON VOLUME+ |            |                                                      |
| 1          | CATALOG INFORMATION INCORRECT                             |            |                                                      |
|            | BROADCAST DATA SET NOT ALLOCATED, SYSTEM ERROR+           |            |                                                      |
| 2          | CATALOG ERROR 4                                           |            |                                                      |
| 3          | CATALOG ERROR 20                                          |            |                                                      |
| 4          | CATALOG ERROR 28                                          |            |                                                      |
| 5          | DYNAMIC ALLOCATION ERROR 104                              |            |                                                      |
| 5          | DYNAMIC ALLOCATION ERROR 108                              |            |                                                      |
| 5          | DYNAMIC ALLOCATION ERROR 10C                              |            |                                                      |
| 6          | DYNAMIC ALLOCATION ERROR 208                              |            |                                                      |
| 7          | DYNAMIC ALLOCATION ERROR 214                              |            |                                                      |
| 8          | DYNAMIC ALLOCATION ERROR 21C                              |            |                                                      |
| 2          | DYNAMIC ALLOCATION ERROR 1704                             |            |                                                      |
| 4          | DYNAMIC ALLOCATION ERROR 1718                             |            |                                                      |
|            | BROADCAST DATA SET NOT USABLE+                            |            |                                                      |
| 14         | I/O SYNAD ERROR xxxx                                      |            |                                                      |
| 15         | OPEN ERROR CODE hhh                                       |            |                                                      |
|            | DATA SET dsn DELETED BUT dsn STILL CATALOGED+             |            |                                                      |
| 2          | CATALOG ERROR CODE 4                                      |            |                                                      |
| 3          | CATALOG ERROR CODE 20                                     |            |                                                      |
| 4          | CATALOG ERROR CODE 28                                     |            |                                                      |
|            | DATA SET dsn NOT ALLOCATED, DATA SET NOT ON VOLUME+       |            |                                                      |
| 1          | CATALOG INFORMATION INCORRECT                             |            |                                                      |
|            | DATA SET dsn NOT ALLOCATED, SYSTEM OR INSTALLATION ERROR+ |            |                                                      |
| 2          | CATALOG ERROR 4                                           |            |                                                      |
| 3          | CATALOG ERROR 20                                          |            |                                                      |
| 4          | CATALOG ERROR 28                                          |            |                                                      |
| 9          | DADSM ERROR CODE 4704                                     |            |                                                      |
| 10         | DADSM ERROR CODE 4708                                     |            |                                                      |
| 11         | DADSM ERROR CODE 470C                                     |            |                                                      |
| 12         | DADSM ERROR CODE 4734                                     |            |                                                      |



18 SYSTEM FAILURE - PLEASE LOGON AGAIN

UNABLE TO DELETE DATA SET dsn+

11 SCRATCH ERROR CODE 4

17 SCRARCH ERROR CODE 6

16 STOW ERROR CODE 16

UNABLE TO MODIFY PROTECTION FLAGS OF DATA SET dsn+

14 I/O ERROR WHILE UPDATEING SECURITY FLAGS

UNABLE TO PROTECT DATA SET+

14 I/O ERROR IN PASSWORD DATA SET

USER ATTRIBUTE DATA SET NOT ALLOCATED, DATA SET NOT ON VOLUME+

1 CATALOG INFORMATION INCORRECT

USER ATTRIBUTE DATA SET NOT USABLE+

16 BLDL I/O ERROR

14 I/O SYNAD ERROR xxxxx

15 OPEN ERROR CODE hhh

16 STOW I/O ERROR

cm ENDED DUE TO ERROR+

19 SYSTEM ABEND CODE hhh

Problem Determination:

KEY Explanation

1. If the data set was deleted by a utility program that was also supposed to update the catalog, but the catalog was not updated, check Table I, items 2, 7ac (command library), 25ac, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.
2. If the necessary control volume is mounted and the error recurs, check Table I, items 2, 7ac (command library), 25ac, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.
3. If sufficient space exists in all necessary control volumes, check Table I, items 2, 7ac (command library), 25ac, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device. Execute the IEHDASDR system utility program, specifying the DUMP statement, to obtain a printed copy of the SYSCTLG data set, and save the resulting output.
4. See Table I, items 2, 7ac (command library), 25ac, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device. Execute the IEHDASDR system utility program, specifying the DUMP statement, to obtain a printed copy of the SYSCTLG data set, and save the resulting output.
5. Table I, item 2, 7ac (command library), 25ac, 29. Instruct the

terminal user to retain the terminal listing or record what is currently displayed on the graphics device. Execute the IEHDASDR system utility program, specifying the DUMP statement, to obtain a printed copy of the SYS1.SYSJOBQE data set, and save the resulting output.

6. If sufficient space exists in the SYS1.SYSJOBQE data set, see Table I, items 2, 7ac (command library), 8a, 11, 25ac, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.
7. If the devices of the type indicated in the User Attribute Data Set for use by this user are actually online, see Table I, items 2, 7ac (command library), 11, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device. Have the person in the installation authorized to use the ACCOUNT command issue the command with the LIST subcommand to list the attributes of the user having trouble.
8. If the device of the type indicated in the User Attribute Data Set for use by this user were actually included in the system at system generation time, see Table I, items 2, 7ac (command library), 17ab, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device. Have the person in the installation authorized to use the ACCOUNT command issue the command with the LIST subcommand to list the attributes of the user having trouble.
9. If the new data set being created by the user does not have the same name as an uncataloged data set, see table I, items 2, 7ac (command library), 25ac, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.
10. If the space exists in the volume table of contents of all online volumes, see Table I, items 2, 7ac (command library), 25ac, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.
11. See Table I, items 2, 7ac (command library), 25ac, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device.
12. If there are no DOS volumes online, see Table I, items 2, 7ac (command library), 25ac, 29. Instruct the terminal to retain the terminal

- listing or record what is currently displayed on the graphics device.
13. If the directory space requested is not larger than the first extent, see Table I, items 2, 7ac (command library), 29. Instruct the terminal to retain the terminal listing or record what is currently displayed on the graphics device.
  14. See Table I, items 2, 7ac (command library), 25ac, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device. Execute the IEHDASDR system utility program, specifying the DUMP statement, to obtain a printed copy of the SYSCTLG data set, and save the resulting output.
  15. See Table I, items 2, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device. Consult the 'System Completion Codes' section of this publication for the associated error code, and respond as indicated for that code; however, do not obtain a storage dump and do not specify MSGLEVEL=(1,1) in the JOB statement, even if so requested.
  16. See Table I, items 2, 7ac (command library), 25ac, 29. Instruct the terminal user to retain the terminal

- listing or record what is currently displayed on the graphics device. Execute the IEHDASDR system utility program, specifying the DUMP statement, to obtain a printed copy of the directory of the data set. Save the resulting output.
17. If the required volume is mounted, see Table I, items 2, 7ac (command library), 11, 25ac, 29. Instruct the terminal user to retain the terminal listing or record what is currently displayed on the graphics device. Make sure that a SYSTSDP DD statement is included in the Start procedure for TSO. Execute the IMDPRDMP service aid to print the TSO dump data set and the SWAP data sets. Save the resulting output. Inform the user that if a command was being processed, the user should:
    - 1) Use the ALLOCATE command to allocate a SYSOUT data set with the FILE name of SYSUDUMP.
    - 2) Repeat the error situation.
    - 3) Strike the 'return' key after receiving the message 'cm ENDED DUE TO ERROR+'.
    - 4) Use the FREE command to free the FILE name SYSUDUMP.
    - 5) Retain the terminal listing or record what is currently displayed on the graphics device.
    - 6) Retain the SYSOUT listing containing the dump output.



## PL/I Syntax Checker Messages (IKM)

|                             |                                                                                                                                                                                                                       |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component Name              | IKM                                                                                                                                                                                                                   |
| Program Producing Message   | PL/I Syntax Checker                                                                                                                                                                                                   |
| Audience and Where Produced | For remote operator and programmer: terminal                                                                                                                                                                          |
| Message Format              | IKMnnn llllllll text<br><br>nnn<br>Message serial number.<br><br>llllllll<br>Data set line number of the line in which the error was detected. Leading zeroes and blanks are suppressed.<br><br>text<br>Message text. |
| Comments                    | Central operator may request that messages appear on his console.                                                                                                                                                     |
| Associated Publications     | <u>IBM System/360 Operating System:</u><br><u>Conversational Remote Job Entry</u><br><u>Terminal User's Guide, GC30-2014</u>                                                                                          |
| Problem Determination       | Refer to the fold-out in part VI of this publication for problem determination instructions.                                                                                                                          |

IKM001 11111111 UNMATCHED STRING QUOTES IN THIS STATEMENT

Explanation: The quotation mark at the end of a character or bit string is missing. No more checking of the statement is performed.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

left parenthesis; or, a statement (excluding prefixes) starts with a nonkeyword identifier but does not contain an equal sign or does not have an equal number of left and right parentheses on the left of the equal sign.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM002 11111111 UNMATCHED COMMENT BRACKETS IN THIS STATEMENT

Explanation: The character pair \*/ marking the end of a comment is missing. No more checking of the statement is performed.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM004 11111111 LABEL MISSING FROM xxx STATEMENT

Explanation: The label that should prefix an ENTRY, PROCEDURE, or FORMAT statement is missing.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM003 11111111 STATEMENT NOT RECOGNIZED

Explanation: A statement (including prefixes) does not start with an identifier, semicolon, decimal integer, or

IKM005 11111111 PREFIX NOT PERMITTED BEFORE xxx

Explanation: A condition prefix to an ELSE clause, or an ENTRY or DECLARE statement, is not permitted.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM006 11111111 CHECK/NOCHECK PREFIX NOT PERMITTED BEFORE THIS STMT

Explanation: The prefixes CHECK and NOCHECK may precede only a PROC or BEGIN statement.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM007 11111111 PREFIX OPTION FOLLOWS LABEL

Explanation: A condition prefix follows a label prefix. This is not permitted under the rules of PL/I. A condition prefix must always precede any label prefix.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM008 11111111 ILLEGAL STATEMENT FOLLOWS xxx

Explanation: xxx = ON: An on-unit consisting of an IF, ON, DO, RETURN, PROCEDURE, DECLARE, END, or FORMAT statement, or an ELSE clause, is not permitted.

xxx = IF or ELSE: A unit-1 or unit-2 branch of an IF statement consisting of an ON, DO, PROCEDURE, ENTRY, DECLARE, END, or FORMAT statement, or an ELSE clause, is not permitted. The illegal statement is not checked further.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM009 11111111 INVALID LABEL BEGNG xxx

Explanation: A label is not an (conditionally subscripted) identifier.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM010 11111111 INVALID PREFIX OPTION xxx

Explanation: A condition prefix contains an invalid condition name. The checking continues after the next colon.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM011 11111111 LABEL NOT PERMITTED BEFORE xxx

Explanation:  
xxx = ON: the on-unit in an ON-statement may not have a label prefix.

xxx = ELSE: a label to an ELSE-clause must not precede the word ELSE.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it. 13, 23

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM012 11111111 INCOMPLETE IF STATEMENT, THEN NOT FOUND WHEN EXPECTED

Explanation: In an IF statement, the keyword THEN, or the entire THEN clause, is missing. The checking of the statement is terminated.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM013 11111111 ERROR IN xxx STATEMENT BEGNG yyy

Explanation:  
xxx = ALLOCATE, FREE, DECLARE, OPEN, CALL, DO, GET, or PUT statements. An invalid symbol may be contained in one of these statements.

xxx = BEGIN. The BEGIN statement is incorrectly written (may have the option ORDER or REORDER in PL/I Version 5).

xxx = THIS. Error in an unclassified statement. Checking of the statement is terminated.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM014 11111111 INVALID CHAR xxx PRECEDING yyy

Explanation: The character is not a PL/I character. Checking of this statement is terminated.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM015 11111111 INVALID CHAR IN BIT STRING BEGNG xxx

Explanation: A bit string contains a character other than 0 or 1.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM016 11111111 xxx MISSING AFTER yyy

Explanation: A delimiter (comma, colon, or right parenthesis) or an identifier is missing.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM017 11111111 MISSING EQUAL SIGN IN DO SPECIFICATION

Explanation: A Type 3 DO statement or repetitive specification must have the following general form: DO variable = expression [...]; . This error terminates the checking of the DO specification.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM018 11111111 SURPLUS COMMA AFTER xxx

Explanation: A comma should not separate the options in a GET, PUT, or DECLARE (ENVIRONMENT) statement.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM019 11111111 A LETTER IMMEDIATELY FOLLOWS CONSTANT BEGNG xxx

Explanation: A constant may only be followed by one of the following: any of several special characters, e.g., a blank or semicolon; an arithmetic operator, a comparison operator, or a bit-string operator. This could not be internally translated so no further checking of the statement is performed.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM020 11111111 INVALID PREFIX OPERATOR xxx PRECEDING yyy

Explanation: An expression begins with an operator other than \_, +, - or ( or an operand other than an identifier, a string, or a constant.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM021 11111111 CONSTANT BEGNG xxx IS TOO LONG

Explanation: A binary fixed point or integer constant has more than 31 digits, or a decimal fixed point or integer constant has more than 15 digits.

A binary floating point constant has more than 53 digits in the mantissa part, or a decimal floating point constant has more than 16 digits in the mantissa part.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM022 11111111 CONSTANT BEGNG xxx EXCEEDS MAXIMUM VALUE

Explanation: A floating point constant exceeds the value 7.205,759,403,792,793E75, which is the highest value allowed.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM023 1111111 SOLITARY DECIMAL POINT FOUND IN OPERAND POSITION

Explanation: A period appears invalidly in an expression in an operand position.  
Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM024 1111111 EXPONENT MISSING IN CONSTANT BEGNG xxx

Explanation: The letter E in a floating point constant is followed by some character other than a digit, a plus or minus sign, or a decimal point.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM025 1111111 EXPONENT TOO LONG IN CONSTANT BEGNG xxx

Explanation: A binary floating point constant has more than 3 digits in the exponent part, or a decimal floating point constant has more than 2 digits in the exponent part.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM026 1111111 DECIMAL POINT IN EXPONENT OF CONSTANT BEGNG xxx

Explanation: The exponent in a floating point constant contains a decimal point.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM027 1111111 CONSTANT BEGNG xxx HAS TOO MANY DECIMAL POINTS

Explanation: A fixed point constant or the mantissa part of a floating point constant contains more than one radix point. Sterling constants are not checked.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM028 1111111 CONFLICTING xxx OPTION

Explanation: The option named conflicts with a previously specified option.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM029 1111111 xxx OPTION REQUIRED

Explanation: The option named must be specified.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM030 1111111 INVALID OPTION BEGNG xx

Explanation: The option named is not a valid option keyword.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM031 1111111 EXPRESSION MISSING AFTER xxx

Explanation: An expression to the right of an equal sign or IF is missing. Checking of the statement is terminated.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

IKM032 1111111 INVALID ARGUMENT SPECIFIED FOR  
xxx

Explanation: The attribute or option  
named has invalid argument or argument  
list.

Programmer Response: Probable user error.  
Correct any errors in your PL/I source  
statement and let the syntax checker  
rescan it.

Problem Determination: Table I, items 13,  
29. Compile your PL/I statement as part  
of a valid PL/I program.

IKM033 1111111 ARGUMENT MISSING AFTER xxx

Explanation: The argument that must  
follow the attribute or option named is  
missing, or the argument list is empty.

Programmer Response: Probable user error.  
Correct any errors in your PL/I source  
statement and let the syntax checker  
rescan it.

Problem Determination: Table I, items 13,  
29. Compile your PL/I statement as part  
of a valid PL/I program.

IKM034 1111111 MULTIPLE xxx yyy SPECIFIED

Explanation: The attribute or option  
named has been previously specified in  
this statement.

Programmer Response: Probable user error.  
Correct any errors in your PL/I source  
statement and let the syntax checker  
rescan it.

Problem Determination: Table I, items 13,  
29. Compile your PL/I statement as part  
of a valid PL/I program.

IKM035 1111111 NO FILE SPECIFIED IN OPEN/CLOSE  
STATEMENT

Explanation: The FILE option in an OPEN  
or CLOSE statement is missing. No more  
checking of the statement is performed.

Programmer Response: Probable user error.  
Correct any errors in your PL/I source  
statement and let the syntax checker  
rescan it.

Problem Determination: Table I, items 13,  
29. Compile your PL/I statement as part  
of a valid PL/I program.

IKM036 1111111 ILLEGAL USE OR INCORRECT FORMAT  
OR REFER OPTION

Explanation: The REFER option is used in  
an illegal context or is specified in an  
invalid format.

Programmer Response: Probable user error.  
Correct any errors in your PL/I source  
statement and let the syntax checker  
rescan it.

Problem Determination: Table I, items 13,  
29. Compile your PL/I statement as part  
of a valid PL/I program.

IKM037 1111111 FILE ORGANIZATION MISSING FROM  
ENVIRONMENT OPTION

Explanation: The file organization is not  
specified in the ENVIRONMENT option.

Programmer Response: Probable user error.  
Correct any errors in your PL/I source  
statement and let the syntax checker  
rescan it.

Problem Determination: Table I, items 13,  
29. Compile your PL/I statement as part  
of a valid PL/I program.

IKM038 1111111 CR OR DB IN FLOATING FIELD OF  
PICTURE BEGNG xxx

Explanation: The CR or DB symbols must  
not be specified for the exponent of a  
floating field in a PICTURE specification.

Programmer Response: Probable user error.  
Correct any errors in your PL/I source  
statement and let the syntax checker  
rescan it.

Problem Determination: Table I, items 13,  
29. Compile your PL/I statement as part  
of a valid PL/I program.

IKM039 1111111 CONFLICTING xxx ATTRIBUTE

Explanation: The attribute named  
conflicts with a previously specified  
attribute. For DECLARE and ALLOCATE  
statements, checking goes on for the next  
level-one declare variable (i.e., if the  
conflicting attribute is inside a  
structure, no more checking of this  
structure is performed).

Programmer Response: Probable user error.  
Correct any errors in your PL/I source  
statement and let the syntax checker  
rescan it.

Problem Determination: Table I, items 13,  
29. Compile your PL/I statement as part  
of a valid PL/I program.

IKM040 1111111 xxx ATTRIBUTE NOT PERMITTED IN  
THIS CONTEXT

Explanation: An ISUB dummy variable  
appears outside the context of a DEFINED  
attribute of a DECLARE statement; or the  
LIKE attribute is specified in an invalid  
context.

Programmer Response: Probable user error.  
Correct any errors in your PL/I source  
statement and let the syntax checker  
rescan it.

Problem Determination: Table I, items 13,  
29. Compile your PL/I statement as part  
of a valid PL/I program.

IKM

IKM041 11111111 ERROR IN FORMAT LIST BEGNG xxx

Explanation: Either 1) a format item does not start with an identifier or a decimal integer constant; 2) the identifier is not a valid format item keyword, or 3) the FORMAT item has an invalid format. Checking continues after the format list.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM042 11111111 xxx MUST HAVE ENTRY ATTRIBUTE

Explanation: The identifier named must be declared with an ENTRY attribute.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM043 11111111 INVALID xxx ATTRIBUTE SPECIFIED FOR yyy

Explanation: The attribute named is not a valid attribute keyword.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM044 11111111 ILLEGAL BASE FOR DEFINED ITEM xxx

Explanation: The item named is defined on an invalid base.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM045 11111111 ERROR IN INITIAL ATTRIBUTE LIST BEGNG xxx

Explanation: The INITIAL attribute list does not begin with a constant, a string, or a repetition factor; or a + or - sign is not followed by a constant.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM046 11111111 INVALID CHAR xxx IN PICTURE BEGNG yyy

Explanation: The picture specification identified contains one or more invalid characters.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM047 11111111 ILLEGAL USE OF CHAR xxx IN PICTURE BEGNG yyy

Explanation: The character identified is valid but improperly used in a picture specification.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM048 11111111 EXPONENT FIELD MISSING IN PICTURE BEGNG xxx

Explanation: In the picture specification for a floating point number, the exponent field is missing.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM049 11111111 EXPONENT FIELD TOO LARGE IN PICTURE BEGNG xxx

Explanation: In the picture specification for a floating point number, the exponent field has too many decimal positions.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM050 11111111 MORE THAN ONE SIGN CHAR IN PICTURE BEGNG xxx

Explanation: The numeric picture specification identified contains more than one (not drifting) sign character.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM051 11111111 INVALID SCALING FACTOR IN PICTURE BEGNG xxx

Explanation: In the picture specification for a fixed point number, the scaling factor is invalidly represented.

Programmer Response: Probable user error, Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM052 11111111 INVALID USE OF SCALING FACTOR IN PICTURE BEGNG xxx

Explanation: A scaling factor may occur only in the picture specification for a fixed-point number.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM053 11111111 NO SCALING FACTOR PARENTHESES IN PICTURE BEGNG xxx

Explanation: The parentheses enclosing the integer of a scaling factor in the picture specification identified are missing.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM054 11111111 INVALID REPETITION FACTOR IN PICTURE BEGNG xxx

Explanation: The repetition factor in the picture specification identified is not an integer. A repetition factor in a picture specification must be a non-zero integer enclosed in parentheses.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM055 11111 MULTIPLE USE OF CHARACTER xxx IN PICTURE BEGNG yyy

Explanation: The characters E, K, and V may occur once only in a numeric picture specification.

Programmer Response: Probable user error, Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM056 111111 NO DIGIT POSITION BEFORE EXPONENT IN PICTURE xxx

Explanation: A picture specification for a floating point number makes no allowance for the digits of a mantissa preceding the delimiter E.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM057 11111111 PICTURE BEGNG xxx LONGER THAN 255 CHAR

Explanation: The picture specification identified exceeds the maximum length of 255 characters.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM058 11111111 STERLING CHAR FOUND IN NON-STERLING PICTURE xxx

Explanation: One of the characters 8, 7, 6, P, G, H, or M is found but the character G did not start this picture specification.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM059 11111111 ILLEGAL LEVEL NUMBER xxx

Explanation: A major structure name must be declared with the level number 1. Minor structures must be declared with level numbers greater than 1. Level numbers must be decimal integers.



Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM060 1111111 PRECISION EXCEEDS xxx FOR PICTURE BEGNG yyy

Explanation: The precision implied by the picture specification for a fixed or floating point number exceeds the maximum default precision.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM061 1111111 ILLEGAL ASTERISK AS SUBSCRIPT IN DEFINING LIST

Explanation: An asterisk is not allowed as a subscript in a defining list.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM062 1111111 ELEMENT xxx IS ILLEGALLY DEFINED WITH ISUB

Explanation: ISUB variables may not be used to define a scalar variable on an array base.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM063 1111111 ILLEGAL ISUB VALUE

Explanation: The value of an ISUB dummy variable is outside the range 1-32.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM064 1111111 POSITION ATTRIBUTE ILLEGAL FOR DEFINED ITEM xxx

Explanation: A POSITION attribute may not be specified for a data item defined by ISUB variables on a base identifier.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM065 1111111 SUBSCRIPTED BASE ILLEGAL FOR DEFINED ITEM xxx

Explanation: The base identifier on which a data item is defined may not be a subscripted name.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM066 1111111 FORMAT LIST MISSING

Explanation: The format in a GET, PUT, or FORMAT statement is missing.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM067 1111111 FORMAT LIST CONTAINS NO DATA FORMAT ITEM

Explanation: The format list in a GET or PUT statement must include a format item for the data item being transmitted.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM068 1111111 FORMAT ITEM xxx PERMITTED WITH OUTPUT ONLY

Explanation: The format item named may not be used in the format list of a GET statement.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

|                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><u>Problem Determination:</u> Table I, items 13, 29. <u>Compile</u> your PL/I statement as part of a valid PL/I program.</p>                                                                                                                                                                                                                           | <p><u>Problem Determination:</u> Table I, items 13, 29. <u>Compile</u> your PL/I statement as part of a valid PL/I program.</p>                                                                                                                                                                                                                                             |
| <p>IKM069 11111111 FORMAT ITEM xxx IS INVALID</p> <p><u>Explanation:</u> The format item named uses invalid characters or is incorrectly written. Checking continues after the end of the format list.</p> <p><u>Programmer Response:</u> Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.</p> | <p>IKM074 11111111 *BOUNDS ARE MIXED WITH NON* BOUNDS</p> <p><u>Explanation:</u> Variable array bounds (denoted by asterisks) may not be mixed with non-variable bounds in a DECLARE statement.</p> <p><u>Programmer Response:</u> Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.</p>                          |
| <p><u>Problem Determination:</u> Table I, items 13, 29. <u>Compile</u> your PL/I statement as part of a valid PL/I program.</p>                                                                                                                                                                                                                           | <p><u>Problem Determination:</u> Table I, items 13, 29. <u>Compile</u> your PL/I statement as part of a valid PL/I program.</p>                                                                                                                                                                                                                                             |
| <p>IKM070 11111111 NESTING OF FORMAT LIST EXCEEDS 20</p> <p><u>Explanation:</u> A format list in this statement is nested to more than 20 levels.</p> <p><u>Programmer Response:</u> Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.</p>                                                      | <p>IKM075 11111111 LOWER BOUND GREATER THAN UPPER BOUND FOR xxx</p> <p><u>Explanation:</u> An array is declared with a lower bound greater than the upper bound or with a single upper bound equal to or less than zero.</p> <p><u>Programmer Response:</u> Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.</p> |
| <p><u>Problem Determination:</u> Table I, items 13, 29. <u>Compile</u> your PL/I statement as part of a valid PL/I program.</p>                                                                                                                                                                                                                           | <p><u>Problem Determination:</u> Table I, items 13, 29. <u>Compile</u> your PL/I statement as part of a valid PL/I program.</p>                                                                                                                                                                                                                                             |
| <p>IKM071 11111111 INVALID DATA ITEM BEGNG xxx</p> <p><u>Explanation:</u> The data item is not a valid identifier or is incorrectly written.</p> <p><u>Programmer Response:</u> Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.</p>                                                           | <p>IKM076 11111111 EXTERNAL NAME BEGNG xxx LONGER THAN SEVEN CHAR</p> <p><u>Explanation:</u> An external name may not exceed seven characters in length.</p> <p><u>Programmer Response:</u> Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.</p>                                                                 |
| <p><u>Problem Determination:</u> Table I, items 13, 29. <u>Compile</u> your PL/I statement as part of a valid PL/I program.</p>                                                                                                                                                                                                                           | <p><u>Problem Determination:</u> Table I, items 13, 29. <u>Compile</u> your PL/I statement as part of a valid PL/I program.</p>                                                                                                                                                                                                                                             |
| <p>IKM072 11111111 NO DATA SPECIFICATION OR CONTROL OPTION FOUND</p> <p><u>Explanation:</u> The data list and format list for a GET or PUT statement are missing.</p> <p><u>Programmer Response:</u> Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.</p>                                      | <p>IKM077 11111111 IDENTIFIER BEGNG xxx IS TOO LONG</p> <p><u>Explanation:</u> An identifier has more than 31 characters.</p> <p><u>Programmer Response:</u> Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.</p>                                                                                                |
| <p><u>Problem Determination:</u> Table I, items 13, 29. <u>Compile</u> your PL/I statement as part of a valid PL/I program.</p>                                                                                                                                                                                                                           | <p><u>Problem Determination:</u> Table I, items 13, 29. <u>Compile</u> your PL/I statement as part of a valid PL/I program.</p>                                                                                                                                                                                                                                             |
| <p>IKM073 11111111 ARRAY BOUND FOR xxx IS TOO LARGE</p> <p><u>Explanation:</u> The upper and/or lower bound of one or more dimensions of an array exceeds the maximum value.</p> <p><u>Programmer Response:</u> Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.</p>                           | <p>IKM078 11111111 UNMATCHED PARENTHESES, xxx MISSING</p> <p><u>Explanation:</u> The left and right parentheses in the current statement are unbalanced; one or more left or right parentheses are missing. The statement is not checked further.</p>                                                                                                                       |

IKM

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM079 11111111 LEFT PARENTHESIS REQUIRED AFTER xxx

Explanation: The option named must be followed by one or more arguments enclosed in parentheses.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM080 11111111 OPERAND MISSING BEFORE xxx

Explanation: An identifier or expression preceding the item named is missing. This error terminate checking of the expression in question.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM081 11111111 INSUFFICIENT ARGUMENT SPECIFIED FOR xxx yyy

Explanation: The number of arguments specified in the statement named is insufficient.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM082 11111111 ON CONDITION INVALID OR MISSING

Explanation: An ON-condition is either missing or invalidly specified. Checking of the ON-statement is terminated.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM083 11111111 INVALID SET/IN CLAUSE SPECIFIED FOR xxx

Explanation: The clause following the SET or IN option is invalid.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM084 11111111 VARIABLE IN LOCATE STATEMENT INVALID OR MISSING

Explanation: The LOCATE keyword is not followed by an unscripted, unqualified identifier.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it. If a problem recurs, do the rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM085 11111111 FACTORING NOT PERMITTED ON ALLOCATE STATEMENT

Explanation: An ALLOCATE statement contains a list of two or more factored variables.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM086 11111111 POINTER QUALIFIER AFTER POINTER QUALIFIER OR SUBSCRIPT

Explanation: A pointer in a pointer qualifier may not be pointer qualified or subscripted.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM087 11111111 OPERAND MISSING AFTER xxx

Explanation: An identifier or expression following the item named is missing. Checking is terminated.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM088 11111111 NO DIGIT POSITION IN PICTURE  
BEGNG xxx

Explanation: A picture specification must contain at least one digit position.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM089 11111111 INVALID OPERATOR xxx

Explanation: The operator is not valid for use in an expression.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM090 11111111 IDENTIFIER MISSING AFTER xxx

Explanation: An operator is missing after the item named. This error terminates the checking of the expression in question.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM091 11111111 OPERATOR MISSING BEFORE xxx

Explanation: An operator is missing after the item named. This error terminates the checking of the expression in question.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM092 11111111 ILLEGAL LEFT PART OF ASSIGNMENT  
STATEMENT

Explanation: An invalid operand appears to the left of the assignment symbol. Checking of the statement is terminated.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM093 11111111 INVALID DO SPECIFICATION

Explanation: The keyword TO or BY is multiply used, or the DO specification contains an illegal symbol.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM094 11111111 xxx MISSING IN yyy STATEMENT

Explanation: For example, the keyword TO or the label in a GO TO statement is missing.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM095 11111111 SEMICOLON NOT FOUND WHEN EXPECTED

Explanation: The semicolon marking the end of a logically complete statement is missing, or no semicolon is found for the last statement of the input buffers.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM096 11111111 INVALID EVENT NAME BEGNG xxx

Explanation: In a WAIT or input/output statement, the event name specified for the EVENT option is invalid.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM097 11111111 BREAK CHAR INVALID AT BEGNG OF  
IDENTIFIER xxx

Explanation: The identifier may not begin with a break character.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.



Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM098 11111111 INVALID FORM OF INITIALIZATION FOR xxx

Explanation: The initialization specified in this statement does not comply with the rules of PL/I syntax.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM099 11111111 MORE THAN 3 LEVELS OF ENTRY NESTING

Explanation: The ENTRY attribute may not apply to more than three logical levels.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM100 11111111 INVALID REPETITION FACTOR IN INITIAL LIST

Explanation: The repetition factor, a decimal integer constant, must be enclosed in parentheses and must precede the value or character to which it relates.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM101 11111111 MORE THAN 63 TRUE LEVEL NUMBERS SPECIFIED FOR xxx

Explanation: A structure may have a maximum of 63 levels, including the major structure number 1.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

IKM102 11111111 MORE THAN 32 DIMENSIONS SPECIFIED FOR xxx

Explanation: An array may have a maximum of 32 dimensions.

Programmer Response: Probable user error. Correct any errors in your PL/I source statement and let the syntax checker rescan it.

Problem Determination: Table I, items 13, 29. Compile your PL/I statement as part of a valid PL/I program.

## Service Aids Messages (IMx)

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component Name              | IMx                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Program Producing Message   | Service Aids: IMAPTFLE, IMASPZAP, IMBLIST, IMBMDMAP, IMCJQDMP, IMCOSJQD, IMDPRDMP.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Audience and Where Produced | For Programmer: SYSPRINT data set.<br>For Operator: console.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Message Format              | <p>IMxnnnI text            (in SYSPRINT)</p> <p>id IMxnnns text        (on console)</p> <p>id<br/>    Message reply identification (absent if operator reply not required).</p> <p>xnnn<br/>    Message serial number, which is coded to indicate the service aid program:</p> <p style="margin-left: 40px;">A000 - A004 IMAPTFLE<br/>A100 - A11B IMASPZAP<br/>B001 - B020 IMBMDMAP<br/>B101 - B126 IMBLIST<br/>C000 - C014 IMCJQDMP/IMCOSJQD<br/>D000 - D005 IMDSADMP<br/>D150 - D184 IMDPRDMP</p> <p>s<br/>    Type code:</p> <p style="margin-left: 40px;">A Action; operator must perform a specific action.<br/>D Decision; operator must choose an alternative.<br/>I Information; no operator action is required.</p> <p>text<br/>    Message text.</p> |
| Comments                    | None.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Associated Publication      | <u>IBM System/360 Operating System: Service Aids</u> , GC28-6719.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Problem Determination       | Refer to the fold-out in part VI of this publication for problem determination instructions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

### IMAPTFLE Messages

IMA000I THE FOLLOWING MODULE(S) DID NOT FIND A MATCH

Explanation: The IMAPTFLE program could not find a match for the input module name on the Stage 1 output tape for SYSGEN, or a module name has been specified more than once (for example, two input statements contained the same module name).

System Action: If IMAPTFLE could not find a match, all module names for which no JCL was produced will be listed following this message. If duplicate module names were encountered, IMAPTFLE will list the JCL for the module the first time it processes the name. All subsequent encounters with the same module name will cause IMAPTFLE to flag the name as an error.

Programmer Response: Probable user error. If the module name was in error, correct the name and rerun the job. For duplicate names, no action is required.

Problem Determination: Table I, items 2, 13, 29.

IMA001I INPUT MODULE TABLE HAS OVERFLOWED BREAK INPUT INTO TWO JOBS AND RERUN

Explanation: The number of input module names has exceeded the limit of 150 allowed in the input module table.

System Action: IMAPTFLE stops processing the input, and gives this message.

Programmer Response: Probable user error. Break the input data into groups of no more than 150 module names per execution of IMAPTFLE, and execute the program as many times as needed to create JCL for all the modules.

IMx

Problem Determination: Table I, items 2, 13, 29.

IMA002 DATA SET ASSOCIATED WITH THE //xxxx DD CARD CANNOT BE OPENED

Explanation: The DCB associated with DD statement xxxx cannot be opened. The data set cannot be read.

System Action: IMAPTFLE processing is terminated.

Programmer Response: Probable user error. Check for errors in the DD statements named in the message. Correct the errors and rerun the job with MSGLEVEL=(1,1) in the JOB statement.

Problem Determination: Table I, items 2, 13, 29.

IMA003I UNCORRECTABLE I/O ERROR OCCURRED  
jobname,stepname,addr,typ,ddname,  
operation,error description

Explanation: An uncorrectable error was detected during the execution of an I/O operation.

System Action: IMAPTFLE terminates processing, but gives the following diagnostic information in the message text:

jobname  
the job within which the I/O error was detected.  
stepname  
the job step in which the error occurred.  
addr  
the unit address of the device on which the error occurred.  
typ  
the device type of the failing device.  
ddname  
the name of the associated data set.  
operation  
the type of I/O operation that was being performed at the time of the error.  
error description  
the type of error that occurred.

Programmer Response: Resubmit the job with MSGLEVEL=(1,1) specified in the JOB statement.

Problem Determination: Table I, items 2, 13, 29.

IMA004I UNIDENTIFIED FORMAT ON SYSGEN STAGE 1 TAPE

Explanation: IMAPTFLE has determined that the Stage 1 Output tape was from a SYSGEN earlier than Release 19. The format of this level Stage 1 Output tape is not supported by IMAPTFLE.

System Action: IMAPTFLE processing is terminated.

Programmer Response: Probable user error. Verify that the:

- Stage 1 Output tape is from a Sysgen earlier than Release 19.
- System to be updated with the PTF is of a Release 19 level or later.

If both of these conditions are true, rerun the job using the correct Stage 1 Output tape. Make sure that MSGLEVEL=(1,1) is specified on the JOB statement.

Problem Determination: Table I, items 2, 13, 17a, 29.

IMA005I INVALID PARAMETER SPECIFIED ON EXEC STATEMENT

Explanation: An invalid parameter was specified in the PARM field of the EXEC statement.

System Action: IMAPTFLE processing is terminated.

Programmer Response: Probable user error. Check for an error in the PARM field of the EXEC statement. Correct any error and rerun the job with MSGLEVEL=(1,1) specified in the JOB statement.

Problem Determination: Table I, items 2, 13, 29.

IMA006I LOAD MODULE ccccccc NOT UPDATED WITH PTF - nn

Explanation: IMAPTFLE was unable to update load module ccccccc with the program temporary fix (PTF). If nn=01, the directory entry for load module ccccccc in the data set described by the SYSLMOD DD statement could not be located. If nn=02, the PTF was not successfully linkage edited into the module.

System Action: IMAPTFLE does not attempt to update load module ccccccc with the PTF. Processing continues.

Programmer Response: Probable user error. If nn=01, verify that the DSNAMES parameter on the SYSLMOD DD statement identifies the data set that contains load module ccccccc, and that the STAGE 1 output tape from SYSGEN corresponds to the system that is currently running. Correct any errors and rerun the job with MSGLEVEL=(1,1) specified in the job statement.

Problem Determination: Table I, items 2, 13, 17a, 29. If nn=02, respond as indicated to the Linkage Editor messages (beginning with IEW) that accompany this message.

IMA007I LOAD MODULE ccccccc UPDATED WITH PTF - NEW SSI IS nnnnnnn

Explanation: Load module ccccccc has been successfully updated with the program temporary fix (PTF). The system status index (SSI) for the updated load module is nnnnnnn.

System Action: IMAPTFLE processing continues.

Programmer Response: None.

IMA008I THE PRECEDING STATEMENT IS INVALID

Explanation: While scanning input defined by the MODF DD statement, IMAPTFLE found a statement that was neither an IDENTIFY statement or an IMAPTFLE control statement. The control statement in error is printed above the message.

The statement probably has one of the following errors:

- The name on the module name control statement did not begin in column one.
- The word IDENTIFY was misspelled. The MODF input is out of order.
- Continuation of an IDENTIFY statement was expected but not received before the next module name.

System Action: IMAPTFLE terminates with a return code of 16.

Programmer Response: Probable user error. Correct the error and rerun the job.

Problem Determination: Table I, item 29. Have the MODF input and the PRINT output available.

IMA009I IMAPTFLE TERMINATED; NO BLOCKSIZE ON THE PCHF DD STATEMENT

Explanation: The BLKSIZE parameter was missing from the PCHF DD statement which described a non-labeled tape.

System Action: IMAPTFLE terminated with a return code of 16.

Programmer Response: Probable user error. Include in the BLKSIZE parameter on the PCHF DD statement the blocksize of the records on the tape and rerun the job.

Problem Determination: Table I, items 1, 3, 15, 29.

IMA010I IMAPTFLE TERMINATED, AN IDENTIFY STATEMENT IS MISSING

Explanation: During the application function, IMAPTFLE did not find an IDENTIFY statement following a PTF object module; an IDENTIFY statement must follow each PTF object module.

System Action: IMAPTFLE terminates with a return code of 16.

Programmer Response: Probable user error. Insert an IDENTIFY statement after each PTF object module and rerun the job.

Problem Determination: Table I, items 1, 15, 29. Have the MODF input available.

IMA013I THE FOLLOWING IS IDENTIFY INFORMATION FOR MODULE mod

Explanation: The IDENTIFY information to be included in the CSECT IDENTIFY records for module mod is listed following this message.

System Action: IMAPTFLE processing continues.

Programmer Response: None.

IMA014I INSUFFICIENT MAIN STORAGE FOR PROCESSING, IMAPTFLE TERMINATED

Explanation: IMAPTFLE was unable to continue processing because the main storage required for necessary tables and buffers was not available in the IMAPTFLE region or partition.

System Action: IMAPTFLE processing terminates with a return code of 16.

Programmer Response: Increase the region or partition size available to IMAPTFLE as recommended in the publication IBM System/360 Operating System: Service Aids SRL, GC28-6719.

Problem Determination: Table I, items 15, 29. Have the MODF input available.

#### IMASPZAP Messages

IMA100I IMASPZAP PROCESSING COMPLETED

Explanation: This message occurs when IMASPZAP terminates normally. It should be noted, however, that normal termination can occur despite prior failure in the processing of control statements.

System Action: The job step terminates.

Programmer Response: Check the output on SYSPRINT to insure that all control statement operations completed successfully.

IMA101I SYSLIB I/O ERROR device, operation, error condition, access method

Explanation: An I/O error occurred when the data set defined in the SYSLIB DD statement was being accessed. The device address, the operation in process, the type of error, and the access method in use are provided in the error message.

System Action: The job step terminates.

Programmer Response: If VERIFY and REP control statements were part of the input stream for IMASPZAP, the user should dump either the record or control section being inspected and/or modified, and carefully check the printed output to insure that any modifications made were performed correctly. If all the modifications requested have not been performed, the user should reexecute IMASPZAP to make the necessary modifications.



Problem Determination: Table I, items 2, 13, 29.

IMA102I SYSLIB DD SPECIFICATION ERROR

Explanation: Either a SYSLIB DD statement was not included in the JCL, or the data set defined in the SYSLIB DD statement does not contain the member name or physical record defined in a control statement.

System Action: Subsequent VERIFY, REP, and SETSSI statements are ignored until a successful NAME or CCHHR operation is performed.

Programmer Response: Probable user error. Make sure that a SYSLIB DD statement was included in the JCL. If so, correct the member name or address in the erroneous control statement or correct the DSNAME in the SYSLIB DD statement, and resubmit the job. If the CONSOLE option is being utilized, the job need not be resubmitted; the corrected statement can be reentered in response to message IMA116A.

Problem Determination: Table I, items 2, 13, 29.

IMA103I CSECT ABSENT - ALL CSECTS FOLLOW

Explanation: A control section name defined in a control statement cannot be found in the member that was specified as containing it.

System Action: All control sections of the load module are dumped. Subsequent VERIFY or REP statements are ignored until a NAME or CCHHR statement is read.

Programmer Response: Probable user error. Correct the control section parameter in the erroneous control statement, and resubmit the job. If the CONSOLE option is being utilized, the job need not be resubmitted; the corrected statement can be reentered in response to message IMA116A.

Problem Determination: Table I, items 2, 13, 29.

IMA104I VERIFY REJECT - SET NO GO SWITCH

Explanation: The data contained in the VERIFY statement did not agree with the data at the specified location.

System Action: A dump of the text portion of the control section or the entire data record is printed on SYSPRINT. Processing continues, but all REP and SETSSI statements that follow the rejected VERIFY statement are ignored until another NAME or CCHHR statement is encountered. However, any VERIFY statements that are detected will be executed.

Programmer Response: Probable user error. Check the dump output and correct either the data or offset parameter (whichever

was in error in the VERIFY statement), and resubmit the job.

Problem Determination: Table I, items 2, 13, 29.

IMA105I INVALID CARD OR NO GO SWITCH SET

Explanation: This message occurs if an operation is not acceptable due to an invalid operation name or if an error occurred on a previous operation.

System Action: If the error occurred previously, during the processing of a NAME or CCHHR statement, no VERIFY or REP operations will be performed until a subsequent NAME, CCHHR, DUMP, DUMPT, ABSDUMP, or ABSDUMPT statement is processed successfully. If the error occurred in a previous VERIFY or REP statement, only REP statements will be bypassed until a subsequent NAME or CCHHR statement is performed successfully.

Programmer Response: Probable user error. Correct the control statement found to be in error, and resubmit the job.

Problem Determination: Table I, items 2, 13, 29.

IMA106I PATCH OVERLAPS - CHECK DUMP

Explanation: One of the following conditions has occurred while a VERIFY or REP operation was being performed:

For a data record - the offset specified in the control statement is beyond the end of the record containing the data to be inspected or modified. (For example, OFFSET>KEYLEN+RECORD LENGTH.)

For a control section - the offset value plus the number of bytes of data specified in the control statement denotes a location that is beyond the limits of the control section. (For example: offset value + number of bytes of data > displacement of last byte of control section.)

System Action: IMASPZAP dumps the data in the control section or data record being modified or inspected, and continues processing subsequent control statements. However, any REP statements pertaining to the same NAME or CCHHR statement will be ignored.

Programmer Response: Probable user error. If a REP operation was being performed on a control section when the error occurred, check the offset and data parameters. If the offset is within the limits of the control section, but the number of bytes specified exceeds the end of the control section, the portion of data that fell within the control section will have been modified before the error was detected. Restore the data to its original form, correct the number of bytes specified in

the REP statement, and perform the REP operation again. If the offset in the REP statement exceeded the limits of the control section, then no modification of data will have been made. In this case, correct the offset specified in the REP statement and perform the REP operation again. If a VERIFY operation was being performed on a control section or data record, or if a REP operation was being performed on a data record at the time the error was detected, no modification will have been made. Correct the offset or number of bytes specified in the control statement (whichever was in error), and perform the operation again.

Problem Determination: Table I, items 2, 13, 29.

IMA107I DS AREA NOT INCLUDED IN TEXT

Explanation: A VERIFY or REP operation was attempted, and the base value specified in a BASE statement was greater than the offset value specified in a corresponding VERIFY or REP statement.

System Action: IMASPZAP dumps the data in the control section being modified or inspected and continues processing. Any subsequent REP statements pertaining to the same NAME statement will be ignored.

Programmer Response: Probable user error. Correct either the value in the erroneous BASE statement or the invalid offset value given in the VERIFY or REP statement, and resubmit the job.

Problem Determination: Table I, items 2, 13, 29.

IMA108I SYSIN SPECIFICATION ERROR

Explanation: The SYSIN DD statement was not defined in the execution JCL.

System Action: The job step terminates.

Programmer Response: Probable user error. Include the SYSIN DD statement in the JCL and resubmit the job.

Problem Determination: Table I, items 2, 13, 29.

IMA109I ERROR - ODD NUMBER DIGITS - IGNORED

Explanation: This message occurs if the patch data, verify data or data offset specified in a VERIFY or REP control statement is not represented as an even number of hexadecimal digits.

System Action: If the error results from an invalid VERIFY statement, any REP statements that follow are ignored until a subsequent NAME, CCHHR, DUMP, DUMPT, ADSDUMP, or ABSDUMPT command is entered. If the error is detected in a REP statement, only that particular statement is ignored.

Programmer Response: Probable user error. Make sure that an even number of hexadecimal digits is specified in the offset and data parameters in the VERIFY or REP statement, and resubmit the job.

Problem Determination: Table I, items 2, 13, 29.

IMA110I NO DIRECTORY SSI - SETSSI IGNORED

Explanation: A SETSSI statement has been entered for a member which does not contain SSI information in its directory entry.

System Action: No SSI information is stored; processing continues with the next control statement.

Programmer Response: To create the SSI in the directory entry for the member:

- If a member of a load module library, re-linkage edit the load module, including a SETSSI control statement.
- If a member of a macro or symbolic library, use the IEBUPDTE utility program, specifying SSI information in the ADD, REPL, CHANGE or REPRO control statement.

Problem Determination: Table I, items 2, 13, 29.

IMA111I PREVIOUS ERROR - SETSSI IGNORED

Explanation: Due to an error detected in a previous operation, the SETSSI operation cannot be performed.

System Action: The SETSSI operation is not performed, and IMASPZAP continues processing subsequent control statements.

Programmer Response: Probable user error. Correct the previously detected error, and rerun the job.

Problem Determination: Table I, items 2, 13, 29.

IMA112I MEMBER NOT FOUND - SETSSI IGNORED

Explanation: The member to which the SETSSI operation was directed could not be found in the directory of the data set specified by the SYSLIB DD statement.

System Action: Processing continues with any remaining control statement.

Programmer Response: Probable user error. Correct the member name in the NAME statement associated with the SETSSI command, or correct the data set name defined in the SYSLIB DD statement, and resubmit the job.

Problem Determination: Table I, items 2, 13, 29.

IMA113I COMPLETED DUMP REQUIREMENTS

Explanation: This message is written to the SYSPRINT device following the

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successful completion of a DUMP, DUMPT, ABSDUMP or ABSDUMPT operation.

System Action: IMASPZAP continues processing with any remaining sequential control statement.

Programmer Response: None.

IMA114I PERMISSION TO UPDATE VTOC DENIED

Explanation: When IMASPZAP requested permission to update the VTOC, the operator replied 'N'.

System Action: No modification to the VTOC will be performed. Processing continues with the next control statement, but any subsequent VERIFY or REP operations will be ignored.

Programmer Response: If you intend to modify the VTOC, instruct the operator to reply 'Y' when permission is requested by IMASPZAP. (See message IMA117D.)

IMA115I SYSIN I/O ERROR device, operation, error condition, access method

Explanation: An uncorrectable I/O error occurred when IMASPZAP was attempting to read a control statement from the SYSIN data set. The device address, the operation in process, the type of error, and the access method in use are provided in the error message.

System Action: Processing is terminated immediately. Control statements read from the SYSIN data set before the error was encountered will have been processed.

Programmer Response: Probable user error. If the error condition is a wrong length record, check the blocksize specified for the SYSIN data set to be sure that it is equal to the actual size of the records in the SYSIN data set. For other error conditions, check the SYSIN DD statement for correct specifications.

Problem Determination: Table I, items 2, 13, 29.

IMA116A ENTER IMASPZAP CONTROL STATEMENT OR END

Explanation: When the console option is being used, this message is written to the console device every time input is required.

System Action: Processing continues.

Operator Response: If the programmer wishes to continue processing, enter a valid control statement; if the programmer wishes to terminate the job, enter REPLY xx, 'END'.

IMA117D REPLY Y or N TO UPDATE VTOC xxxxxx yyy  
zzzzzzzz

Explanation: IMASPZAP is being executed by the zzzzzzzz for the purpose of modifying or inspecting the VTOC on volume

xxxxxx, device yyy. As a precautionary measure, the program requests permission for this operation.

System Action: The program suspends processing until the operator enters a response.

Operator Response: If the programmer initiating this run is not authorized to perform such an operation, enter REPLY xx, 'N'. As a result of this negative response, IMASPZAP will issue message IMA114I and all subsequent VERIFY and REP statements will be ignored. The response REPLY xx, 'Y' will, however, allow IMASPZAP to inspect and modify the VTOC.

IMA118I SYSPRINT DD NOT IN INPUT

Explanation: A SYSPRINT DD statement was not included in the execution JCL statements for this execution of IMASPZAP.

System Action: IMASPZAP terminates immediately.

Programmer Response: Probable user error. Define a SYSPRINT DD statement to be included in the JCL, and rerun the job.

Problem Determination: Table I, items 2, 13, 29.

IMA119I NO IDR FOR MODULE name

Explanation: IMASPZAP found that the load module (name) does not include CSECT identification records (IDRs); it has not been processed by a linkage editor containing IDR support.

System Action: IMASPZAP continues with normal processing.

Programmer Response: If IDR maintenance data in the load module is desired, reprocess the module with the linkage editor that has IDR support, then return the IMASPZAP job.

IMA120I FULL IDR FOR MODULE mod

Explanation: A REP operation was to be performed on the module indicated in the message (mod) but IMASPZAP found that no space is available in the IMASPZAP IDR for maintenance information.

System Action: Any REP operation for the module (mod) will be performed.

Programmer Response: The indicated module must be reprocessed by the linkage editor so that the module will contain an additional IMASPZAP IDR. Rerun the IMASPZAP job.

IMA121I CCHHR UPDATE BY jobname ON ser, cchhr,  
dsname

Explanation: IMASPZAP has modified a data set on a direct access device by use of the CCHHR and REP statements. This

message is automatically given as security audit information.

Variables in the message are as follows:

jobname represents the name of the job which performed the CCHHR update.  
ser is replaced with the volume serial.  
cchhr is replaced with device record address of the record that was modified.  
dsname is replaced with the name of the modified data set.

If IMASPZAP input is from the system console and both CCHHR and REP statements have been processed, then this message will appear immediately after the next CCHHR, NAME, DUMP, ABSDUMP, END, or invalid statement entered.

System Action: Normal processing continues.

Operator Response: Save the information as recommended by your installation.

IMA123I SYSPRINT I/O ERROR ddd,op,err,acc-meth

Explanation: An I/O error occurred while IMASPZAP was writing in the data set defined by the SYSPRINT DD statement. The device address (ddd), the operation (op), the type error (err), and the access method used (acc-meth) are provided in the message text.

System Action: The job step is terminated.

Programmer Response: If the REP operation was successful, rerun the job step after insuring that the associated REP and VERIFY control statements have been removed.

Problem Determination: Table I, items 2, 13, 29.

#### IMBMDMAP Messages

IMB001I SYSPRINT DD STATEMENT MISSING

Explanation: IMBMDMAP was unable to open the SYSPRINT data set.

System Action: Processing is terminated.

Programmer Response: Probable user error. Define a SYSPRINT DD statement and rerun.

Problem Determination: Table I, items 2, 13, 29.

IMB002I SNAPDUMP DD STATEMENT MISSING

Explanation: The DEBUG option was specified in the JCL statements, but the SNAPDUMP data set could not be opened.

System Action: Processing continues, but the DEBUG parameter is ignored.

Programmer Response: Probable user error. Define a SNAPDUMP DD statement and rerun.

Problem Determination: Table I, items 2, 13, 29.

IMB003I - WARNING - xxxxxxxx CONTAINS NO RLD RECORDS

Explanation: Warning message; partitioned data set member xxxxxxxx contains no relocation dictionary records.

System Action: Processing continues.

Programmer Response: None.

IMB004I xxxxxxxx CONTAINS NO ESD RECORDS

Explanation: Partitioned data set member xxxxxxxx contains no external symbol dictionary entries. This may be a normal condition, e.g., if the member was linkage edited with an attribute of NE (NOT-EDITABLE).

System Action: Mapping of xxxxxxxx is not performed, but IMBMDMAP continues processing.

Programmer Response: Execute IMBMDMAP with a DEBUG request to obtain a dump of the subject module and partitioned data set directory to verify load module structure.

Problem Determination: Table I, items 2, 13, 29.

IMB005I I/O ERROR READING MEMBER xxxxxxxx

Explanation: An error occurred while partitioned data set member xxxxxxxx was being read.

System Action: Mapping of member xxxxxxxx is not performed, but IMBMDMAP continues processing.

Programmer Response: Rerun IMBMDMAP.

Problem Determination: Table I, items 2, 13, 29.

IMB006I MEMBER xxxxxxxx NOT FOUND - BLDL FAILED

Explanation: Partitioned data set member xxxxxxxx was not found during execution of the BLDL macro instruction.

System Action: Mapping of member xxxxxxxx is not performed, but IMBMDMAP continues processing.

Programmer Response: Probable user error. Check for proper specification of the DSNAME and member name. If they are accurately specified and the error recurs, use IMBMDMAP with the DEBUG parameter to obtain a dump of the partitioned data set directory.

IMx

Problem Determination: Table I, items 2, 13, 29.

IMB007I I/O ERROR READING PDS DIRECTORY - DURING BLDL

Explanation: Execution of the BLDL macro instruction could not be completed; an error occurred during reading of the partitioned data set directory of the member indicated in the heading at the top of the listing page.

System Action: Mapping of the specified member is not performed, but IMBMDMAP continues processing.

Programmer Response: Rerun IMBMDMAP.

Problem Determination: Table I, items 2, 13, 29.

IMB008I EXEC PARM CONTAINS INVALID CHARACTERS. MUST BE LINKPACK, BASIC, DEBUG, AND/OR 1 TO 6 CHARACTER HEX ADDRESS

Explanation: IMBMDMAP has encountered invalid characters in one of the EXEC parameters.

System Action: IMBMDMAP will execute, using parameters up to the invalid one.

Programmer Response: Probable user error. Correct the invalid parameter and resubmit the job.

Problem Determination: Table I, items 2, 13, 29.

IMB010I RESIDENT SVCS NOT MAPPED IN LINKPACK MAP - NUCLEUS IPLD DOES NOT MATCH SYS1.NUCLEUS (IEANUC01).

Explanation: The nucleus described in the DD statement provided for a link pack area map does not match the nucleus currently residing in main storage.

System Action: Processing continues.

Programmer Response: Probable user error. Define the correct nucleus in a DD statement and rerun.

Problem Determination: Table I, items 2, 13, 29.

IMB011I WARNING - NUCLEUS NOT SCATTER LOADABLE

Explanation: Warning message. IMBMDMAP has detected an error while processing the scatter records for the nucleus. The nucleus may be incorrectly loaded.

System Action: Processing continues.

Programmer Response: Rerun with the DEBUG option and check scatter records.

Problem Determination: Table I, items 2, 13, 29.

IMB012I WARNING - IEAANIPO IS NOT 1ST ENTRY IN ESD

Explanation: Warning message. One of the following conditions has been encountered by IMBMDMAP, while mapping the nucleus:

- IEAANIPO was not the first control section to be given control at initial program load; or
- One of the first two control sections in the nucleus was not of the "SD" type.

System Action: Processing continues.

Programmer Response: Check the map of the nucleus in question to determine which condition has occurred; then correct the situation before trying again to load this nucleus.

Problem Determination: Table I, items 2, 13, 29.

IMB013I \*\*\*\*\*NUMBER OF ALIASES EXCEEDED TABLE-ALIASES NOT PRINTED\*\*\*\*\*

Explanation: IMBMDMAP will print a maximum of sixteen aliases.

System Action: The first nine aliases will be printed; the rest will be ignored and processing continues.

Programmer Response: None.

IMB014I SORT TABLE OVERFLOW-ENLARGE REGION/PARTITION SIZE-RERUN

Explanation: IMBMDMAP table capacities were exceeded because region or partition size was insufficient.

System Action: This specific mapping operation is terminated, and processing continues.

Programmer Response: Probable user error. Expand the region or partition size and rerun IMBMDMAP.

Problem Determination: Table I, items 2, 13, 29.

IMB015I CDE TABLE OVERFLOW-ENLARGE REGION/PARTITION SIZE-RERUN

Explanation: IMBMDMAP table capacities were exceeded because region or partition size was insufficient.

System Action: This specific mapping operation is terminated and processing continues.

Programmer Response: Probable user error. Expand the region or partition size and rerun IMBMDMAP.

Problem Determination: Table I, items 2, 13, 29.

IMB016I ESD RLD TABLE OVERFLOW-ENLARGE REGION/PARTITION SIZE-RERUN

Explanation: IMBMDMAP table capacities were exceeded because the region or partition size was insufficient.

System Action: This specific mapping operation is terminated and processing continues.

Programmer Response: Probable user error. Expand the region or partition size and rerun IMBMDMAP.

Problem Determination: Table I, items 2, 13, 29.

IMB017I SCATTER TABLE OVERFLOW-ENLARGE  
REGION/PARTITION SIZE-RERUN

Explanation: IMBMDMAP table capacities were exceeded because the region or partition size was insufficient.

System Action: This specific mapping operation is terminated and processing continues.

Programmer Response: Probable user error. Expand the region or partition size and rerun IMBMDMAP.

Problem Determination: Table I, items 2, 13, 29.

IMB018I TRANSLATE TABLE OVERFLOW - ENLARGE  
REGION/PARTITION SIZE - RERUN

Explanation: IMBMDMAP table capacities were exceeded because the region or partition size was insufficient.

System Action: This specific mapping operation is terminated and processing continues.

Programmer Response: Probable user error. Expand the region or partition size and rerun IMBMDMAP.

Problem Determination: Table I, items 2, 13, 29.

IMB019I IPL TABLE OVERFLOW - ENLARGE  
REGION/PARTITION SIZE - RERUN

Explanation: IMBMDMAP table capacities were exceeded because the region or partition size was insufficient.

System Action: This specific mapping operation is terminated and processing continues.

Programmer Response: Probable user error. Expand the region or partition size and rerun IMBMDMAP.

Problem Determination: Table I, items 2, 13, 29.

IMB020I xxxxxxxx DD STATEMENT DOES NOT DEFINE A  
PDS, DD IGNORED

Explanation: IMBMDMAP performs its mapping function based upon the DD statements supplied by the user. Any DD statement which describes a load module in a partitioned data set will cause IMBMDMAP to produce a map of that load module. DD statements which do not define a

partitioned data set will result in this message being produced.

DD statements which do not define a member of a partitioned data set will result in the issuance of this message.

System Action: Statement xxxxxxxx is ignored. Processing continues.

Programmer Response: Examine the DD statement indicated in the message. If a map of the data set specified was not desired, the message should be considered for information only. If a map of the data set specified was desired, correct the DD statement indicated and resubmit the job.

Problem Determination: Table I, items 2, 13, 29.

### IMBLIST Messages

IMB101I ESD CONTAINS INVALID DATA

Explanation: The IMBLIST program encountered either an invalid ESD type or an incorrect ESDID.

System Action: If the LISTOBJ function of IMBLIST is being used, the invalid control card is printed and processing continues. Otherwise, processing terminates.

Programmer Response: Recompile the module(s) and rerun the job.

Problem Determination: Table I, items 1, 13, 29. If the problem occurred during execution of LISTOBJ, execute the LISTIDR function of IMBLIST to determine which compiler processed the module. If the problem occurred during execution of LISTLOAD, execute the LISTIDR function of IMBLIST to determine which linkage editor produced the load module.

IMB102I INVALID [LOAD/OBJECT] RECORD

Explanation: IMBLIST detected an undefined record type in the load/object records. For object records, byte positions 2-4 do not contain any of the following types: ESD, SYM, TXT, RLD, or END. For load module records, the hexadecimal code in the first byte of the record is invalid or undefined.

System Action: If the record in question is an object record, it will be printed and execution will continue. If the record in question is from a load module, processing will terminate for the current control statement and resume with the next.

Programmer Response: List the load module using the IEBPTPCH data utility specifying PRINT TOTCONV=XE to determine the nature of the faulty record. If it has been incorrectly modified, restore it to its correct format.

IMx

Problem Determination: Table I, items 1, 2, 13, 29. Execute the IMBLIST service aid program to obtain IDR listings for the module and for all programs which may have modified it.

IMB103I RLD POINTER INVALID

Explanation: The IMBLIST program encountered an incorrect R or P pointer in the relocation dictionary (RLD).

System Action: Processing terminates.

Programmer Response: Re-link edit the program and rerun the job.

Problem Determination: Table I, items 1, 2, 13, 29. Execute the LISTOBJ function of IMBLIST to determine which linkage editor or language translator produced the bad R or P pointer. Execute LISTIDR for IDR data, showing if IMASPZAP has been executed for the module, when and what translators were used, and other user supplied data.

IMB104I TABLE OVERFLOW, ENLARGE REGION/PARTITION SIZE AND RERUN

Explanation: IMBLIST table capacities were exceeded because the region or partition size was insufficient.

System Action: The operation is terminated; processing continues with the next control statement.

Programmer Response: Enlarge the region/partition size, and rerun the job.

Problem Determination: Table I, items 1, 2, 13, 29. Execute the IEBTPCH utility program specifying PRINT TOTCONV=EX to list the module being processed by IMBLIST.

IMB105I ddname DOES NOT DEFINE LOAD MODULE LIBRARY

Explanation: The name specified by the DDN parameter on the IMBLIST control statement or by the default ddname on the SYSLIB DD statement is not the name of a load module library.

System Action: Processing terminates.

Programmer Response: Insure that the library referenced by the IMBLIST control statement or by the SYSLIB DD statement contains load modules; or change the control statements indicating the proper library type. Rerun the job.

IMB106I MODULE IS NOT EDITABLE, NO XREF PROVIDED

Explanation: When the associated module was link edited, the not editable attribute of the linkage editor was specified. The mcdule, therefore, does not contain the CESD, and no XREF can be provided.

System Action: Processing terminates for this operation and continues with the next control statement.

Programmer Response: Recreate the load module from its associated object module. Do not specify the not editable attribute. Rerun the job.

Problem Determination: Table I, items 1, 2, 13, 29.

IMB107I I/O ERROR ON READ

Explanation: An uncorrectable input/output error was encountered while IMBLIST was reading input.

System Action: Processing terminates.

Programmer Response: Be sure the data set is defined correctly in the control statement.

Problem Determination: Table I, items 1, 2, 13, 29.

IMB108I MEMBER NOT FOUND

Explanation: The member name or alias name specified by the MEMBER parameter on the IMBLIST control statement was not found in the indicated library.

System Action: Processing terminates for this operation and continues with the next control statement.

Programmer Response: List the directory of the referenced library using the LISTPDS function of the IEHLIST utility. Rerun the job.

Problem Determination: Table I, items 1, 2, 13, 29.

IMB109I I/O ERROR READING PDS DIRECTORY

Explanation: An uncorrectable I/O error occurred while IMBLIST was reading the directory of a partitioned data set.

System Action: Processing terminates for this step.

Programmer Response: None.

Problem Determination: Table I, items 1, 2, 13, 25ac, 29.

IMB110I DDNAME DOES NOT DEFINE OBJECT MODULE DATA SET

Explanation: The IMBLIST program attempted to process as an object module a data set or member defined by the DDN parameter or by the operands on the LISTOBJ control statement. However, the data set or member is not an object module.

System Action: The operation is terminated; processing continues with the next operation.

Programmer Response: Verify that the module to be processed is an object module. Rerun the job.

Problem Determination: Table I, items 1, 2, 13, 25ac, 29.

IMB111I ddname CANNOT BE OPENED

Explanation: The specified data set cannot be opened because the DD statement defining the data set may be missing.

System Action: Processing terminates.

Programmer Response: Verify the job control language for the specified data set, insuring that a DD statement defining it is including and is correct. Execute the LISTVTOC function of the IEHLIST utility to obtain a list of the volume table of contents of the volume containing the data set.

IMB112I LOAD MODULE DOES NOT CONTAIN CSECT IDENTIFICATION

Explanation: The load module specified on the LISTIDR control section does not contain any CSECT identification records.

System Action: No IDR listings are produced. Processing continues with the next operation.

Programmer Response: Re-link the load module using a linkage editor which contains IDR support, and rerun the job.

IMB113I IDR INFORMATION IS INCOMPLETE

Explanation: The last CSECT identification record found in this load module is not marked with an "end of IDR data" flag.

System Action: Processing continues.

Programmer Response: Verify that no IDR data has been lost. Re-link the module using a linkage editor which contains IDR support, and resubmit the job.

IMB114I THE CSECT NAME ASSOCIATED WITH AN IDR 2

Explanation: The ESDID on an IDR data entry did not match any ID in the CESD of the load module being processed.

System Action: Processing of this operation is terminated. Processing continues with the next operation.

Programmer Response: Verify that the IDR data for this load module has not been altered. If it has been altered, correct it and resubmit the job.

Problem Determination: Table I, items 1, 2, 13, 29.

IMB120I EXPECTED CONTINUATION CARD NOT FOUND

Explanation: The IMBLIST control statement indicated continuation (a comma was found after the last operand); however, it is not followed with proper continuation.

System Action: Processing is terminated.

Programmer Response: Check all IMBLIST control cards for valid continuation cards. Resubmit the job.

IMB121I INVALID CONTROL STATEMENT

Explanation: An IMBLIST control statement is invalid because it contains an invalid operation, an embedded blank, or an operation beginning before column 2.

System Action: Processing terminates.

Programmer Response: Check IMBLIST control statements for infractions of the IMBLIST control statement format. rerun the job.

IMB122I INVALID OPERAND NEAR CARD COLUMN INDICATED BY "\$"

Explanation: An error has occurred in the IMBLIST control statement near the card column location indicated by the "\$".

System Action: Processing terminates.

Programmer Response: Check the IMBLIST control statements for infractions of the IMBLIST statement format.

IMB123I CLOSE QUOTE OR PARENTHESIS NOT FOUND

Explanation: Quotation mark or close parenthesis is missing on an IMBLIST control statement.

System Action: Processing terminates.

Programmer Response: Check the IMBLIST control statements for unbalanced quotation marks and parenthesis. Resubmit the job.

IMB124I NUMBER OF MEMBER NAMES EXCEEDS 32 NEAR COLUMN INDICATED BY "\$"

Explanation: The number of member names specified on an IMBLIST control statement exceeds the limit, 32. The card column where this error was first detected is flagged by a "\$".

System Action: The excess is ignored and processing continues.

Programmer Response: Use two or more IMBLIST control statements to list the membernames.

IMx

IMB125I IMPROPER OPERAND NEAR COLUMN INDICATED BY "\$"

Explanation: An incorrect or invalid operand has been detected in the IMBLIST control statement; its location is indicated by "\$".

System Action: The operand is ignored. Processing continues.

Programmer Response: Check the validity of the IMBLIST control statements. Resubmit the job.

IMB126I IMPROPER OPTION NEAR COLUMN INDICATED BY "\$"

Explanation: An option specified in the IMBLIST control statement is invalid. "\$" indicates the relative card column location.

System Action: The default value was assumed; processing continues.

Programmer Response: Check the validity of the options specified on the IMBLIST control statement. Correct the errors and resubmit the job.

#### IMCJQDMP Messages

IMC000A ENTER O=XXXD,Q=YYY(,S) OR PRESS INTERRUPT KEY FOR O=00E,Q=191

Explanation: The program is requesting that a device identification command be entered through the console keyboard, or that default device assignment be specified by the absence of a console entry.

System Action: The program suspends processing until the operator enters a reply.

Operator Response: If input and output devices are to be specified, enter a device identification command. If the default assignments of address 00E for output and address 191 for input are satisfactory, depress the external interrupt key without making a console entry.

IMC001A SPECIFY SELECT PARAMETERS [OR END]

Explanation: For the System/360 Operating System version of the job queue dump program - IMCOSJQD - the dump options have not been provided in the SYSIN data set and must be obtained from the operator's console. A reply of "END" will terminate job queue dump operation.

For the stand alone version of the job queue dump program - IMCJQDMP - the SELECT parameter has been indicated in a device identification command and the program is requesting that the parameters for a selective job queue dump be entered through the console.

System Action: The system waits pending the operator's reply.

Operator Response: Enter the desired dump parameters.

IMC002A COMMAND ERROR [-ENTER QDUMP PARAMETERS]

Explanation: A syntax error was detected in a job queue dump command entered through the SYSIN data set or through the operator's console.

System Action: If the commands are being entered through the SYSIN data set, message IMC002A is issued to an output device, and processing will continue only if there are more commands in the input stream.

If commands are being entered from the console, message IMC002A is issued to the console and the program waits pending the operator's reply.

Operator Response: Probable user error. If control statements are being entered from the console, reenter the command.

Programmer Response: Probable user error. If control statements are being supplied in the input stream, correct the options and resubmit the job. If control statements are being entered from the system console, insure that proper options are provided to the operator, and request that he rerun the job.

IMC003A QUEUE NOT FOUND ON SPECIFIED DEVICE-ENTER QDUMP PARAMETERS

Explanation: The format 1 data set control block (DSCB) for SYS1.SYSJOBQE was not found in the VTOC of the volume mounted on the device indicated in the device identification command entered through the console; or, if the default parameters were utilized, in the VTOC of the volume mounted on device 191.

System Action: The program suspends processing until the operator enters a reply.

Operator Response: Probable user error. Mount the correct volume on the desired device, if necessary. Enter a device identification command giving the current output and input addresses.

Problem Determination: Table I, items 2, 13, 29.

IMC004I QDUMP COMPLETED

Explanation: Processing of the QDUMP operation is now complete.

System Action: If commands are being provided by the SYSIN data set, the program issues message IMC004I to the SYSPRINT data set. If commands are being entered from the system console, message IMC004I is issued to the console and to the SYSPRINT data set.

Operator Response: None.

IMC005I SPECIFIED QUEUE IS EMPTY

Explanation: The program was requested to dump the logical tracks assigned to a specific work queue, or to search a particular queue for a given job name. Examination of the minor queue control record (QCR) associated with the queue reveals no records resident in the queue.

System Action: If dump commands are being entered in the SYSIN data set, the program dumps the corresponding minor QCR, message IMC005I is issued to the SYSPRINT data set, and processing will continue only if more options are included in the input stream.

If dump options are being entered from the console, the program dumps the corresponding minor QCR, issues message IMC005I to the console, and reissues message IMC001A.

Operator Response: None.

IMC005I SPECIFIED QUEUE IS EMPTY

Explanation: The program was requested to dump the logical tracks assigned to a specific work queue, or to search a particular queue for a given job name. Examination of the minor queue control record (QCR) associated with the queue reveals no records resident in the queue.

System Action: If dump commands are being entered in the SYSIN data set, the program dumps the corresponding minor QCR, message IMC005I is issued to the SYSPRINT data set, and processing will continue only if more options are included in the input stream.

If dump options are being entered from the console, the program dumps the corresponding minor QCR, issues message IMC005I to the console, and reissues message IMC001A.

Operator Response: Additional selective dump parameters may be entered or the operation may be terminated.

IMC006I THESE JOBS NOT FOUND

jobname1  
jobname2, etc.

Explanation: The program found no logical tracks assigned to the listed job or jobs. The search was restricted to the specified queue control record (QCR) if the QCR= parameter was entered in combination with the JOBNAME= parameters and, if so, the associated QCR is dumped. If the QCR= parameter was omitted, all input work queues were searched, and all associated QCRs were dumped.

System Action: If commands are being entered from the SYSIN data set, message IMC006I is issued to the SYSPRINT data set and:

- Processing continues if more options are included in the SYSIN data set.
- The program terminates if no more commands are included in the SYSIN data set.

If dump options are being entered from the console, the program reissues message IMC001A.

Operator Response: Additional selective dump parameters may be entered or the operation may be terminated.

IMC007E K ddd, { SCRTCH } / JQDUMP  
                  { ser }

Explanation: K indicates that the volume on tape drive ddd is to be demounted and saved.

- If the volume has standard labels the volume serial number replaces ser; otherwise SCRTCH appears in the message.
- JQDUMP is the data set name given to the data set created by IMCJQDMP if the volume has labels.

System Action: The program continues processing and will request a new volume if more data is to be written.

Operator Response: Demount the tape and save it for later processing.

IMC008A M ddd, { SCRTCH } / JQDUMP  
                  { SLTAPE }

Explanation: M indicates that a tape is to be mounted on tape drive ddd.

- If SCRTCH appears in the message a non-labeled tape or a labeled tape that has labels which can be overwritten with data is to be mounted.
- If SLTAPE appears in the message a standard labeled tape is to be mounted. JQDUMP is the name of the data set created by IMCJQDMP.

System Action: The program waits for the device ddd to be made ready.

Operator Response: Mount the requested tape and ready the drive.

IMC009A ENTER TODAY'S DATE IN THE FOLLOWING FORM  
YYDDD

Explanation: The program needs the current date to verify the expiration of dates on standard labeled tape. The date must be entered in the form yyddd with no blanks or special characters embedded. The date in the form yyddd has the following meaning:  
yy - represents the last two digits of the current year.  
ddd - represents the Julian form of the current day with leading zeros if the date is less than three digits.

System Action: The program waits for the operator's reply.

Operator Response: Enter the current date in the form requested.

IMx

IMC010I TAPE IS STANDARD LABELED, DSN=JQDUMP

Explanation: The tape just created has standard labels with the data set name JQDUMP.

System Action: Processing continues.

Operator Response: None.

IMC011D E ddd, volser, dsn

Explanation: E indicates that the program intended to write on the tape on drive ddd; however, the expiration date for the data set dsn on the volume volser has not occurred.

System Action: The program waits for the operator's reply.

Operator Response: Enter REPLY xx,'u' if the expiration date is to be ignored and the tape written on. Enter REPLY xx,'M' if the expiration date is to be honored and the tape not written on.

IMC012E TAPE PROTECTED FROM USE

Explanation: One of the following cases will cause this message to be given:

- The tape that was to be written on is security protected.
- The expiration date for the data set on the mounted tape has not occurred and the operator replied M to message IMC011D.

System Action: The program continues processing and will eventually request a new tape.

Operator Response: Wait for mount message IMC008A.

IMC013A adr, INT REQ

Explanation: IMCJQDMP tried to write on the device at unit address adr, but the device was not ready.

System Action: The program waits until the device is ready for output operations.

Operator Response: Ready the device. If the output is to tape, make sure that the tape reel has a file protect ring. If the problem recurs, call IBM for programming support.

IMC014E TAPE HAS USASCII LABELS

Explanation: The tape mounted for output has USASCII standard labels.

System Action: IMCJQDMP will reject the tape and will request a new tape for its output.

Operator Response: Wait for the mount message.

IMC015I SYS1.SYSJOBQE IS ON A SHARED DEVICE

Explanation: IMCJQDMP attempted to read a record from SYS1.SYSJOBQE data set and found the status modifier and the busy bits of the CSW on, indicating that the device is being shared with another CPU. The read operation was retried 256 times.

System Action: Processing was terminated.

Operator Response: Vary the device offline from the other CPU and move the volume to a non-shared device; then rerun IMCJQDMP.

IMC016I PERMANENT I/O ERROR ON ddname - [EXECUTION TERMINATED]

Explanation: An I/O error has occurred on the device assigned to the data set specified in the DD statement indicated by ddname, and a DCB SYNAD routine has been entered. Following the message, the contents of the SYNADAF buffer will be printed on the device defined by the SYSPRINT DD statement.

In the case of an I/O error on OSJQDIN (the job queue data set), the message can result from one of the following:

- An I/O error or wrong length record was encountered while reading the master queue control record.
- IMCOSJQD found an invalid TTR in the queue being processed.
- IMCOSJQD encountered an I/O error or wrong length record in the queue being processed and a full job queue dump was not requested.
- A full job queue dump was requested, but IMCOSJQD encountered 20 I/O errors or 20 wrong length records in succession.

If the error indicated is for ddname OSJQDIN, messages with further details on the error(s) can be found in the dump produced for ddname OSJQDOUT. Additional information can be obtained in IBM System/360 Operating System: Service Aids System Reference Library, GC28-6719, under program IMCOSJQD.

System Action: IMCJQDMP execution is terminates unless the I/O error occurred on the job queue data set being dumped. If the I/O error occurred on the queue data set being dumped one of the following will occur:

- If the options are being entered from the system console, message IMC001A will be issued to allow further dump options to be entered.
- If the dump options are being entered from the input stream (SYSIN), IMCOSJQD will continue processing with the next control option.

Programmer Response: Check the indicated DD statement to insure that the proper device is specified, and resubmit the job.

Problem Determination: Table I, items 2, 13, 29.

IMC017I File { OSJQDIN } CANNOT BE OPENED  
                  { OSJQDOUT }

Explanation: The required input (job queue) and/or output DD statements are missing or unrecognizable; therefore, the corresponding data control block(s) (DCB) cannot be opened.

System Action: IMCOSJQD execution is terminated.

Programmer Response: Probable user error. Supply the correct OSJQDIN and OSJQDOUT DD statements. Rerun the job.

Problem Determination: Table I, items 1, 2, 13, 29.

- LBL ERR - Mount a nonlabeled tape on the desired tape device and enter that tape device address in response to message IMD001A.

Problem Determination: Table I, items 2, 28 (if msg IBI ERR), 29.

IMD003I CHAN ERR

Explanation: A permanent I/O error has occurred during IMDSADMP execution.

System Action: Execution of the dump program is terminated and a wait state is entered.

Operator Response: Probable hardware error. Record the contents of general register 11, which contains the address of the device on which the error occurred. Execute IMDSADMP again.

Problem Determination: Table I, items 14, 30. Record and have available the contents of general purpose register 11 at the time the message is issued.

#### IMDSADMP Messages

IMD001A { PTR } =  
          { TAPE }

Explanation: Message IMD001A is issued when the direct access dump program is loaded for execution. It is a request to the operator to enter the output device address. This message is issued to the console which was specified by the console parameter when IMDSADMP was assembled.

System Action: The console proceed indicator is turned on so that the operator can enter the output device address.

Operator Response: The operator should enter one of the following responses to assign the output device address for the dump:

- PTR= - Enter ppp where ppp is the printer device address to which the output is to be written.
- TAPE= - Enter ttt where ttt is the tape device address to which the output is to be written.

To assign the default device address, depress the EOB (end of block) and the ALTN CODING keys simultaneously. A default device address was included for IMDSADMP when the module was assembled.

IMD002I { CMD } ERR  
          { LBL }

Explanation: An error has been discovered in the device address entered in response to message IMD001A, or the volume mounted on the specified device was not acceptable for IMDSADMP output.

System Action: Message IMD001A is reissued and the correct device address may be entered.

Operator Response: Probable user error. The operator should do one of the following:

- CMD ERR - Reenter the correct output device in response to message IMD001A.

IMD004I EOR

Explanation: The end of reel condition was detected while IMDSADMP was writing a main storage dump to magnetic tape. Volume switching is not supported by IMDSADMP.

System Action: IMDSADMP terminates execution, unloads the tape volume, and enters a wait state.

Operator Response: Probable user error. Mount a tape column that contains a full 2400-foot reel of tape and execute IMDSADMP again, or use the high speed option of IMDSADMP.

Problem Determination: Table I, items 2, 28, 29.

IMD005I DONE

Explanation: IMDSADMP main storage dump is complete.

System Action: If output is to magnetic tape, the output volume is unloaded. IMDSADMP enters a wait state.

Operator Response: Load the IPL program to restart the operating system.

#### IMDPRDMP Messages

IMD150I FILE { PRINTER } CANNOT BE OPENED  
                  { SYSUT1 }

Explanation: The required PRINTER or SYSUT1 DD statement is missing or unrecognizable; therefore, the corresponding data control block cannot be opened.

System Action: IMDPRDMP execution is terminated.



Programmer Response: Probable user error. Supply the correct PRINTER or SYSUT1 DD statement. Execute the job step again, making sure that MSGLEVEL=(1,1) is specified in the JOB statement.

Problem Determination: Table I, items 2, 15, 29.

IMD151I INSUFFICIENT MAIN STORAGE - EXECUTION TERMINATED

Explanation: The IMDPRDMP program has been unable to acquire enough main storage to establish an input buffer. The program cannot process any input records.

System Action: IMDPRDMP execution is terminated.

Programmer Response: Probable user error. For MVT, the region in which the IMDPRDMP program is attempting to execute is too small to contain the required work areas. The default value of the REGION subparameter is not large enough. Include a REGION=42K subparameter in either the JOB or EXEC statement and resubmit the job.

For MFT, the partition in which the IMDPRDMP program resides is too small to contain the required work areas. Assign IMDPRDMP to a 38K partition and resubmit the job.

Problem Determination: Table I, items 2, 13, 29.

IMD152I SYSUT1 IS DATA CELL - DEVICE NOT SUPPORTED

Explanation: The SYSUT1 data set is assigned to a 2321 data cell. IMDPRDMP does not support data cell access methods.

System Action: IMDPRDMP execution is terminated.

Programmer Response: Probable user error. Change the UNIT= subparameter of the SYSUT1 DD statement so that the data set is not allocated to a 2321 device, and resubmit the job.

Problem Determination: Table I, items 2, 13, 29:

IMD153I PERMANENT I/O ERROR ON ddname - EXECUTION TERMINATED

Explanation: An I/O error has occurred on the device assigned to the data set specified in the statement indicated by ddname, and the associated DCB SYNAD routine has been entered.

System Action: IMDPRDMP execution is terminated.

Programmer Response: Check the indicated DD statement to ensure that the proper device is specified, and resubmit the job.

Problem Determination: Table I, items 2, 13, 29.

IMD154D REPLY TITLE, 'SAME' OR 'END'

Explanation: This message appears on the console prior to the execution of each user control statement requesting that the operator specify a dump title to be applied to the dump listing. This message is issued if a 'T' has been included in the PARM= option of the EXEC statement.

System Action: IMDPRDMP enters a wait state pending the operator's reply.

Operator Response: Enter one of the following responses:

- If a new title is to be applied to each page of the IMDPRDMP output listing, enter REPLY xx,'cccc...cc,' cccc...cc being any character string of up to 62 characters.
- If the previously specified title is to be used, enter REPLY xx,'SAME'.
- If execution of the IMDPRDMP program is to be terminated, enter REPLY xx,'END'.

IMD155D REPLY WITH GO, DESIRED FUNCTION, OR END

Explanation: All user control statements in the SYSIN data set have been processed without encountering an END control statement. This message, issued to the console, requests additional control statements.

If the SYSIN data set was omitted, this message is issued immediately upon beginning execution of the IMDPRDMP program. The program enters a conversational control mode in which control statements are entered from the console. This message is reissued after the processing on each set of specified functions has been completed.

System Action: The IMDPRDMP program enters a wait state until the operator's response has been entered.

Operator Response: Any sequence of user control statements may be entered. If GO is entered, the set of user control statements specified by a preceding ONGO statement will be used. If no ONGO has been specified, the ONGO default values will be used. A reply of END will cause the IMDPRDMP program to terminate execution.

IMD156I REPLY WITH STOP TO TERMINATE CURRENT FUNCTION

Explanation: This message allows the operator to stop the execution of a function control statement at any time. This message is issued to the console only if 'S' included in the PARM= option list of the EXEC statement.

System Action: IMDPRDMP execution continues. This message remains outstanding until a STOP command is entered or until the program terminates.

Operator Response: If the user wishes to halt execution of the active function

control statement, he should enter REPLY xx, 'STOP'. This will cause the IMDPRDMP program to stop processing the current function control statement and either read the next control card from the SYSIN data set or issue message IMD155D to request more control statements from the operator. If the user does not reply to this message, execution will proceed normally and at termination the outstanding reply will be deleted.

IMD157A MOUNT NEW DUMP TAPE

Explanation: IMDPRDMP has encountered a NEWDUMP or NEWTAPE control statement and has closed the current input dump data set. This message is issued to request that the new input dump volume be mounted.

System Action: If the SYSUT1 work data set is being used, the input data set is opened, OPEN mount message IEC101A is issued, and the work data set is loaded. If the SYSUT1 work data set is not being used, the dump data set is closed, message IMD157A is issued, and the next control statement is read. The OPEN mount message IEC101A is not issued, and the tape is not loaded, until the next control statement is read.

Operator Response: Respond as indicated to message IEC101A.

IMD158I I/O ERROR ON TAPE

{ ENTIRE TAPE WILL BE PRINTED  
ONLY NUCLEUS AND SQA WILL BE PRINTED  
SELECT OPTION TO RETRY }

Explanation: An I/O error occurred while IMDPRDMP was attempting to read a block either from the SYSUT1 data set or, if the tape is being processed directly without the use of the SYSUT1 data set, from a tape input data set.

System Action: IMDPRDMP program action is indicated by the second portion of the message, whose appearance depends on the value assigned to 'n' in the option list of the PARM= subparameter of the EXEC statement. If 'n' has not been coded, the entire tape will be printed as the default. The remainder of this control statement is ignored. All remaining control statements are syntax-checked, but none are executed until a valid NEWDUMP, NEWTAPE, or CVT control statement is encountered.

Programmer Response: None.

IMD159I IMDPRDMP PROGRAM CHECK

{ ENTIRE TAPE WILL BE PRINTED  
ONLY NUCLEUS AND SQA WILL BE PRINTED  
SELECT OPTION TO RETRY  
LINKPACK AREA MAP ABORTED  
QCB TRACE ABORTED }

Explanation: A program check occurred in IMDPRDMP when it attempted to use information contained on the input dump tape.

System Action: IMDPRDMP action is indicated by the second portion of the message. If one of the first three submessages was issued, the program action taken depends on the value assigned to 'n' in the option list of the PARM= subparameter of the EXEC statement. If 'n' is not coded, the entire input dump tape will be printed as the default. The remainder of this control statement is ignored. All remaining control statements are syntax-checked, but none are executed until a valid NEWDUMP, NEWTAPE, or CVT control statement is encountered. The fourth and fifth submessages are issued only if IMDPRDMP was processing the portion of the dump listing indicated. Processing continues with the next function.

Programmer Response: None.

IMD161I FORMAT ERROR

{ ENTIRE TAPE WILL BE PRINTED  
ONLY NUCLEUS AND SQA WILL BE PRINTED  
SELECT OPTION TO RETRY  
LINKPACK AREA MAP ABORTED  
QCB TRACE ABORTED }

Explanation: IMDPRDMP attempted to format a system control block and found its format to be in error.

System Action: IMDPRDMP action is indicated by the second portion of the message. If one of the first three submessages was issued, action taken depends on the value assigned to 'n' in the option list of the PARM= subparameter of the EXEC statement. If 'n' is not coded, the entire input dump tape will be printed as the default. The remainder of the control statement is ignored. All remaining control statements are syntax-checked, but none are executed until a valid NEWDUMP, NEWTAPE, or CVT control statement is encountered. The fourth and fifth submessages are issued only if IMDPRDMP was processing the portion of the dump listing indicated. Processing continues with the next function.

Programmer Response: None.

IMD162I JOB jobname { NOT FOUND  
ROLLED OUT }

Explanation: The indicated job was specified in a PRINT JOBNAME=jobname user control statement. Either the job could not be found by processing main storage in the stand-alone dump, or it was determined that the area of storage that was occupied by the indicated job was rolled out before the dump was taken.

System Action: IMDPRDMP execution continues with the next user control statement.

Programmer Response: None.



IMD163I GO FUNCTIONS TO BE PERFORMED  
[ongo operands]

Explanation: On execution of a GO control statement, this message lists the functions to be performed.

System Action: The indicated GO functions are performed. If the ONGO control statement has been previously issued by the user, the specified functions appear in this message. If no ONGO control statement was specified, the default functions Q, L, F, and P A are indicated and will be performed.

Programmer Response: None.

IMD164I TAPE IS PRE-FORMATTED DUMP REMAINING  
PARAMETERS IGNORED

Explanation: IMDPRDMP has determined that the input tape data set is not an IMDSADMP high-speed dump or an OS/360 core image dump. The input block size is less than 134 characters.

System Action: IMDPRDMP prints the contents of the input tape with no formatting. The current user control statement is ignored and the next control statement is obtained.

Programmer Response: Probable user error. If user control statements are being entered from the system console, the current tape volume should be demounted by entering the NEWDUMP or NEWTAPE control statement. Otherwise IMDPRDMP should be

Problem Determination: Table I, items 2, 13, 29.

IMD165I ERROR ON PRECEDING CONTROL STATEMENT  
error descriptor

Explanation: A syntax error was detected during the scan of an IMDPRDMP control statement. The error descriptor on the second line identifies the error as one of the following:

- VERB LENGTH GREATER THAN 8. A character string of length greater than 8 was found in the verb position.
- INVALID DELIMITER FOLLOWING VERB. The delimiter separating the statement verb and the keyword parameters is invalid for the verb specified.
- INVALID VERB. The verb of a control statement could not be recognized.
- KEYWORD LENGTH GREATER THAN 8. A keyword parameter was found to have length greater than 8 characters.
- INVALID DELIMITER FOLLOWING KEYWORD. The delimiter following a specified keyword is invalid.
- INVALID KEYWORD. A specified keyword parameter could not be recognized.
- OPERAND MISSING. The value of a keyword parameter was not specified.
- DELIMITER ERROR IN STORAGE OPERAND LIST. Parameters in the STORAGE keyword value list of the PRINT verb must be separated by commas. An invalid delimiter in this list was found during the scan.

- STORAGE ADDRESS GREATER THAN 6. A main storage address in the STORAGE operand list was specified with more than 6 hexadecimal digits.
- STARTING OMITTED IN STORAGE OPERAND. Values in the operand of the STORAGE keyword must appear in pairs. An odd number of addresses was specified in this value list.
- UNBALANCED PARENTHESIS. Unbalanced parentheses were found in the value list of a keyword parameter.
- DELIMITER ERROR IN JOBNAME OPERAND LIST. Job names in the value list of the JOBNAME keyword must be separated by commas.
- NAME MISSING FROM JOBNAME OPERAND LIST. No job name was specified for the JOBNAME keyword parameter of the PRINT verb.
- TOO MANY JOB NAMES IN LIST. More than ten jobnames were specified in the value list of the JOBNAME keyword parameter of the PRINT verb.
- JOBNAME LENGTH GREATER THAN 8. A job name specified in the JOBNAME operand has length greater than eight characters.
- GO PARAMETER ENCOUNTER IN ONGO OPERAND. The go verb may not be specified as a verb in the ONGO list.
- INVALID CVT ADDRESS SPECIFIED. The value specified in the CVT verb is invalid. This value must be specified as a 1 to 6 digit hexadecimal address.
- If the control statement error cannot be diagnosed by the IMDPRDMP program, then the error descriptor is not issued with message IMD165I.
- SYNTAX ERROR IN OPERAND FIELD OF TSO VERB. The keyword parameters for the TSO control statement have not been correctly specified.
- NEWDUMP KEYWORD VALUE ERROR. A syntax error exists in the keyword parameters of the NEWDUMP control statement.
- NO INPUT DD CARD. The value of the DDNAME keyword of the NEWDUMP control statement specified a DD statement which has not been included with the job control statements used to execute the IMDPRDMP service aid program.
- FILE OPERATION CANNOT BE PERFORMED ON D/A INPUT. The FILESEQ keyword parameter was used in the NEWDUMP control statement, but the corresponding dump data set was allocated to a direct access device.
- NEWDUMP OPERATION CANNOT BE PERFORMED. The tape positioning to the OS/360 core image dump specified by the NEWDUMP control statement could not be accomplished by the IMDPRDMP service aid program. The specified dump was not found during the following positioning sequence:
  1. The FILESEQ keyword parameter was used on the NEWDUMP control statement and the input dump data set resides on a non-labeled magnetic tape volume. The volume did not contain the specified number of files.
  2. The DUMPSEQ keyword parameter was used in the NEWDUMP control

statement, but the corresponding dump data set did not contain the specified number of dumps.

System Action: If user control statements are being entered through the card reader, the IMDPRDMP program will scan remaining control statements for syntax errors. No control statements will be executed until a correct NEWDUMP or NEWTAPE control statement is encountered. If user control statements are being entered through the system console, the IMDPRDMP program issues message IMD155D to let the user enter a new control statement.

Programmer Response: Probable user error. If the control statements were entered via the card reader, resubmit the job, specifying the control statement in the proper syntax. If entering the control statements via the system console, reenter the control statement in the proper syntax.

Problem Determination: Table I, items 2, 13, 29.

IMD166I FORMAT ERROR DURING JOBNAME SEARCH

Explanation: IMDPRDMP encountered a format error while attempting to locate storage assigned to a specified job.

System Action: IMDPRDMP execution continues and, if possible, the search is continued.

Operator Response: None.

IMD168I DUMP DATA SET EMPTY - DD xxxxxxxx

Explanation: The dump data set described by the DD statement xxxxxxxx does not contain an OS/360 core image dump or a preformatted dump.

System Action: If the user control statements are being entered from the SYSIN data set, the IMDPRDMP program will scan the remaining control statements for syntax errors. No control statements will be executed until a correct NEWDUMP or NEWTAPE statement is encountered. If user control statements are being entered from the console, message IMD155D will be issued to allow the user to enter a new IMDPRDMP control statement.

Operator Response: Probable user error. The current input data set can not be processed by IMDPRDMP. If additional dumps are to be processed by IMDPRDMP, the NEWDUMP or NEWTAPE control statements may be used to specify a different input data set. Otherwise, execution of IMDPRDMP may be terminated by replying 'END' to message IMD155D.

IMD170I END OF FILE ON SYSIN - CONTROL PASSED TO OPERATOR

Explanation: All user control statements in the SYSIN data set have been processed

without encountering an END control statement.

System Action: IMDPRDMP issues message IMD155D to the system console.

Programmer Response: None.

IMD171I INPUT STREAM FLUSHED FROM THIS POINT

Explanation: A user control statement syntax error has been detected. This message notes the position in the SYSIN data set after which user control statements were ignored.

System Action: All remaining user control statements in the SYSIN data set are scanned for syntax errors but none are executed until a valid NEWDUMP, NEWTAPE, or CVT verb is encountered. If an end-of-file condition is reached without encountering an END statement, message IMD155D is issued.

Programmer Response: None.

IMD172I FUNCTION TERMINATED BY OPERATOR

Explanation: STOP has been entered in reply to message IMD156I.

System Action: IMDPRDMP ceases processing the current function statement and obtains the next user control statement.

Programmer Response: None.

IMD173I SYSUT1 IS NOT DA - TAPE ROUTINE USED

Explanation: The SYSUT1 data set was not assigned to a direct access device.

System Action: IMDPRDMP attempts to load the IMDTREAD tape read module to be used as the Tape data set access routine.

Programmer Response: If IMDTREAD is available and is loaded successfully, no action is necessary. If IMDTREAD cannot be loaded, assign the SYSUT1 data set to a suitable direct access device and execute IMDPRDMP again.

Problem Determination: Table I, items 2, 13, 29.

IMD174I {SYSUT1} LOADED  
{SYSUT2}

Explanation: The work data set indicated in the message text has been loaded from the input data set.

System Action: If the work data set is SYSUT1, module IMDDREAD will get the dump information from the SYSUT1 data set. If the work data set is SYSUT2, load mode has been successful and execution terminates.

Programmer Response: None.



IMD175I NO TAPE DD CARD - SYSUT1 ASSUMED LOADED

Explanation: The TAPE DD statement has been omitted and no alternate input ddname has been specified by the NEWDUMP control statement.

System Action: IMDPRDMP assumes that the dump information has been previously loaded on the SYSUT1 data set and will attempt to process the dump information from there.

Programmer Response: None.

IMD176I ddname DD NOT TAPE DEVICE - NO WORK FILE DD

Explanation: The IMDPRDMP program has determined that the input data set does not reside on a tape device. The input data set is specified by the TAPE DD statement or by the DDNAME operand of the NEWDUMP control statement. When the input data set does not reside on a tape volume, one of the work files, SYSUT1 or SYSUT2, is required, but neither of these has been specified.

System Action: IMDPRDMP execution is terminated.

Programmer Response: Either change the input DD statement to allocate the data set to a tape device or supply a DD statement for one of the following work data sets:

- SYSUT1 - This is a direct access work data set which is used temporarily to hold the main storage dump during IMDPRDMP processing.
- SYSUT2 - This may be any data set to which the dump is copied for later processing by IMDPRDMP.

Problem Determination: Table I, items 1, 2, 13, 29.

IMD177I THESE MODULES NOT FOUND

IMD177I module names

IMD177I module names

etc.

Explanation: IMDPRDMP attempted unsuccessfully to locate the named modules in SYS1.LINKLIB or in a private library by using the BLDL macro instruction.

System Action: IMDPRDMP suppresses the function that required the use of the named modules, issues message IMD180I to indicate which function cannot be used, and continues processing with one of the following actions:

- If the module named in message IMD180I is required for execution of a control statement, that control statement is not executed, and IMDPRDMP proceeds with the next control statement.
- If the TSO function of IMDPRDMP is being used and the module named in message IMD180I is IMDPRSWP, TSO user information cannot be read from the TSO SWAP data set. Execution of the TSO control statement continues but printing of swapped information is omitted.

- If the module is a user exit program for the EDIT function of IMDPRDMP, message IMD214I is issued to indicate that EDIT processing will be terminated. IMDPRDMP continues with the next control statement.

- If the module is a format appendage for the EDIT function of IMDPRDMP, message IMD215I is issued to indicate that trace records requiring this appendage will be printed in the hexadecimal dump format.

Operator Response: Note the module names identified by message IMD177I and inform the system programmer that this message has been issued.

Programmer Response: If the module named in message IMD177I has the format IMDUSRxx, xx being a hexadecimal number in the range 1-50, the module is a user format appendage for the EDIT function. Trace records requiring this module are user trace records for which the hexadecimal dump may be desired. If the module name is not of this format or if the user format appendage is desired, message IMD1772 indicates a probable user error. The required IMDPRDMP module must be link edited into the private library or the SYS1.LINKLIB data set.

Problem Determination: Table I, items 2, 29. Save a listing of the SYSPRINT data set produced by IMDPRDMP available.

IMD178I I/O ERROR ON BLDL

Explanation: IMDPRDMP issued a BLDL macro instruction to locate a required module. The BLDL macro instruction encountered an input/output error.

System Action: IMDPRDMP suppresses the function that required use of the module, issues message IMD180I to indicate which function cannot be used, and continues processing with one of the following actions:

- If the module named in message IMD180I is required for execution of a control statement, that control statement is not executed and IMDPRDMP proceeds with the next control statement.
- If the TSO function of IMDPRDMP is being used and the module named in message IMD180I is IMDPRSWP, TSO user information cannot be read from the TSO SWAP data set. Execution of the TSO control statement continues, but printing of swapped information is omitted.
- If the module named in message IMD180I is a user exit program or a format appendage for the EDIT function of IMDPRDMP, message IMD214I is issued to indicate that EDIT processing will be terminated. IMDPRDMP proceeds with the next control statement.

Operator Response: Inform the system programmer that this message has been issued.

Programmer Response: Verify that the IMDPRDMP modules have been link edited correctly into the private library or SYS1.LINKLIB data set. Resubmit the job.

Problem Determination: Table I, items 1, 4, 29.

IMD179I CANNOT LOAD PGM SEGMENT, INCR REG/PART  
nnnnK

Explanation: IMDPRDMP attempted to load a module, but sufficient main storage was not available. The value nnnn gives the number of K-bytes, by which the region should be increased to provide storage for the requires segment.

System Action: IMDPRDMP suppresses the function that required the use of the segment, issues message IMD180I to indicate which function cannot be used, and continues processing with one of the following actions:

- If the module named in message IMD180I is required for execution of a control statement, that control statement is not executed, and IMDPRDMP proceeds with the next control statement.
- If the TSO function of IMDPRDMP is being used and the module named in message IMD180I is IMDPRSWP, TSO user information cannot be read from the TSO SWAP data set. Execution of the TSO control statement continues, but printing of swapped information is omitted.
- If the module named in message IMD180I is a user exit program for the EDIT function of IMDPRDMP, message IMD214I is issued to indicate that EDIT processing will be terminated. IMDPRDMP proceeds with the next control statement.
- If the module named in message IMD180I is a format appendage for the EDIT function of IMDPRDMP and GTF trace data is being edited from a dump data set, message IMD215I is issued to indicate that trace records requiring this module will be printed in hexadecimal dump format.
- If the module named in message IMD180I is a format appendage for the EDIT function of IMDPRDMP and an external trace data set is being processed, message IMD214I is issued to indicate that EDIT processing will be terminated. IMDPRDMP processing proceeds with the next control statement.

Operator Response: Report this message to the system programmer.

Probable Response: Probable user error. Increase the value of the REGION parameter on the JOB or EXEC statement used to execute IMDPRDMP, as indicated in the message text. Verify that a SYSPRINT DD statement has been included in the IMDPRDMP JCL. Resubmit the job.

Problem Determination: Table I, items 1, 2, 4, 29. Save a listing of the SYSPRINT data set produced by IMDPRDMP.

IMD180I mod FUNCTION INOPERATIVE

Explanation: The function of IMDPRDMP, mod in the message text, is inoperative. This module can be one of the following:

- Required for the execution of an IMDPRDMP control statement. In this case, the module name will have the format IMDPRxxx where xxx is one of:

PAL - PRINT ALL function  
PCR - RPINT CURRENT function  
PDR - PRINT F03 function (DAR)  
FXT - FORMAT function  
PJB - PRINT JOBNAME= - print storage by specific jobname  
LPA - LINK PACK AREA map function  
SCN - EDIT GTF trace data (control card scan phase)  
XED - EDIT GTF trace data (processing phase)  
NUC - PRINT Nucleus and SQA  
PMS - PRINT STORAGE= - print by absolute storage address  
TSO - TSO subsystem formatting

- IMDPRSWP, the TSO SWAP data set routine.
- A system or subsystem format appendage routine for the EDIT function of IMDPRDMP. In this case, the module name has the format IMDSYSxx where xx is a hexadecimal number, or IMDUSRyy where yy is a hexadecimal number in the range 51-FF.
- A user format appendage for the EDIT function as indicated by module name IMDUSRxx where xx is a hexadecimal number in the range 1-50.
- A user exit program for the EDIT function of IMDPRDMP as specified by the EXIT parameter of the EDIT control statement.

System Action: The action taken by IMDPRDMP depends on the cause of the named function becoming inoperative. One of the messages IMD177I - IMD179I is issued prior to issuing message IMD180I to indicate both the reason for the function becoming inoperative and the resulting system action.

Operator Response: None.

Programmer Response: Follow the recommended programmer response indicated for messages IMD177I - IMD179I.

IMD181I DELETE ERROR - mod

Explanation: During execution of the EDIT function, IMDPRDMP attempted to acquire storage for the load of a program segment by deleting the loaded module - mod. It was found that module - mod had already been deleted.

System Action: EDIT execution is terminated; IMDPRDMP processing proceeds with the next control statement.

Operator Response: Report this message to the programmer.

Programmer Response: Probable user error. User exit programs and user format



appendages for the EDIT function must not issue the DELETE macro instruction specifying modules of IMDPRDMP. Verify that this is not done. Resubmit the job including a SYSPRINT DD statement in the IMDPRDMP JCL.

Problem Determination: Table I, items 1, 2, 4, 29. Save a listing of the SYSPRINT data set produced by IMDPRDMP.

#### IMD182I SWAP DATA SET NOT ACCESSIBLE

Explanation: No DD statements have been provided to describe the TSO swap data set; therefore the TSO user regions and user control blocks cannot be printed.

System Action: IMDPRDMP continues processing the TSO control statement. The TSO system control blocks that have been specified in the TSO control statement are formatted and printed.

Programmer Response: Supply the necessary DD statements to describe the swap data set. Resubmit the job, making sure that MSGLEVEL=(1,1) is specified in the JOB statement.

Problem Determination: Table I, items 2, 13, 29.

#### IMD184I INPUT DATA SET INVALID

Explanation: IMDPRDMP has determined that the input data set is not an IMDSADMP high-speed dump or an OS/360 core image dump. The input block size is greater than 133 characters; therefore, the tape cannot be printed.

System Action: If user control statements are being entered through the card reader, IMDPRDMP will scan remaining control statements for syntax errors. No control statements will be executed until a correct NEWDUMP or NEWTAPE control statement is encountered. If user control statements are being entered through the console, the IMDPRDMP program issues message IMD155D to let the user enter a new control statement.

Programmer Response: Probable user error. If control statements are being entered through the console, the current tape volume should be demounted by entering the NEWDUMP or NEWTAPE control statement. Otherwise, execute IMDPRDMP again, making sure that the correct dump tape is mounted.

Problem Determination: Table I, items 2, 13, 16, 29.

#### IMD187I INVALID EXEC CARD PARAMETER

Explanation: The IMDPRDMP program detected a syntax error in the value of the PARM= parameter on the EXEC JCL statement which invoked IMDPRDMP.

System Action: IMDPRDMP processing continues with the value assumed for this parameter in error.

Programmer Response: Probable user error. Correct the value of the PARM= parameter; make sure that MSGLEVEL=(1,1) is specified on the JOB statement and that a SYSPRINT DD statement has been included with the IMDPRDMP JCL. Re-submit the job.

Problem Determination: Table I, items 4, 29.

#### IMD188I PARALLEL AND SERIAL SWAP DD NOT PAIRED

Explanation: IMDPRSWP encountered a SYSWAPn1 DD statement without having encountered a SYSWAPn0 DD statement.

System Action: Information described by these DD statements will not be printed. Processing continues.

Programmer Response: Probable user error. Include the required SYSWAPn0 DD statement in the IMDPRSWP JCL. Rerun the job.

Problem Determination: Table I, items 1, 16, 29.

#### IMD189I INVALID CHARACTER IN LEVEL FIELD OF SWAP DD STATEMENT

Explanation: IMDPRSWP encountered a SYSWAPnm DD statement in which n is not a numeric value (0-9) or m is neither zero (0) nor one (1).

System Action: Information described by the DD statement in error will not be printed. Processing continues.

Programmer Response: Probable user error. Respecify the SYSWAPnm DD statement with a valid, numeric SWAP level. Rerun the job.

Problem Determination: Table I, items 1, 16, 29.

#### IMD199D CONTINUE DEFINITION

Explanation: Control statements for the EDIT function of IMDPRDMP are being entered from the system console. An EDIT control statement is to be continued. (This message may follow message IMD200I.)

System Action: The IMDPRDMP program enters a wait pending the operator's reply.

Operator Response: Enter the continuation for the current EDIT control statement.

#### IMD200I IMDPRDMP VERB RECEIVED - EDIT KEYWORD EXPECTED

Explanation: IMDPRDMP control statements are being entered from the system console. Message IMD199D or message IMD210D requested additional EDIT keywords; however, the reply began with an IMDPRDMP verb.

System Action: If IMDPRDMP control statements are being entered by way of the SYSIN data set, the IMDPRDMP program will scan for syntax errors, without executing

the remaining statements. If the control statements are being entered from the system console, message IMD199D or message IMD210D is reissued to allow the user to enter the correct keywords.

Operator Response: Obtain the proper continuation or respecification format from the programmer, and enter the proper keywords in the reply to message IMD199D or message IMD210D.

Problem Determination: Table I, items 1, 2, 4, 29. Save the SYSPRINT data set for IMDPRDMP.

IMD201I INVALID KEYWORD BEGINNING WITH xxx

Explanation: While scanning a control statement, EDIT has encountered an invalid keyword. The first three characters of that keyword are indicated by xxx.

System Action: If control statements are being provided by the SYSIN data set, the function requested by the control statement in error will not be executed. Further action depends on the nature of the data set being processed:

1. If a dump data set is being processed, IMDPRDMP will syntax-check the remaining control statements for that dump without executing them.
2. If an external trace data set is being processed, IMDPRDMP will resume processing with the next control statement.

If user control statements are being entered from the primary system console, IMDPRDMP issues message IMD210D to allow the user to enter EDIT keywords.

Operator Response: None.

Programmer Response: Probable user error. If the control statements were entered by way of the SYSIN data set, resubmit the job using valid keywords and abbreviations. If entering the control statements by way of the system console, reenter EDIT keywords with correct syntax.

Problem Determination: Table I, items 2, 4, 29.

IMD202I INVALID PARENTHESES

Explanation: While scanning a control statement, EDIT encountered either unbalanced parentheses or parentheses around a keyword value(s) for which only one value may be specified.

System Action: If control statements are being provided by the SYSIN data set, the function requested by the control statement in error will not be executed. Further action depends on the nature of the data set being processed:

1. If a dump data set is being processed, IMDPRDMP will syntax-check the remaining control statements for that dump without executing them.
2. If an external trace data set is being

processed, IMDPRDMP will resume processing with the next control statement.

If user control statements are being entered from the primary system console, IMDPRDMP issues message IMD210D to allow the user to enter EDIT keywords.

Operator Response: None.

Programmer Response: Probable user error. If the control statements were entered by way of the SYSIN data set, resubmit the job, making sure that all parentheses are paired and that no parentheses are used with the DDNAME and EXIT keywords. If entering the control statements by way of the system console, reenter the EDIT keywords correctly.

Problem Determination: Table I, items 2, 4, 29.

IMD203I INVALID PARM VALUE FOR KEYWORD keywd

Explanation: While scanning the keyword parameter - keywd, EDIT has encountered a value that contains other than valid alphameric values or that falls outside of the range of values allowed for that keyword.

System Action: If control statements are being provided by the SYSIN data set, the function requested by the control statement in error will not be executed. Further action depends on the nature of the data set being processed:

1. If a dump data set is being processed, IMDPRDMP will syntax-check the remaining control statements for that dump without executing them.
2. If an external trace data set is being processed, IMDPRDMP will resume processing with the next control statement.

If user control statements are being entered from the primary system console, IMDPRDMP issues message IMD210D to allow the user to enter EDIT keywords.

Operator Response: None.

Programmer Response: Probable user error. If the control statements were entered by way of the SYSIN data set, resubmit the job, making sure that alphabetic and numeric characters are used correctly, and that all parameters fall within the range of values allowed. If entering the control statements by way of the system console, reenter the EDIT keywords, making sure that all the errors mentioned above have been corrected.

Problem Determination: Table I, items 2, 4, 29.

IMD204I LENGTH OF PARM INVALID FOR KEYWORD keywd

Explanation: While scanning parameter values associated with keyword - keywd, EDIT has encountered a parameter value that exceeds the maximum length allowed for parameters of that keyword.

IMx

System Action: If control statements are being provided by the SYSIN data set, the function requested by the control statement in error will not be executed. Further action depends on the nature of the data set being processed:

1. If a dump data set is being processed, IMDPRDMP will syntax-check the remaining control statements for that dump without executing them.
2. If an external trace data set is being processed, IMDPRDMP will resume processing with the next control statement.

If user control statements are being entered from the primary system console, IMDPRDMP issues message IMD210D to allow the user to enter EDIT keywords.

Operator Response: None.

Programmer Response: Probable user error. If the control statements were entered by way of the SYSIN data set, resubmit the job, making sure that all parameter values conform to length requirements. If entering the control statements by way of the system console, reenter the EDIT keywords, making sure that the error mentioned above has been corrected.

Problem Determination: Table I, items 2, 4, 29.

IMD205I DUPLICATE KEYWORD-keywd

Explanation: While scanning a control statement, EDIT has encountered the EXIT or DDNAME keyword after it had already been specified with a different value.

System Action: If control statements are being provided by the SYSIN data set, the function requested by the control statement in error will not be executed. Further action depends on the nature of the data set being processed:

1. If a dump data set is being processed, IMDPRDMP will syntax-check the remaining control statements for that dump without executing them.
2. If an external trace data set is being processed, IMDPRDMP will resume processing with the next control statement.

If user control statements are being entered from the primary system console, IMDPRDMP issues message IMD210D to allow the user to enter EDIT keywords.

Operator Response: None.

Programmer Response: Probable user error. If the control statements were entered by way of the SYSIN data set, resubmit the job, making sure that the EXIT or DDNAME keyword is specified only once per EDIT control statement. If the control statements were entered from the system console, reenter the EDIT keywords, making sure that the error mentioned above has been corrected.

Problem Determination: Table I, items 2, 4, 29.

IMD206I EXCESSIVE NO. PARM VALUES FOR KEYWORD keywd

Explanation: While scanning multiple parameter values associated with keyword - keywd, EDIT has encountered a greater number of unique parameter values than is allowed for this keyword.

System Action: If control statements are being provided by the SYSIN data set, the function requested by the control statement in error will not be executed. Further action depends on the nature of the data set being processed:

1. If a dump data set is being processed, IMDPRDMP will syntax-check the remaining control statements for that dump without executing them.
2. If an external trace data set is being processed, IMDPRDMP will resume processing with the next control statement.

If user control statements are being entered from the primary system console, IMDPRDMP issues message IMD210D to allow the user to enter EDIT keywords.

Operator Response: None.

Programmer Response: Probable user error. If the control statements were entered from the SYSIN data, set, resubmit the job, making sure that the number of unique parameter values does not exceed the maximum number allowed for this keyword. If entering the control statements from the system console, reenter the EDIT keywords, making sure that the error mentioned above has been corrected.

Problem Determination: Table I, items 2, 4, 29.

IMD207I INVALID DELIMITER FOR KEYWORD keywd

Explanation: While scanning values for the keyword (keywd) EDIT has encountered either a delimiter in the place of a value or an unexpected type of delimiter.

System Action: If control statements are being provided by the SYSIN data set, the function requested by the control statement in error will not be executed. Further action depends on the nature of the data set being processed:

1. If a dump data set is being processed, IMDPRDMP will syntax-check the remaining control statements for that dump without executing them.
2. If an external trace data set is being processed, IMDPRDMP will resume processing with the next control statement.

If user control statements are being entered from the primary system console, IMDPRDMP issues message IMD210D to allow the user to enter EDIT keywords.

Operator Response: None.

Programmer Response: Probable user error. If the control statements were entered by way of the SYSIN data set, check all delimiters and resubmit the job. If entering the control statements from the system console, reenter the EDIT keywords with the proper delimiters.

Problem Determination: Table I, items 2, 4, 29.

IMD208I START VALUE EXCEEDS STOP VALUE IN STMTS ABOVE

Explanation: This message is issued when EDIT determines that, on the EDIT control statement, the START parameter value is larger than the STOP parameter value.

System Action: If control statements are being provided by the SYSIN data set, the function requested by the control statement in error will not be executed. Further action depends on the nature of the data set being processed:

1. If a dump data set is being processed, IMDPRDMP will syntax-check the remaining control statements for that dump without executing them.
2. If an external trace data set is being processed, IMDPRDMP will resume processing with the next control statement.

If user control statements are being entered from the primary system console, IMDPRDMP issues message IMD210D to allow the user to enter EDIT keywords.

Operator Response: None.

Programmer Response: Probable user error. If the control statements were entered by way of the SYSIN data set, resubmit the job, insuring that the STOP parameter value is greater than the START parameter value. If entering the control statements from the system console, reenter the EDIT keywords, making sure that the error mentioned above has been corrected.

Problem Determination: Table I, items 2, 4, 29.

IMD209I INVALID USR EID OR RANGE

Explanation: While scanning the parameter values associated with the USR keyword, EDIT has encountered one of the following conditions:

1. an unrecognizable symbolic EID.
2. an EID range in which the left (lower) value exceeds the right (upper) value.

System Action: If control statements are being provided by the SYSIN data set, the function requested by the control statement in error will not be executed. Further action depends on the nature of the data set being processed:

1. If a dump data set is being processed, IMDPRDMP will syntax-check the remaining control statements for that dump without executing them.

2. If an external trace data set is being processed, IMDPRDMP will resume processing with the next control statement.

If user control statements are being entered from the primary system console, IMDPRDMP issues message IMD210D to allow the user to enter EDIT keywords.

Operator Response: None.

Programmer Response: Probable user error. If the control statements were entered by way of the SYSIN data set, resubmit the job, making sure that any symbolic EIDs used are valid and that the right (upper) value in an EID range is equal to or greater than the left (lower) value. If entering the control statements by way of the system console, reenter the control statement, making sure that all of the errors mentioned above have been corrected.

Problem Determination: Table I, items 2, 4, 29.

IMD210D RESPECIFY EDIT KEYWORDS OR REPLY 'RUNEDIT'

Explanation: An EDIT control statement entered from the system console is in error. This message is issued to allow the operator to respecify the keywords contained in that statement or to select default processing.

Note: If the control statement has been divided into a string of continued lines, only the keywords for the line in error may be respecified. The keywords from the previous lines have already been accepted.

System Action: EDIT waits pending the operator's reply.

Operator Response: Do one of the following:

- Respecify the keywords and values from the statement in error including corrections to syntax violations as noted by messages IMD201I - IMD2109I.
- Reply RUNEDIT to cause EDIT execution to begin with the parameters selected on the previously accepted control statements. If no control statements have been accepted, the default options (EDIT SYS,USR=ALL) will be in effect.

IMD211I EDIT OPTIONS IN EFFECT-option list

Explanation: This message is issued to inform the user what keyword options have been accepted for EDIT's data reduction process. If more than one option has been accepted, they are separated by commas in the order specified below:

EXIT=exitname  
DDNAME=ddname  
START=(day, hh.mm.ss)  
STOP=(day, hh.mm.ss)  
JOBNAMES=(jjj<sub>1</sub>, jjj<sub>2</sub>, ... jjj<sub>n</sub>)  
TCBS=(tcbaddr<sub>1</sub>, tcbaddr<sub>2</sub>, ... tcbaddr<sub>n</sub>)

IMx

either of the following:

IO=SIO=parm  
or  
[SIO=parm] [,IO=parm]  
SVC=parm  
PI=parm  
USR=parm  
EXT  
DSP

In the options listed, parm may be either 'ALL', OR 'SEL', where 'ALL' indicates that all events within that event class will be edited, and 'SEL' indicates that only events selected by the user supplying the keyword parameter values for that event class will be edited.

System Action: EDIT processing continues with the above data reduction options in effect.

Operator Response: None.

Programmer Response: None.

IMD212I RCD ON PG nnnn. RET CODE retcde RCVD FR  
MODULE mod

Explanation: The record currently being processed by EDIT has been dumped in hexadecimal on page number nnn of the output data set. Module mod attempted to format the record, but EDIT was unable to process it because module mod returned an invalid return code (retcde).

System Action: EDIT will display in hexadecimal the record associated with the error in hexadecimal.

EDIT takes action based on the value of the "ER" parameter, specified in the EXEC statement of the IMDPRDMP JCL, as follows:

- 0 -- If the error was in a format appendage module, as soon as EDIT recognizes that a subsequent record requires that module, processing will terminate for that record and EDIT will select another. If the error was in a user exit module, records will continue to be processed by the format appendages. Message IMD213I will then be issued by EDIT.
- 1 -- If the error was in a format appendage module, all subsequent records requiring the same format module will be dumped in hexadecimal format. Message IMD215I will then be issued by EDIT. If the error was in a user exit module, formatting of records will continue. Message IMD213I will then be issued by EDIT.
- 2,3 -- Processing of the current EDIT function will terminate. Message IMD214I is issued by EDIT, and processing will continue with the next control statement.  
If ER= is not specified on the EXEC statement a value of ER=2 will be assumed.

Operator Response: Report this message to the programmer.

Programmer Response: Probable user error if the module name is either of:

- 1) IMDUSRxx where xx is a hexadecimal number in the range 01-50;
- 2) A user exit name.

Verify that the module sets a valid return code, and, if necessary, correct it.

Problem Determination: If the module name is neither case (1) or (2), see Table I, items 1, 2, 4, 29. Make sure that a SYSPRINT DD statement is included in the IMDPRDMP JCL. Save a listing of the SYSPRINT data set, and the GTF input trace data set or the dump data set being processed.

IMD213I PROCESSING CONTINUES - BYPASSING MODULE  
mod

Explanation: This message is issued following message IMD212I and message IMD216I if the user has specified '0' as the value of the ER parameter on the IMDPRDMP EXEC statement. EDIT continues processing, bypassing format appendage or user exit module - mod

System Action: EDIT execution continues. If the error noted in message IMD212I or IMD216I occurred in a format appendage module, further records requiring that module will not be processed. If the error noted in message IMD212I or IMD216I occurred in a user exit module, processing of records will continue without passing control to the failing user exit.

Operator Response: None.

Programmer Response: None.

IMD214I CURRENT EDIT FUNCTION TERMINATED

Explanation: This message is issued, during EDIT execution, when one of the following occurs:

- 1) A user exit module could not be found or loaded for execution.
- 2) A format appendage module, required for processing an external data set, existed in the correct library but could not be loaded for execution.
- 3) During an attempt to load a user exit module or a format appendage module, an I/O error occurred during execution of a BLDL macro instruction.
- 4) EDIT attempted to acquire main storage space for the load of a module needed to process the current input record by deleting a previously loaded user exit or format appendage module which is no longer in use. EDIT found, however, that the previously loaded format appendage or user exit module has already been deleted.
- 5) The user has specified '2' or '3' as the value of the ER= parameter on the IMDPRDMP EXEC statement, and an error, identified by message IMD212I or IMD216I, has occurred in a format appendage or user exit module.

System Action: The current EDIT function is terminated. Processing continues with the next control statement.

Operator Response: None.

Programmer Response: None.

IMD215I FURTHER RCDS REQUIRING mod WILL BE DUMPED IN HEX

Explanation: This message is issued following message IMD212I and message IMD216I when the user has specified '1' as the value of the ER= parameter on the IMDPRDMP EXEC statement. EDIT continues processing, dumping in hexadecimal any record that requires format appendage module - mod for editing.

System Action: EDIT continues processing, having deleted format appendage module - mod. Any subsequent records requiring mod for editing will be dumped in hexadecimal.

Operator Response: None.

Programmer Response: None.

IMD216I RCD AND OTHER INFO ON PG nnnn. PGM CHECK IN MODULE mod

Explanation: A program check interrupt has occurred during execution of the format appendage or user exit module - mod. The current input record will be dumped in hexadecimal, along with information pertaining to the program check, on page nnnn of the IMDPRDMP data set.

System Action: EDIT will display in hexadecimal the record associated with the error. EDIT continues execution based on the value of the 'ER' parameter specified on the EXEC statement.

EDIT takes action based on the value of the 'ER' parameter, as follows:

- 0 -- If the error was in a format appendage module, as soon as EDIT recognizes that a subsequent record requires that module, processing will terminate for that record and EDIT will select another. If the error was in a user exit module, records will continue to be processed by the format appendages. Message IMD213I will then be issued by EDIT.
- 1 -- If the error was in a format appendage module, all subsequent records which require processing by the same format module will be dumped in hexadecimal format. Message IMD215I is then issued by EDIT. If the error was in a user exit module, the resultant action is the same as if 'ER=0' had been specified.
- 2 -- Processing of the current EDIT function will terminate. Message IMD214I is issued by EDIT. Processing continues with the next control statement.

If ER= is not specified on the EXEC statement, a value of ER=2 is assumed.

Operator Response: Report this message to the programmer.

Programmer Response: Probable user error if the module name is either of:  
1) IMDUSRxx where xx is a hexadecimal number in the range 01-50;  
2) A user exit name.

Verify that the module in error has been thoroughly tested, using the 'ER=3' parameter value on the IMDPRDMP EXEC statement and including a SYSABEND DD statement in the IMDPRDMP JCL if a dump of the module is desired.

Problem Determination: If the module name is neither case (1) or case (2), see Table I, items 1, 2, 4, 5a, 29. Insure that the ER=3 parameter is specified on the IMDPRDMP EXEC statement and that a SYSPRINT DD statement is included in the IMDPRDMP JCL. Save a listing of the SYSPRINT data set, a copy of the related dump, and a copy of the input trace data set (or dump) being processed.

IMD217I NO SYS DATA, JOB OR TCB SELECTION NOT ALLOWED

Explanation: The EDIT function of IMDPRDMP is being used and the JOBNAME or TCB keyword parameter was specified on the EDIT control statement. The trace data set being processed is in the SYSM format; therefore, editing of trace records by specified jobname or TCB address is not possible.

System Action: If control statements are being entered by way of the SYSIN data set, EDIT processing is terminated and IMDPRDMP execution continues with the next user control statement. If control statements are being entered by way of the system console, message IMD218D will be issued allowing the operator to decide if EDIT processing is to continue.

Operator Response: Message IMD218D will be issued following message IMD217I. Enter desired response to message IMD218D.

Programmer Response: Probable user error. If control statements are being entered by way of the SYSIN data set, do not use the JOBNAME or TCB address parameters of the EDIT control statement. Make sure that a SYSPRINT DD statement is included in the IMDPRDMP JCL. Resubmit the job.

If control statements are being entered from the system console, respond to message IMD218D when it is issued.

Problem Determination: Table I, items 1, 4, 29. Save a listing of the SYSPRINT data set produced by IMDPRDMP. Save the GTF trace data set or the dump data set being processed.

IMx

IMD218D REPLY 'C' TO EDIT W/O JOB/TCB SELECTION,  
'S' TO TERMINATE

Explanation: IMDPRDMP control statements are being entered from the system console. The EDIT function of IMDPRDMP is being used and the JOBNAME or TCB keyword parameter was specified on the EDIT control statement. Trace data being processed is in the SYSM format; therefore, editing by specific jobname or TCB address is not possible. The operator is asked to decide whether or not processing is to continue without the requested selective editing.

System Action: The IMDPRDMP program enters a wait state pending the operator's reply.

Operator Response: If EDIT processing is to continue and all trace records are to be edited, reply 'C'. If EDIT processing is to stop, enter 'S', causing IMDPRDMP execution to continue with the next user control statement.

IMD219D EDIT DUMP - NO SELECT. REPLY DDMAE OR  
'0' TO TERMINATE

Explanation: IMDPRDMP control statements are being entered by way of the system console and the EDIT function is being used. The user has specified selective editing without including a DDNAME parameter in the EDIT control statement, thus requesting selective editing of GTF trace buffers in a dump data set. This is not permitted by the EDIT function.

System Action: The IMDPRDMP program enters a wait state until the response is entered.

Operator Response: If an external trace data set is to be edited, enter the ddname of the DD card describing the data set. If an external trace data set is not to be edited, enter '0' and then enter the corrected EDIT control statement is response to message IMD155D.

IMD220I NO EDIT DD CARD - ddn

Explanation: The EDIT function of IMDPRDMP is being used. The DD statement specified by the EDIT keyword parameter DDNAME has been omitted from the IMDPRDMP JCL. ddn is the name specified by this parameter.

System Action: EDIT processing is terminated. IMDPRDMP execution continues with the next control statement.

Operator Response: Report this message to the programmer.

Programmer Response: Probable user error. Supply the necessary DD statement, or correct the value of the DDNAME parameter to specify the correct ddname. Make sure that a SYSPRINT DD statement has been included in the IMDPRDMP JCL. Resubmit the job.

Problem Determination: Table I, items 1, 4, 29. Save a listing of the SYSPRINT data set produced by IMDPRDMP.

IMD224I BLKSIZE=3500 ASSUMED, NOT SPECIFIED FOR  
DD - ddn

Explanation: The EDIT function of IMDPRDMP is being used. No blocksize was specified for the data set described by the DD statement ddn. This data set resides on a non-labeled magnetic tape volume.

System Action: EDIT processing continues with the blocksize 3500 assumed.

Operator Response: None.

Problem Determination: Table I, items 1, 4, 29. Save a listing of the SYSPRINT data set produced by IMDPRDMP.

IMD225I REG/PART nnnK TOO SMALL FOR EDIT BUFFERS

Explanation: The EDIT function of IMDPRDMP is being used. The region in which IMDPRDMP is executing is too small to contain the requested number of trace data set buffers. The amount of storage required for these buffers is determined by the product of the maximum blocksize in the trace data set and the value of the BUFNO subparameter of the DD statement. (If BUFNO is not specified, the value 2 is assumed).

System Action: EDIT processing is terminated. IMDPRDMP execution continues with the next user control statement.

Operator Response: Report this message to the programmer.

Programmer Response: Probable user error. Either 1) increase the value of the REGION parameter on the JOB or EXEC statement by the amount indicated by nnn, or 2) decrease the value of the BUFNO parameter so that the amount of main storage required for trace buffers is less than the value. Resubmit the job making sure that the SYSPRINT DD statement is included in the IMDPRDMP JCL.

Problem Determination: Table I, items 1, 4, 29. Save a listing of the SYSPRINT data set produced by IMDPRDMP.

IMD226I NO RECORDS IN REQUESTED INTERVAL

Explanation: EDIT did not find any records in the requested interval for one of the following reasons:

- The time interval specified by the START/STOP keywords are within the time interval covered by the trace data set, but GTF did not generate any records during that time.
- The entire trace data set was generated before the START time indicated by the EDIT control statement.

System Action: EDIT processing is terminated. IMDPRDMP execution continues with the next user control statement.

Operator Response: None.

Programmer Action: None.

IMD227I DATA SET CREATED AFTER STOP TIME

Explanation: The EDIT function of IMDPRDMP is being used for an external trace data set. The user specified a STOP= value in his EDIT control statement that is earlier than the value of any time stamp record in the data set.

System Action: Current EDIT processing is terminated and processing resumes with the next control statement.

Operator Response: Report this message to the programmer.

Programmer Response: Probable user error. Make sure that the STOP= time is within the time-range of this data set (this can be determined by executing IMDPRDMP EDIT with the same data set, specifying the SYS and USR=ALL options, and examining the block time stamps). Resubmit the job with the correct STOP= value.

Problem Determination: Table I, items 4, 29. Save the trace data set and a listing of the SYSPRINT data set produced by IMDPRDMP.



## FORTRAN Syntax Checker Messages (IPD)

|                             |                                                                                                                                                                                                                          |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Component Name              | IPD                                                                                                                                                                                                                      |
| Program Producing Message   | FORTRAN syntax checker.                                                                                                                                                                                                  |
| Audience and Where Produced | For remote operator and programmer: terminal.                                                                                                                                                                            |
| Message Format              | IPDnnn xxxxxxxx yyyyyy text<br><br>nnnn<br>Message serial number.<br><br>xxxxxxx<br>Data set line number of the line in which the error was detected.<br><br>YYYYYY<br>Characters in error.<br><br>text<br>Message text. |
| Comments                    | Control operator may request that messages appear on his console.                                                                                                                                                        |
| Associated Publications     | <u>IBM System/360 Operating System:</u><br><u>Conversational Remote Job Entry</u><br><u>Terminal User's Guide, GC30-2014</u>                                                                                             |
| Problem Determination       | Refer to the fold-out in part VI of this publication for problem determination instructions.                                                                                                                             |

IPD000 SYSTEM OR SYNTAX CHECKER FAILURE

Explanation: While scanning the last statement, the syntax checker encountered a condition that should not occur. It may be a hardware, syntax checker, or operating system error.

Problem Determination: Table I, items 3, 29.

Programmer Response: Probable user error. Make the correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD002 UNRECOGNIZABLE STMT OR MISSPELLED KEYWD

Explanation: The statement was not a recognizable FORTRAN statement type, or a keyword of six or fewer characters was misspelled. An assignment statement with errors to the left of the "=" is unrecognizable.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD006 EXPRESSION EXPECTED

Explanation: An expression is either missing or invalid in the statement where a valid one is expected. For example, each of these statements would receive this message:

1. A=
2. G (I,J) = C (I, )
3. X= Y+2.0\*( \*\*2+6.28)

The source characters in error in the message would be: none for statement 1; ")" for statement 2; "\*\*2+6." for

IPD004 UNSIGNED INTEGER EXPECTED

Explanation: An invalid form, such as an integer constant preceded by a plus or minus sign, was encountered in the statement where (1) an unsigned integer is the only valid form, or (2) an unsigned integer or unsigned variable is the only valid form.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD

IPD008 POSSIBLY TOO MANY SUBSCRIPTS PRECEDE

Explanation: A list of eight or more (four or more in FORTRAN E) names within parentheses has been found following a symbolic name on the left side of the equal sign in an assignment statement or statement function definition. If the statement is a statement function definition, the message should be ignored.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD010 TOO MANY SUBSCRIPTS

Explanation: A list of eight or more (four or more in FORTRAN E) expressions within parentheses has been found following a symbolic name in a place where a subscripted variable reference would be valid.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD012 ) EXPECTED

Explanation: Either a required parenthesis was missing or there was no right parenthesis to match a left parenthesis.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD014 ARITH IF REQUIRES STATEMENT NUMBER LIST

Explanation: There was a missing or invalid statement number in the list of statement numbers after an arithmetic IF statement. (FORTRAN G and H only)

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD016 INVALID EXPRESSION IN IF STATEMENT

Explanation: The expression within parentheses after the "IF" keyword of a logical or arithmetic IF statement was not recognizable as either a valid logical or arithmetic expression. (FORTRAN G and H only)

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD018 UNRECOGNIZABLE STMT AFTER LOGICAL IF

Explanation: The statement following the "IF (logical expression)" was not a recognizable FORTRAN statement type, or there was something other than blanks between the right parentheses at the end of the logical expression and the start of the statement. Some errors in arithmetic IF statements will cause this message to be issued. (FORTRAN G and H only)

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD020 NON-ZERO INTEGER EXPECTED

Explanation: The indicated numeric constant is zero, not an integer constant, or both.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD022 ILLEGAL STATEMENT AFTER LOGICAL IF

Explanation: The statement following the "IF(logical expression)" is not one of the statement types permitted after a logical IF. The statement cannot be a DO, another logical IF, any non-executable statement, nor any of the DEBUG statements. (FORTRAN G and H only)

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD026 DATA SET NUMBER EXPECTED

Explanation: An input/output statement had neither an unsigned non-zero integer nor a variable name in the correct position for the data set reference numbers.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD028 LENGTH SPECIFICATION INVALID

Explanation: In a type-statement, a length specification was missing or was incorrect for the type of statement specified for the variable(s) or function. (FORTRAN G and H only)

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep. IPD038 / EXPECTED

Explanation: The first name in a NAMELIST statement was not preceded by a slash, or a name or list of data preceded by a slash was not followed by a slash. (COMMON, SUBROUTINE, FUNCTION, ENTRY, NAMELIST, DATA, INTEGER, REAL, LOGICAL, and COMPLEX statements in FORTRAN G and H only)

Problem Determination: Table I, items 3, 15, 22, 29.

IPD030 ( EXPECTED

Explanation: A required left parenthesis is missing. This message is not issued for statements where parentheses are optional (assignment statements, for example), but is issued where a pair of parentheses is mandatory (as in FUNCTION, EQUIVALENCE, WRITE, etc.).

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD032 NAME EXPECTED

Explanation: A required name is missing or is preceded by characters that cannot begin a name. For example, all these statements will receive this message:

```
FUNCTION (A,B,C)
DIMENSION, X(20,30)
DEFINE FILE 8(10,20,U,3X)
```

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD034 DUMMY ARGUMENT EXPECTED

Explanation: A SUBROUTINE or FUNCTION statement has an argument that is invalid - a constant or an expression, for example. (This also applies to the ENTRY statement in FORTRAN G and H)

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD036 ARRAY DIMENSIONS EXPECTED

Explanation: A DIMENSION statement gave either partial or no dimension information for one of its array names, or invalid characters were between the array name and the dimension information.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD040 INVALID DATA TYPE

Explanation: Either the type of a datum in a type-statement did not agree with the type declared by the statement, the datum was missing, or, in an Implicit statement, the type specification was invalid (e.g., IMPLICIT REEL (D)). (Hexadecimal and both types of literal data are allowed in all type statements.) (FORTRAN G and H only)

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD042 STATEMENT NUMBER EXPECTED

Explanation: A FORMAT statement was not numbered or a form other than a statement number was encountered after the "GO TO" in an unconditional GO TO statement. (In addition, in FORTRAN G and H, the invalid form could be in an ASSIGN or a CALL statement.)

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD044 'TO' EXPECTED

Explanation: An ASSIGN statement did not have "TO" in the required place. (FORTRAN G and H only)

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD046 ARGUMENT EXPECTED

Explanation: A CALL statement has an invalid or missing argument in its argument list.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD048 DATA LIST EXPECTED

Explanation: A data statement contains no data list or the data list is separated from the variable list by invalid characters. (FORTRAN G and H only)

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD050 RELATIONAL OPERATOR EXPECTED

Explanation: In a logical expression, an arithmetic expression was not followed by a relational operator. (FORTRAN G and H only)

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD052 , EXPECTED

Explanation: In a statement with a relatively rigid form, such as EQUIVALENCE or DEFINE FILE, a comma was absent or preceded by invalid characters.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.  
0

Problem Determination: Table I, items 3, 15, 22, 29.

IPD054 OPERAND EXPECTED IN ARITH EXPRESSION

Explanation: An arithmetic operator was not followed by a valid arithmetics operand, or two operators occur together (as in A \* -B).

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD056 OPERAND EXPECTED IN LOGICAL EXPRESSION

Explanation: A logical operator was not followed by a logical operand, or a logical operand was missing. An invalid logical operator, such as ".NOT..NOT.", also causes this message. (FORTRAN G and H only)

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD058 I/O LIST ITEM EXPECTED

Explanation: A variable name did not follow a comma in the list of a READ or WRITE statement (or in FORTRAN G and H, a PUNCH or PRINT statement).

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD060 ' EXPECTED

Explanation: A FIND statement did not contain an apostrophe to separate the data set reference number from the expression describing the record to be found. This message is issued only if the omission of the apostrophe leaves a valid data set reference number. For example, "FIND (10 100)" would not cause this message because 10100 is not a valid data set reference number.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD062 INCORRECT PARAMETER - MUST BE E, L, OR U

Explanation: The data set control character in a DEFINE FILE statement was not an E, L or U.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD064 DEBUG PARAMETER EXPECTED

Explanation: A valid parameter did not follow a comma after a valid parameter in a DEBUG statement. (FORTRAN G only)

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD066 SUBSCRIPT EXPECTED

Explanation: A subscript was missing, not in one of the valid forms, or separated from the preceding comma or left parenthesis by invalid characters. (FORTRAN E only)

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD068 TOO MANY LEVELS OF PARENTHESES

Explanation: In a FORMAT statement, group repeat specifications were too deeply nested. FORTRAN E does not allow a group repeat specification within a group repeat specification. FORTRAN G and H do allow this, but allow no further nesting of group repeat specifications.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD072 INTEGER EXPECTED

Explanation: A numeric constant that was not an integer was found where an integer is required.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD074 COMPLEX NUMBER INVALID

Explanation: The two parts of a complex constant did not agree in length, or one or both parts was not a real constant. (FORTRAN G and H only)

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD076 DELIMITER MISSING OR INVALID FORMAT CODE

Explanation: In a FORMAT statement, either a format code was invalid, a delimiter (such as the required comma or slashes between two literal format codes) was missing or the right parenthesis at the end of the FORMAT was missing.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD078 VARIABLE LIST EXPECTED

Explanation: In a DATA statement, a variable name (or list of variable names) did not occur (1) as the first item of the data statement, or (2) after a comma following a list of constants enclosed in slashes. This message is also issued when there are invalid characters between the "DATA" keyword or the comma and the list of variables. (FORTRAN G and H only)

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep

Problem Determination: Table I, items 3, 15, 22, 29.

IPD080 EXPECTED IN FORMAT CODE

Explanation: There was no period as required in the "w.d" following the D, E, or F format code in a FORMAT statement.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD082 NAME TOO LONG

Explanation: A symbolic name contains more than six characters, a keyword of seven or more letters at the beginning of a statement is misspelled, or a misspelled keyword follows the "IF(logical expression)" part of a logical IF statement. A missing delimiter may cause this message to be issued. Each of the following statements would produce this message:

```
38 CONTINUE
SUBROUTINE X(ARG1 ARG2)
```

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD084 STATEMENT NUMBER INVALID

Explanation: The statement number field (positions 1-5 of the initial line of a statement) was zero or contained at least one character that was neither a digit nor a blank. Within a statement, this message is issued if a statement number is zero or contains too many digits.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD086 H-LITERAL INCOMPLETE

Explanation: The number of characters in the statement after the "H" was smaller than the count before the "H" in the H-literal.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD088 FIELD WIDTH NOT IN RANGE 1-255

Explanation: The field width specified in a format code was not in the required range.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD090 LITERAL EXCEEDS 255 CHARACTERS

Explanation: The number of characters between the apostrophes of a literal exceeds 255. In determining the number of characters enclosed, two adjacent apostrophes within the outermost apostrophes are counted as one character.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD092 STATEMENT ANALYSIS EXCEEDS TABLE LIMITS

Explanation: The statement was so complicated that the syntax checker ran out of space in its table. The statement cannot be checked by the syntax checker.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD094 END REQUIRES BLANK LABEL & CONTIN FIELDS

Explanation: Positions 1-6 of an END statement must be blank, and an END statement cannot have continuation lines.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD096 INVALID OR EXCESS SOURCE CHARACTERS

Explanation: The statement being checked completely satisfies the definition for that type of statement at some point before the last non-blank character in the statement. This may occur if a delimiter has been left out between elements of a statement.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD098 INVALID RANGE IN IMPLICIT STATEMENT

Explanation: An IMPLICIT statement contains a range of characters in which the last character of the range alphabetically precedes the first character of the range. Note that "\$" follows "Z" in the alphabet. A character

that is not alphabetic will also cause this message to be issued. (FORTRAN G and H only)

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD100 FIRST LINE IS A CONTINUATION

Explanation: The first line scanned did not have "C" in position one, nor did it have a blank or zero in position six.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD102 COMMENT LINE WITHIN STATEMENT

Explanation: A comment line was found between an initial line and a continuation line or between two continuation lines.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD104 TOO MANY CONTINUATION LINES

Explanation: The statement consisted of an initial line followed by more than 19 continuation lines.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD106 TOO MANY DECIMAL PLACES FOR FIELD WIDTH

Explanation: In a D, E, F, or G format code, the fractional portion ("d" of "w.d") exceeded the total field width ("w" of "w.d"). (G in FORTRAN G and H only)

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD108 DECIMAL PLACES MUST BE SPECIFIED

Explanation: In a D, E, or F format code, fractional portion ("d" of "w.d") was missing or was separated from the decimal point by invalid characters.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD110I ) REQUIRED FOR IMPLIED DO

Explanation: In the input or output list of an I/O statement, a right parenthesis was not the first non-blank character after the parameters of an implied DO.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD112 DO VARIABLE CANNOT BE SUBSCRIPTED

Explanation: In an I/O list, a subscripted variable was used as the DO variable within an implied DO loop.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD114 DEBUG FACILITY NOT SUPPORTED

Explanation: One of the Debug Facility statements appeared in a FORTRAN H program. These statements are allowed only in FORTRAN G. They are diagnosed when FORTRAN H is being checked since FORTRAN G and H use the same syntax table. If FORTRAN E is being checked, these statements will be diagnosed as unrecognizable or as beginning with too long a name.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD116 EXPONENT MISSING OR INVALID

Explanation: The characters after the "D" or "E" in a double precision or real constant do not constitute a valid exponent.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD118 REAL CONSTANT MUST HAVE AT LEAST 1 DIGIT

Explanation: In a place where a numeric constant might be written, a decimal point was found followed by an E or D exponent, but there was no digit on either side of the decimal point.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD120 INTEGER TOO LARGE

Explanation: The magnitude of an integer constant exceeds 2147483647.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD122 CLOSING ' EXPECTED

Explanation: The end of the statement was reached without finding the closing apostrophe for a literal constant or literal format code. The opening apostrophe of the literal is the source character identified in the error message. (Only the literal format code is allowed in FORTRAN E.)

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD124 DATA ILLEGAL FOR DUMMY ARRAY

Explanation: An array was dimensioned in a REAL, INTEGER, LOGICAL or COMPLEX type-statement. One of the dimensions was a variable name, making the array a dummy array, but a slash, indicating the start of a list of data, was then encountered. Dummy arrays cannot be assigned initial data values.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD126 REAL NUMBER EXPECTED

Explanation: A numeric datum of a type other than real was written in a REAL type-statement. (FORTRAN G and H only)

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD128 INVALID CHARACTERS AFTER STOP OR PAUSE

Explanation: Characters other than digits, or too many digits, follow the STOP or PAUSE in a STOP or PAUSE statement. (In FORTRAN G and H, a literal is also permitted to follow PAUSE and will not receive this diagnostic.)

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD130 REAL NUMBER OUTSIDE OF ALLOWABLE RANGE

Explanation: A real number's magnitude, taking the value of the exponent into account, is outside the range 1.0E-79 to 9. (any fraction) E+75.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD132 FORMAT STMT NO. OR ARRAY NAME EXPECTED

Explanation: In a PRINT, PUNCH, or READ statement, no reference is made to a FORMAT statement or to an array containing a FORMAT. (FORTRAN G and H only)

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD134 MISPLACED LENGTH SPECIFICATION PRECEDES

Explanation: A FUNCTION statement in which the "FUNCTION" is preceded by "REAL", "INTEGER", "COMPLEX", or "LOGICAL" has a length specification between the type and "FUNCTION". The length specification is invalid in that position and must be moved to the end of the function name.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD138 ARITH EXP EXPECTED AFTER RELATIONAL OP

Explanation: A relational operator in a logical expression was not followed by a valid arithmetic expression. (FORTRAN G and H only)

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD140 INVALID COMMA IN DO

Explanation: An invalid comma was found after the statement number in a DO statement.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD142 = EXPECTED

Explanation: In a DO statement, in which the statement number was followed by an invalid comma, the equal sign expected after the DO variable was not found.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD144 LITERAL CONTAINS NO CHARACTERS

Explanation: The closing apostrophe of a literal constant or literal format code occurred immediately to the right of the opening apostrophe. (Only the literal format code is allowed in FORTRAN E.)

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD146 INVALID IF AFTER LOGICAL IF

Explanation: A statement after the "IF (logical expression)" part of a logical IF statement was recognized as an IF statement, but was not a valid arithmetic IF statement as required. (FORTRAN G and H only)

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD158 TOO MANY SUBSCRIPTS PRECEDE

Explanation: A list of eight or more (four or more in FORTRAN E) expressions within parentheses has been found following a symbolic name on the left side of the equal sign in an assignment statement.

Programmer Response: Probable user error. Make correction as noted in the explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3, 15, 22, 29.

IPD160 'END' TOO FAR ON LINE

Explanation: The free-form END statement contains more than 66 characters, not including trailing blanks. (This message will not appear if the statement contains other errors.)

System Action: Processing continues.

Programmer Response: Probable user error.  
Make correction as noted in the  
explanation and rerun the job or jobstep.

Problem Determination: Table I, items 3,  
15, 22, 29.

IPDxxx SYSTEM OR SYNTAX CHECKER FAILURE

(xxx = an even number from 162 through  
254)

Explanation: While scanning the last  
statement, the syntax checker encountered  
a condition that should not occur. It may  
be a hardware, syntax checker, or  
operating system error.

Programmer Response: None.

Problem Determination: Table I, items 3,  
19, 29.

IPD



**PART IV: UNNUMBERED MESSAGES**



## American National Standard COBOL Unnumbered Messages

American National Standard COBOL Unnumbered. Messages are not included in this publication. They are documented in the publication IBM System/360 Operating System: Full American National Standard COBOL Programmer's Guide, GC28-6399. If your installation uses Full American National Standard COBOL frequently, you may prefer to have its unnumbered messages in this publication; this page and the index tab in this section is provided so that you can remove the messages from the Programmer's Guide and insert them here.

For routing and descriptor codes of these messages, see Table 33 in Part V of this publication: "Routing and Descriptor Codes."



## COBOL E Unnumbered Messages

COBOL E Unnumbered Messages are not included in this publication. They are documented in the publication IBM System/360 Operating System: COBOL E Programmer's Guide, GC24-5029. If your installation uses COBOL E frequently, you may prefer to have its unnumbered messages in this publication; this page and the index tab for this section is provided so that you can remove the messages from the Programmer's Guide and insert them here.

For routing and descriptor codes of these messages, see Table 33 in Part V of this publication: "Routing and Descriptor Codes."



## FORTRAN IV G Unnumbered Messages

FORTRAN IV G Unnumbered Messages are not included in this publication. They are documented in the publication IBM System/360 Operating System: FORTRAN IV (G and H) Programmer's Guide, GC28-6817. If your installation uses FORTRAN IV G frequently, you may prefer to have its messages in this publication; this page and the index tab for this section is provided so that you can remove the messages from the Programmer's Guide and insert them here.

For routing and descriptor codes of these messages, see Table 33 in Part V of this publication: "Routing and Descriptor Codes."



## FORTRAN IV H Unnumbered Messages

FORTRAN IV H Unnumbered Messages are not included in this publication. They are documented in the publication IBM System/360 Operating System: FORTRAN IV (G and H) Programmer's Guide, GC28-6817. If your installation uses FORTRAN IV G frequently, you may prefer to have its messages in this publication; the index tab on this page is provided so that you can remove the messages from the programmer's guide and insert them here.

For routing and descriptor codes of these messages, see Table 33 in Part V of this publication: "Routing and Descriptor Codes."



## Linkage Editor Module Disposition Messages

\*\*\*\*\* member name NOW ADDED TO DATA SET.

Explanation: The load module created by this execution of the linkage editor has been added to the partitioned data set specified on the SYSLMOD DD card with the member name specified in this message.

Programmer Response: None.

\*\*\*\*\* member name DOES NOT EXIST BUT HAS BEEN ADDED TO THE DATA SET.

Explanation: The replacement function was specified in the NAME control statement, but the member named in this message did not exist prior to this execution of the linkage editor. The load module created has been added to the partitioned data set specified on the SYSLMOD DD card with the member name specified in this message.

Programmer Response: None.

\*\*\*\*\* member name NOW REPLACED IN DATA SET.

Explanation: The replacement function was specified in the NAME control statement, and the member named in this message did exist prior to this execution of the linkage editor. The load module created by the linkage editor has replaced the existing member in the partitioned data set specified on the SYSLMOD DD card.

Programmer Response: None.

\*\*\*\*\* alias name IS AN ALIAS FOR THIS MEMBER.

Explanation: The alias name specified in the message has been assigned to the load module created in this execution of the linkage editor. The alias name can be an alternate entry point in the module or an additional name for the primary entry point.

Programmer Response: None.

\*\*\*\*\* MODULE HAS BEEN MARKED NOT EXECUTABLE.

Explanation: The linkage editor has encountered an error condition (severity code 2 or greater) that may cause an error during execution of the load module. (The numbered diagnostic messages issued by the linkage editor describe the error.) The linkage editor sets a flag in the directory entry for the load module to indicate that the module cannot be executed.

Note: If the LET option has been specified, the linkage editor will not take this action for a severity 2 error condition.

Programmer Response: Correct the error and link edit the step again. A NAME statement with the replacement function will be needed if the new load module is to replace the load module marked NOT EXECUTABLE in an existing data set.

\*\*\*\*\* MODULE HAS BEEN MARKED  
attribute[,attribute][,AND attribute]

Explanation: The directory entry for the load module created by this execution of the linkage editor has been marked with the attributes named in the message. Each attribute field in the message can be one of the following:

|             |                 |
|-------------|-----------------|
| REFRESHABLE | NOT REFRESHABLE |
| REENTERABLE | NOT REENTERABLE |
| REUSABLE    | NOT REUSABLE    |

The attributes (REFR, RENT, or REUS) are specified in the PARM field of the EXEC statement for the linkage editor job step. The specified attributes can be negated, however, because the linkage editor checks the module attributes in the directory entry for each input load module included from system or private libraries by linkage editor control statements or the automatic library call mechanism. Any incompatible attributes will cause the linkage editor to override the attribute specified on the EXEC statement. If any input load module is marked NOT REUSABLE, the output load module is marked NOT REUSABLE. If any is marked NOT REENTERABLE, the output load module is marked NOT REENTERABLE. If any is marked NOT REFRESHABLE, the output load module is marked NOT REFRESHABLE.

Programmer Response: Determine if each attribute assigned to the output load module is one you want. If not, check the attribute assigned to each input load module for a possible conflict. When an undesirable attribute is found, examine the load module to see if the attribute is accurate. If it is not, recreate the incorrect module from its object deck, specifying the correct attribute on the PARM field of the EXEC statement. Then link edit the original job again.



## Maintenance Analysis Log Unnumbered Messages

CHANGE ITEM BYPASSED - CHANGE LEVELS DO NOT CHECK.

Explanation: The change level in the change SSI is not one greater than the change level in the library SSI.

CHANGE ITEM BYPASSED - EXCEPT CARD.

Explanation: The change item is intended for a member that does not exist in the user's system libraries. The change item has not been treated as a new member, because no FORCE card was submitted for it. If a FORCE card was used, the change item is not an addition or replacement, and therefore cannot be added to a library.

CHANGE ITEM BYPASSED - LOCAL-FIX FLAG ON.

Explanation: The local-fix flag is on in the library SSI; no FORCE card was submitted for the change item.

CHANGE ITEM BYPASSED - NOT IN SYSTEM.

Explanation: The change item is intended for a member that does not exist in the user's system libraries. The change item has not been treated as a new member, because no FORCE card was submitted for it. If a FORCE card was used, the change item is not an addition or replacement, and therefore cannot be added to a library.

CHANGE ITEM BYPASSED - PTF FLAGS DO NOT CHECK.

Explanation: The PTF flag is on in the library SSI, but the product-temporary-fix is not expected by the change item. No FORCE card was submitted for the change item.

CHANGE ITEM EXPECTS PTF. PTF FLAG SET OFF.

Explanation: The change item, which has been included in the job-stream output, expected the product-temporary-fix that had been made in the member to be updated. The PTF flag in the member's library SSI is set off.

FORCE AND EXCEPT BOTH SPECIFIED. FORCE OVERRIDES.

Explanation: Both a FORCE card and an EXCEPT card were submitted for the change item. The analyzer accepts only the FORCE card.

FORCED MODIFICATION TO A LFF. LFF FLAG RETAINED.

Explanation: The change item is a modification that has been forced against a library member containing a local fix. The local-fix flag in the library SSI remains on.

FORCED MODIFICATION TO A PTF. PTF FLAG RETAINED.

Explanation: The change item is a modification that has been forced against a library member containing a product-temporary-fix. The PTF flag in the library SSI remains on.

FORCED REPLACEMENT TO A LFF. LFF FLAG SET OFF.

Explanation: The change item is a replacement that has been forced against a library member containing a local fix. The local-fix flag in the library SSI is set off.

FORCED REPLACEMENT TO A PTF. PTF FLAG SET OFF.

Explanation: The change item is a replacement that has been forced against a library member containing a product-temporary-fix. The PTF flag in the library SSI is set off.

LIBRARY BYPASSED - COULD NOT BE OPENED.

Explanation: The library identified in the header line of this log page could not be opened, probably because a DD card was not submitted for it (or the DD card contained an undetected error). Therefore, no change items for this library could be analyzed.

NEW MEMBER TO BE ADDED TO SYSTEM.

UPDATE ANALYSIS HAS COMPLETED.

Explanation: Normal end-of-job message.



## PL/I Object Program Unnumbered Messages

PL/I Object Program Unnumbered Messages are not included in this publication. They are documented in the publication IBM System/360 Operating System: PL/I (F) Programmer's Guide, GC28-6594. If your installation uses PL/I F frequently, you may prefer to have its messages in this publication; this page and the index tab for this section is provided so that you can remove the messages from the Programmer's Guide and insert them here.

For routing and descriptor codes of these messages, see Table 33 in Part V of this publication: "Routing and Descriptor Codes."



## System Generation Unnumbered Messages

7, \* \* \* GENERATION TERMINATED \* \* \*

Explanation: The system generation process was abnormally terminated.

Severity Code: 7

\*, message text

Explanation: This type of message documents the options selected for the new system through the system generation macro instructions. All options are described, whether the selection was explicit or implicit.

Severity Code: \*



**PART V: ROUTING AND DESCRIPTOR CODES**



## Messages Routing Codes

Routing codes provide the ability to route system operator messages to selected functional areas. More than one routing code can be assigned to each message. Through multiple console support, each system operator receives only those messages related to the commands that he enters and to his assigned functions. The routing codes are specified in the ROUTCDE parameter of the WTO/R macro instruction.

### Code Meaning

- 1 MASTER CONSOLE ACTION  
to be used for any message that indicates a change in the system status and demands action by the master console operator.
- 2 MASTER CONSOLE INFORMATION  
to be used for any message that indicates a change in the system status. Such a message does not demand action, but alerts the master console operator to a condition that may require his action. This routing code is used for any message that indicates job status; it is also used for processor and problem program messages to the system operator.
- 3 TAPE POOL  
to be used for any message that specifies the status of a tape unit or reel, the disposition of a tape reel, or other tape oriented information -- for example, messages that request that tapes be mounted.
- 4 DIRECT ACCESS POOL  
to be used for any message that specifies the status of a direct access unit or pack, the disposition of a disk pack, or other direct access oriented information -- for example, messages that request that disks be mounted.
- 5 TAPE LIBRARY  
to be used for any message that specifies tape library information -- for example, messages that request, via volume serial numbers, that tapes be obtained for system or programmer use.
- 6 DISK LIBRARY  
to be used for any message that specifies disk library information -- for example, messages that request, via volume serial numbers, that disk packs be obtained for system or programmer use.
- 7 UNIT RECORD POOL  
to be used for any message that specifies unit record equipment information -- for example, messages that request that printer chains be mounted.
- 8 TELEPROCESSING CONTROL  
to be used for any message that specifies the status or the disposition of teleprocessing equipment -- for example, messages that indicate line errors.
- 9 SYSTEM SECURITY  
to be used for any message associated with security checking -- for example, messages that require replies specifying a password.
- 10 SYSTEM ERROR/MAINTENANCE  
to be used for any message that indicates a system error or an uncorrectable input/output error, or any message associated with system maintenance.
- 11 PROGRAMMER INFORMATION  
to be used for any message that is of interest only to the problem programmer. This routing code is used only when the program issuing the message has no way of routing the message to the programmer via the system output data set facility. The message will appear in the job's system output message class.
- 12 EMULATORS  
to be used for any message issued by an emulator program. (These messages are not included in this publication, but are contained in the Systems Reference Library publications that describe the emulator programs.)
- 13 Reserved for customer use
- 14 Reserved for customer use
- 15 Reserved for customer use
- 16 Reserved for future expansion
- 16 Reserved for future expansion



## Messages Descriptor Codes

Descriptor codes provide the means for determining how a message is to be printed or displayed and how a message is to be deleted from a graphic device. Descriptor codes 1 through 7 are mutually exclusive; a message can be assigned only one such code. Descriptor code 8 and 9, however, may be used with any other descriptor code. The descriptor codes are specified in the DESC parameter of the WTO/R macro instruction.

| Code | Meaning                                                                                                                                                                                                                                                                          |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | <b>SYSTEM FAILURE</b><br>to be used for any message that indicates an uncorrectable error occurred. To continue, the operator must restart the system.                                                                                                                           |
| 2    | <b>IMMEDIATE ACTION REQUIRED</b><br>to be used for any message that requires an immediate action by the operator. The task waits until the requested action is completed.                                                                                                        |
| 3    | <b>EVENTUAL ACTION REQUIRED</b><br>to be used for any message that requires an eventual action by the operator. The task does not await completion of the action.                                                                                                                |
| 4    | <b>SYSTEM STATUS</b><br>to be used for any message that indicates the status of a system task or the status of a hardware unit.                                                                                                                                                  |
| 5    | <b>IMMEDIATE COMMAND RESPONSE</b><br>to be used for any message that is issued as an immediate response to a system command. The completion of the response is not dependent upon another system action or task.                                                                 |
| 6    | <b>JOB STATUS</b><br>to be used for any message that contains status information regarding the job or job step.                                                                                                                                                                  |
| 7    | <b>APPLICATION PROGRAM/PROCESSOR</b><br>to be used for any message that is issued while a program is in problem program mode.                                                                                                                                                    |
| 8    | <b>OUT OF LINE MESSAGE</b><br>to be used for one message of a group of one or more messages that is to be displayed out of line. If the device support cannot print a message out of line, the code will be ignored and the message will be printed in line with other messages. |
| 9    | <b>OPERATOR'S REQUEST</b><br>to be used for a message that is written in response to an operator's request for information (made by means of the DISPLAY or MONITOR command).                                                                                                    |

10-16 Reserved for future use

## Messages Sent to the Hard Copy Log

All messages that are sent to the hard copy log are prefixed with a time stamp and the routine codes used to route the messages. (The time stamp is included only if the timer feature is a part of the central processing unit and the timer option is specified in the CENPROCS or SUPRVSOR system generation macro instruction.) Each logged message will have the following format:

hhmmss rrrr message

hh specifies the hour (00-23).  
mm specifies the minute (00-59).  
ss specifies the second (00-59).  
rrrr specifies the hexadecimal representation of the routing code field. The hexadecimal number must be converted to a binary number and then compared to the routing codes. For example, hexadecimal number 420C can be shown to represent routing codes 2, 7, 13, and 14:

|               |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |
|---------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| Hexadecimal   | 4 | 2 | 0 | C |   |   |   |   |   |    |    |    |    |    |    |    |
| Binary        | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0  | 0  | 0  | 1  | 1  | 0  | 0  |
| Routing codes | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |

message specifies the message identification and message text.

### Multiple-line WTO hardcopy message format:

The following is the hardcopy log message format for multiple-line WTO messages (including system status displays):

#### First Line (Control line of the status display)

|      |   |   |   |   |   |   |   |            |    |    |    |    |               |      |      |      |    |
|------|---|---|---|---|---|---|---|------------|----|----|----|----|---------------|------|------|------|----|
| Byte | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8          | 9  | 10 | 11 | 12 | 13            | ---- | to   | ---- | 84 |
| Data | h | h | m | m | s | s | b | rc         | rc | rc | rc | b  | first         | line | text |      |    |
|      |   |   |   |   |   |   |   | time stamp |    |    |    |    | routing codes |      |      |      |    |

#### Subsequent Lines

|                               |   |   |   |   |   |       |      |       |    |
|-------------------------------|---|---|---|---|---|-------|------|-------|----|
| Byte                          | 1 | 2 | 3 | 4 | 5 | ----- | to   | ----- | 76 |
| Data                          | n | n | n | b |   |       | text |       |    |
| Message Identification Number |   |   |   |   |   |       |      |       |    |



## Key to the Following Figures

Descriptor codes 1-8  
as described above.  
Routing codes 1-12  
as described above.

- \* indicates that the messages will be routed back to the consoles that initiated the associated requests.
- # indicates that the message will be routed: (1) according to the routing indicators specified by the operator; (2) according to the default routing instructions previously specified by the operator; or (3) back to the console that initiated the associated request.
- x indicates that the code denoted by x is always present.
- o indicates that one of the routing codes denoted by o is present.
- a and b indicates that either both the routing codes denoted by a or both the routing codes denoted by b are present.  
indicates that the routing code may or may not be present

NOTE 1  
indicates messages that issued via START I/O operations. (These messages are not issued via the WTO/R macro instruction.)

NOTE 3  
indicates messages that have a routing code of 1 and are also routed to each active console. (All these messages are routed to the master console, but each individual message is routed only to the console that the message describes.)

NOTE 4  
indicates messages that are broadcast to each active console.

NOTE 5  
indicates messages that have a routing code of 2 and are also routed to each individual console assuming the capabilities of the failing console. (These messages are issued to indicate that a console switch has occurred.)

NOTE 6  
indicates messages that are routed only to the CRT Display Consoles. (These messages are not issued via the WTO/R macro instruction.) System Commands issued from the Model 85 Operator Console with CRT Display are moved from the entry area to the message area via the WTO macro instruction. The messages are routed back to the Model 85 console.

NOTE 7  
indicates messages that are routed only to consoles where a DISPLAY (or MONITOR) JOBNAMES command is active.

NOTE 8  
indicates messages that are issued via the WTO/R macro instruction, but have no routing or descriptor codes specified (old format WTO/R macro instruction).

| Descriptor Codes |                     |   |   |   |   |   |   | Message Texts | Routing Codes                                                                              |        |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---------------------|---|---|---|---|---|---|---------------|--------------------------------------------------------------------------------------------|--------|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2                   | 3 | 4 | 5 | 6 | 7 | 8 |               | *                                                                                          | 1      | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| x                | x                   |   |   |   |   |   |   | IEA000A       | adr,INT REQ,cm,stat,sensbbbbbb,,ser,jjj                                                    |        |   |   | o | o |   | o | o |   |    |    |    |
|                  |                     |   |   |   |   |   |   | IEA000A       | adr,INT REQ,CC=3/NO PATHS AVAILABLE,,,jjj                                                  |        |   |   | o | o |   | o | o |   |    |    |    |
|                  |                     | x |   |   |   |   |   | IEA000I       | adr,errmsg,cm,stat,sensbbbbbb,dcbctfd,ser                                                  |        |   | x |   |   |   |   |   |   | x  | x  |    |
|                  |                     | x |   |   |   |   |   | IEA000I       | lna,errdscrptn,cm,stat,ibss,opxxterm,,jjj                                                  |        |   |   |   |   |   |   | x |   | x  | x  |    |
|                  |                     | x |   |   |   |   |   | IEA000I       | adr,errdscrptn,cm,stat,sensbbbbbb,<br>{binxcylintrck},ser,jjj<br>{binxsbstcytr}<br>dcbctfd |        |   |   | o | o |   | o |   |   | x  | x  |    |
|                  |                     |   | x |   |   |   |   | IEA001I       | UNIT adr, PATH pth INOPERATIVE [FOR CPU x]                                                 |        |   |   | o | o |   | o |   |   | x  |    |    |
|                  |                     |   |   | x |   |   |   | IEA002I       | ABEND/ABDUMP ERROR.                                                                        |        | x |   |   |   |   |   |   |   |    |    |    |
|                  |                     |   | x |   |   |   |   | IEA007I       | NO CORE AVAIL FOR NEW REGN                                                                 |        |   | x |   |   |   |   |   |   |    |    |    |
|                  |                     |   | x |   |   |   |   | IEA021I       | jjj sss CORE IMAGE BYPASSED -x                                                             |        | x |   |   |   |   |   |   |   |    |    |    |
|                  |                     |   | x |   |   |   |   | IEA022I       | jjj sss CORE IMAGE FAILED -x                                                               |        |   | x |   |   |   |   |   |   |    |    |    |
|                  |                     |   | x |   |   |   |   | IEA023I       | jjj sss CORE IMAGE COMPLETE -x                                                             |        |   | x |   |   |   |   |   |   |    |    |    |
|                  |                     |   | x |   |   |   |   | IEA027I       | jjj sss ENQUEUED RESOURCES                                                                 |        | x |   |   |   |   |   |   |   |    |    |    |
|                  |                     |   | x |   |   |   |   | IEA027I       | xxxx, yyyy                                                                                 |        | x |   |   |   |   |   |   |   |    |    |    |
|                  | x                   |   |   |   |   |   |   | IEA028A       | REPLY 'C' OR 'N'                                                                           |        | x |   |   |   |   |   |   |   |    |    |    |
|                  |                     |   | x |   |   |   |   | IEA029I       | jjj sss TASK xxx {REINSTATED<br>REINSTATEMENT FAILED}                                      |        | x |   |   |   |   |   |   |   |    |    |    |
| NONE             |                     |   |   |   |   |   |   | IEA100I       | TIMER IS NOT WORKING.                                                                      | NOTE 1 |   |   |   |   |   |   |   |   |    |    |    |
|                  |                     |   |   |   |   |   |   | IEA101A       | SPECIFY SYSTEM PARAMETERS                                                                  |        |   |   |   |   |   |   |   |   |    |    |    |
|                  |                     |   |   |   |   |   |   | IEA102A       | INVALID PARAMETER/FORMAT - RESPECIFY                                                       |        |   |   |   |   |   |   |   |   |    |    |    |
|                  |                     |   |   |   |   |   |   | IEA103I       | DATASET dsn NOT FOUND BY LOCATE                                                            |        |   |   |   |   |   |   |   |   |    |    |    |
|                  |                     |   |   |   |   |   |   | IEA104A       | M ser                                                                                      |        |   |   |   |   |   |   |   |   |    |    |    |
|                  |                     |   |   |   |   |   |   | IEA105A       | dsn RESIDES ON A UNIT (utn) FOR WHICH THERE IS NO UCB                                      |        |   |   |   |   |   |   |   |   |    |    |    |
|                  |                     |   |   |   |   |   |   | IEA106I       | mem NOT FOUND IN lib                                                                       |        |   |   |   |   |   |   |   |   |    |    |    |
|                  |                     |   |   |   |   |   |   | IEA107I       | prm IGNORED                                                                                |        |   |   |   |   |   |   |   |   |    |    |    |
|                  |                     |   |   |   |   |   |   | IEA108I       | PERMANENT I/O ERROR DURING BLDL                                                            |        |   |   |   |   |   |   |   |   |    |    |    |
|                  |                     |   |   |   |   |   |   | IEA109I       | BLDL FAILED FOR FOLLOWING MODULES [-SYS1.SVCLIB]                                           |        |   |   |   |   |   |   |   |   |    |    |    |
|                  |                     |   |   |   |   |   |   | IEA110I       | LOAD FAILED FOR lmd                                                                        |        |   |   |   |   |   |   |   |   |    |    |    |
|                  |                     |   |   |   |   |   |   | IEA111A       | SPACE EXCEEDED - RESPECIFY prm                                                             |        |   |   |   |   |   |   |   |   |    |    |    |
|                  |                     |   |   |   |   |   |   | IEA112I       | LIST lis FOR prm - INVALID FORMAT                                                          |        |   |   |   |   |   |   |   |   |    |    |    |
|                  |                     |   |   |   |   |   |   | IEA113I       | prm MODULE LIST                                                                            |        |   |   |   |   |   |   |   |   |    |    |    |
|                  |                     |   |   |   |   |   |   | IEA114I       | SVC xxx NOT SUPPORTED                                                                      |        |   |   |   |   |   |   |   |   |    |    |    |
| IEA115I          | SVC xxx NOT DEFINED |   |   |   |   |   |   |               |                                                                                            |        |   |   |   |   |   |   |   |   |    |    |    |

| Descriptor Codes |   |   |   |   |   |   |                                                                    | Message Texts                                              | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |
|------------------|---|---|---|---|---|---|--------------------------------------------------------------------|------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8                                                                  |                                                            | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| NONE             |   |   |   |   |   |   |                                                                    | IEA116A CONTINUE SYSTEM PARAMETERS                         |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |                                                                    | IEA117I NUMBER OF TIME-SLICING GROUPS EXCEEDS SYSGEN LIMIT |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |                                                                    | IEA118I TIME SLICE VALUE INCREASED TO 20 MILLISECONDS      |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |                                                                    | IEA119I SQS SIZE INCREASED TO nnnn BYTES                   |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |                                                                    | IEA120A DEVICE ddd SHARED. REPLY 'CONTINUE' OR 'WAIT'      |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |                                                                    | IEA130I LINK LIBRARY DATA SETS NOT FOUND                   |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |                                                                    | IEA131A MOUNT LINKLIB VOL(S): ser                          |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |                                                                    | IEA135A SPECIFY SYS1.DUMP TAPE UNIT OR NO                  |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |                                                                    | IEA136I DEVICE AT ddd UNACCEPTABLE FOR SYS1.DUMP-xxxx      |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |                                                                    | IEA137A M ddd,NL                                           |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |                                                                    | IEA138A D ddd                                              |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |                                                                    | IEA150A SPECIFY HARDCPY                                    |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |                                                                    | IEA152I HARDCPY SPECIFICATION INVALID                      |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |                                                                    | IEA153I HARDCPY CONSOLE UNAVAILABLE                        |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |                                                                    | IEA154I HARD COPY OF INITIALIZATION MESSAGES DISCONTINUED  | NOTE 1        |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |                                                                    | IEA205I UNABLE TO SCRATCH dsn ON ser                       |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |                                                                    | IEA206I UNABLE TO ALLOCATE dsn ON ser                      |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |                                                                    | IEA207I FORMATTING OF dsn DATA SET UNSUCCESSFUL            |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |                                                                    | IEA208I fff FUNCTION INOPERATIVE                           |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |                                                                    | IEA209I dsn SCRATCHED FROM ser                             |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |                                                                    | IEA210I dsn ALLOCATED ON ser                               |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |                                                                    | IEA211I OBTAIN FAILED FOR dsn DATA SET                     |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |                                                                    | IEA212A D, xxx OR yyy                                      |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |                                                                    | IEA213I INITIALIZATION OF SYS1.ASRLIB INCOMPLETE           |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |                                                                    | IEA214I I/O ERROR DURING SYS1.ASRLIB INITIALIZATION        |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |                                                                    | IEA216I GETMAIN FAILED DURING INITIALIZATION               |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |                                                                    | IEA217I SEREP INTERFACE ESTABLISHED                        |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |                                                                    | IEA218I MODEL=nnn, ALTSYS=ddd ASSUMED                      |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |                                                                    | IEA219I MODEL NOT SUPPORTED                                |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |                                                                    | IEA220I H0=nn BYTES H1=nn BYTES                            |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   | IEA250E TIMER ON CPU y INOPERATIVE, VARY COMMANDS MAY BE AFFECTED. |                                                            |               |   |   |   |   |   |   |   |   |   |    |    |

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                                                                                   | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|---------------------------------------------------------------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                                                                                 | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| NONE             |   |   |   |   |   |   |   | IEA251E CONTROL UNIT ccX HAS PARTITION SWITCHES SET ASYMMETRICALLY                                                              | NOTE 1        |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   | IEA252I STORAGE LOCATIONS xxxxxx TO yyyyyy OFFLINE                                                                              |               |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   | IEA253I CHANNELS OFFLINE y:x                                                                                                    |               |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   | IEA254W STORAGE BOX ENABLE/DISABLE SWITCHES SET ASYMMETRICALLY                                                                  |               |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   | IEA255W BOTH PREFIX SWITCHES ARE SET THE SAME                                                                                   |               |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   | IEA256I PARTITIONED SYSTEM INITIATED                                                                                            |               |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   | IEA257I ONE CPU MULTIPROCESSOR INITIATED                                                                                        |               |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   | IEA258I MULTIPROCESSOR INITIATED                                                                                                |               |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   | IEA260I STATUS OF DEVICE<br>dev dev dev dev dev<br>cc x x x x x<br>cc x x x x x |               |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEA400I jjj, sss R/I I/O ERR                                                                                                    |               |   | x |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   | x |   |   | IEA401I jjj, sss R/O I/O ERR                                                                                                    |               |   | x |   |   |   |   |   |   |   |    |    | x  |
| x                |   |   |   |   |   |   |   | IEA402A ROLLOUT/IN MSGS REQUIRED. REPLY Y OR N.                                                                                 | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEA403I jjj, sss, LOG R/O siz, adr                                                                                              |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEA404I REGN adr LOG ROLLIN                                                                                                     |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEA405I jjj, sss, R/O OF jjj, sss                                                                                               |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEA406I jjj, sss, ROLLIN                                                                                                        |               |   | x |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEA604A D adr,ser                                                                                                               |               |   |   |   | x |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEA605A M adr,ser,,jjj                                                                                                          |               |   |   |   | x |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IEA606I adr,BAD VOLUME LABEL,cm,stat,sensbbbbbb,,ser, jjj                                                                       |               |   |   |   | x |   |   |   |   |   |    |    |    |

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                                                                                   | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|---------------------------------------------------------------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                                                                                 | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| x                |   |   |   |   |   |   |   | IEB901A M ddd,xxxxxx,jjj,sss                                                                                                    |               |   |   | x |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   | x |   | IEB902I INVALID NAME FIELD                                                                                                      |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IEB903I INVALID OPERATION                                                                                                       |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IEB904I INVALID KEYWORD                                                                                                         |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IEB905I INVALID PARAMETER VALUE                                                                                                 |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IEB906I DUPLICATE OPERATION FIELD                                                                                               |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IEB907I INCONSISTENT REPLACE PARAMETER                                                                                          |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IEB908I CONFLICTING OPTIONS SPECIFIED                                                                                           |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IEB909I EXPECTED CONTINUATION NOT RECEIVED                                                                                      |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IEB910I NO SYSUT1 DD CARD - JOB TERMINATED                                                                                      |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IEB911I NO SYSIN DD CARD - ALL DEFAULT OPTIONS ASSUMED                                                                          |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IEB912I NO SYSPRINT DD CARD - DUMMY ASSUMED                                                                                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IEB913I NO xxxxxxxx DD CARD - DUMMY ASSUMED                                                                                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IEB914I DCB SUBPARAMETER(S) MISSING IN xxxxxxxx DD CARD - DEFAULTS ASSUMED                                                      |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IEB915I DDNAME xxxxxxxx CANNOT BE OPENED                                                                                        |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IEB916I INCONSISTENT xxxxxxxx DCB PARAMETERS                                                                                    |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IEB917I LOAD MODULE SPECIFIED FOR xxxxxxxx NOT FOUND                                                                            |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IEB918I JOB TERMINATED AFTER xxxxxxxx EXIT                                                                                      |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IEB919I INSUFFICIENT STORAGE AVAILABLE                                                                                          |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IEB920I ddd,device type,ddname,operation attempted,<br>error description,asterisks,access method                                |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IEB921I ddd,device type,ddname,operation attempted,<br>error description,relative block number,<br>access method                |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IEB922I ddd,device type,ddname,operation attempted,<br>error description,actual track address and<br>block number,access method |               |   |   |   |   |   |   |   |   |   |    |    | x  |

Figure 3. Routing and Descriptor Codes of Data Management Messages (Part 1 of 4)

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| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                              | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                            | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| x                |   |   |   |   |   |   |   | IEC001A M ddd,ser[,labtyp][,den],jjj,sss[,dsn]             |               |   |   | o | o |   |   |   |   |   |    |    |    |
|                  | x |   |   |   |   |   |   | IEC002E K ddd,ser[,labtyp][,den],jjj,sss[,SPACE=prm][,dsn] |               |   |   | o | o |   |   |   |   |   |    |    |    |
|                  | x |   |   |   |   |   |   | IEC003E R ddd,ser[,labtyp][,den],jjj,sss[,SPACE=prm][,dsn] |               |   |   | o | o |   |   |   |   |   |    |    |    |
|                  | x |   |   |   |   |   |   | IEC004E D ddd,ser[,labtyp][,den],jjj,sss[,SPACE=prm][,dsn] |               |   |   | o | o |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEC007D E ddd,ser,jjj,sss,dsn                              | x             |   |   | o | o |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEC009A F ddd,ser,jjj,sss,dsn                              |               |   |   | x |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEC010D F ddd,ser,jjj,sss,dsn                              |               |   |   | x |   |   |   |   |   |   |    |    |    |
|                  |   | x |   |   |   |   |   | IEC012I {I/O ERR} ddd,ser<br>{SEC VOL}                     |               |   |   | x |   |   |   |   |   |   | x  |    |    |
| x                |   |   |   |   |   |   |   | IEC014E D ddd                                              |               |   |   | x |   |   |   |   |   |   |    |    |    |
|                  |   | x |   |   |   |   |   | IEC017I A ddd,ddn-n                                        |               |   |   |   |   |   |   |   |   |   |    | x  |    |
| x                |   |   |   |   |   |   |   | IEC018D A ddd,ser                                          | x             |   |   | x |   |   |   |   |   |   |    |    | x  |
|                  | x |   |   |   |   |   |   | IEC020I 001-x,jjj,sss,ddn,ddd,ser,dsn                      |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   | x |   |   |   |   |   | IEC021I NO SPACE IN PASSWORD DATA SET                      |               |   |   |   |   |   |   |   |   |   | x  |    | x  |
|                  |   |   | x |   |   |   |   | IEC022I 137-rc,jjj,ddn[-#],ddd,ser,dsn                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   | x |   |   |   |   | IEC023I 237-rc,jjj,ddn[-#],ddd,ser,dsn                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   | x |   |   |   |   | IEC024I 337-rc,jjj,ddn[-#],ddd,ser,dsn                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   | x |   |   |   |   | IEC025I 437-rc,jjj,ddn[-#],ddd,ser,dsn                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   | x |   |   |   |   | IEC026I 637-rc,jjj,ddn[-#],ddd,ser,dsn                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   | x |   |   |   |   | IEC027I 737-rc,jjj,ddn[-#],ddd,ser,dsn                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   | x |   |   |   |   | IEC028I 837-rc,jjj,ddn[-#],ddd,ser,dsn                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   | x |   |   |   |   | IEC030I B37-rc,jjj,ddn[-#],ddd,ser,dsn                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   | x |   |   |   |   | IEC031I D37-rc,jjj,ddn[-#],ddd,ser,dsn                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   | x |   |   |   |   | IEC032I E37-rc,jjj,ddn[-#],ddd,ser,dsn                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
| x                |   |   |   |   |   |   |   | IEC101A M ddd,ser[,labtyp][,den],jjj,sss[,dsn]             |               |   |   | o | o |   |   |   |   |   |    |    | x  |
|                  | x |   |   |   |   |   |   | IEC104E D ddd,ser                                          |               |   |   | x |   |   |   |   |   |   |    |    |    |
|                  |   | x |   |   |   |   |   | IEC105I ddd,jjj REDUCED ERROR RECOVERY REQUESTED           |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  | x |   |   |   |   |   |   | IEC106E R ddd,ser                                          |               |   |   | x |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEC107D E ddd,ser,jjj,sss,dsn                              | x             |   |   | o | o |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEC109A F ddd,ser,jjj,sss,dsn                              |               |   |   | x |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEC110D F ddd,ser,jjj,sss,dsn                              |               |   |   | x |   |   |   |   |   |   |    |    |    |
|                  |   | x |   |   |   |   |   | IEC112I {I/O ERR} ddd,ser<br>{SEC VOL}                     |               |   |   | x |   |   |   |   |   |   |    | x  |    |

Figure 3. Routing and Descriptor Codes of Data Management Messages (Part 2 of 4)

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| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                              | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                            | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| x                |   |   |   |   |   |   |   | IEC114E D ddd[,ddn-n]                                      |               |   |   |   |   |   |   | x |   |   |    |    |    |
|                  | x |   |   |   |   |   |   | IEC119I D ddd,ser                                          |               |   |   | x |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEC120A M xxx; character set code [,FOLD][,VERIFY]         |               |   |   |   |   |   |   | x |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEC121D V xxx, character set code [,FOLD]                  |               |   |   |   |   |   |   | x |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEC122D xxx, character set code IMAGE NOT FOUND            |               |   |   |   |   |   |   | x |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEC123D xxx, SPECIFY UCS PARAMETER                         |               |   |   |   |   |   |   | x |   |   |    |    |    |
|                  |   | x |   |   |   |   |   | IEC124I xxx, ERROR OCCURRED WHILE LOADING FCB              |               |   |   |   |   |   |   | x |   |   |    |    |    |
|                  |   | x |   |   |   |   |   | IEC125I ERROR - REPEAT REPLY                               |               |   |   |   |   |   |   | x |   |   |    |    |    |
|                  |   | x |   |   |   |   |   | IEC126I xxx, UNCORRECTABLE ERROR LOADING UCS               |               |   |   |   |   |   |   | x |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEC127D xxx, image-id FCB IMAGE NOT FOUND                  |               |   |   |   |   |   |   | x |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEC128D V xxx, VERIFY FORMS ALIGNMENT                      |               |   |   |   |   |   |   | x |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEC129D xxx, SPECIFY FCB PARAMETER                         |               |   |   |   |   |   |   | x |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IEC131I xx,jjj,sss,RDJFCB ISSUED FOR DCB WITH BLANK DDNAME |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   | x |   |   |   |   | IEC133I A ddd,ddn-n                                        |               |   |   |   |   |   |   |   |   |   |    |    | x  |
| x                |   |   |   |   |   |   |   | IEC134I A ddd,ser                                          |               | x | x |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   | x |   |   |   | IEC141I 013-rc,jjj,ddn[-#],ddd,ser,dsn                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   | x |   |   |   | IEC142I 113-rc,jjj,ddn[-#],ddd,ser,dsn                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   | x |   |   |   | IEC143I 213-rc,jjj,ddn[-#],ddd,ser,dsn                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   | x |   |   |   | IEC144I 313-rc,jjj,ddn[-#],ddd,ser,dsn                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   | x |   |   |   | IEC145I 413-rc,jjj,ddn[-#],ddd,ser,dsn                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   | x |   |   |   | IEC146I 513-rc,jjj,ddn[-#],ddd,ser,dsn                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   | x |   |   |   | IEC147I 613-rc,jjj,ddn[-#],ddd,ser,dsn                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   | x |   |   |   | IEC148I 713-rc,jjj,ddn[-#],ddd,ser,dsn                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   | x |   |   |   | IEC149I 813-rc,jjj,ddn[-#],ddd,ser,dsn                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   | x |   |   |   | IEC150I 913-rc,jjj,ddn[-#],ddd,ser,dsn                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   | x |   |   |   | IEC151I A13-rc,jjj,ddn[-#],ddd,ser,dsn                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   | x |   |   |   | IEC152I B13-rc,jjj,ddn[-#],ddd,ser,dsn                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   | x |   |   |   | IEC153I C13-rc,jjj,ddn[-#],ddd,ser,dsn                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   | x |   |   |   | IEC154I 140-rc,jjj,ddn[-#],ddd,ser,dsn                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   | x |   |   |   | IEC155I 240-rc,jjj,ddn[-#],ddd,ser,dsn                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   | x |   |   |   | IEC156I 03D-rc,jjj,ddn[-#],ddd,ser,dsn                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  | x |   |   |   |   |   |   | IEC202E K ddd,ser[,labtyp][,den],jjj,sss[,SPACE=prm][,dsn] |               |   |   |   |   | o | o |   |   |   |    |    |    |

Figure 3. Routing and Descriptor Codes of Data Management Messages (Part 3 of 4)

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| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                          | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                        | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   | x |   |   |   |   |   | IEC204E D ddd,ser[,labtyp][,den],jjj,sss[,SPACE=prm][,dsn]             |               |   |   | o | o |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEC210I 214-rc,jjj,ddn[-#],ddd,ser,dsn                                 |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   | x |   |   | IEC211I 314-rc,jjj,ddn[-#],ddd,ser,dsn                                 |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   | x |   |   | IEC212I 414-rc,jjj,ddn[-#],ddd,ser,dsn                                 |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   | x |   |   | IEC213I 514-rc,jjj,ddn[-#],ddd,ser,dsn                                 |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   | x |   |   | IEC214I 614-rc,jjj,ddn[-#],ddd,ser,dsn                                 |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   | x |   |   | IEC215I 714-rc,jjj,ddn[-#],ddd,ser,dsn                                 |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   | x |   |   | IEC215I A14-rc,jjj,ddn[-#],ddd,ser,dsn                                 |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   | x |   |   | IEC217I B14-rc,jjj,ddn[-#],ddd,ser,dsn                                 |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   | x |   |   | IEC218I 117-rc,jjj,ddn[-#],ddd,ser,dsn                                 |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   | x |   |   | IEC219I 217-rc,jjj,ddn[-#],ddd,ser,dsn                                 |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   | x |   |   | IEC220I 317-rc,jjj,ddn[-#],ddd,ser,dsn                                 |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   | x |   |   | IEC221I 417-rc,jjj,ddn[-#],ddd,ser,dsn                                 |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   | x |   |   | IEC222I 717-rc,jjj,ddn[-#],ddd,ser,dsn                                 |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   | x |   |   | IEC223I jjj,sss,ddn[-#],ddd,ser,dsn                                    |               |   |   |   |   |   |   |   |   |   |    |    | x  |
| x                |   |   |   |   |   |   |   | IEC301A {S JOB jjj, STEP sss, DDNAME ddn [,CONC n]}<br>{S DSNNAME dsn} |               |   |   |   |   |   |   |   |   |   |    |    | x  |
| x                |   |   |   |   |   |   |   | IEC400A M ddd,ser/dsn                                                  |               |   |   | x | x |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEC401A F ddd,ser/dsn                                                  |               |   |   | x |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEC402D F ddd,ser/dsn                                                  |               | x |   | x |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEC403A M ddd,ser                                                      |               |   |   | x |   | x |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEC601D M ddd,ser REPLY=SKIP VOL OR MOUNTING                           |               |   |   | x |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEC701D M ddd, VOLUME TO BE LABELED ser                                |               |   |   | x |   |   |   |   |   |   |    |    |    |
|                  |   | x |   |   |   |   |   | IEC702I ddd, VOLUME LABELS CANNOT BE VERIFIED                          |               |   |   | x |   |   |   |   |   |   |    |    |    |
|                  |   | x |   |   |   |   |   | IEC703I ddd, VOLUME IS FILE PROTECTED                                  |               |   |   | x |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEC704A L ddd                                                          |               | x |   | x |   |   |   |   |   |   |    |    |    |
|                  |   | x |   |   |   |   |   | IEC705I TAPE ON ddd, ser IS labtyp,den BPI                             |               |   |   | x |   |   |   |   |   |   |    |    |    |
|                  |   | x |   |   |   |   |   | IEC801I lna THRESHOLD TRANS=nnn DC=nnn IR=nnn TO=nnn                   |               |   |   |   |   |   |   |   |   | x |    | x  |    |
|                  |   | x |   |   |   |   |   | IEC802I lna LINE TOTALS TRANS=nnnnnnnn DC=nnnnn IR=nnnnn TO=nnnnn      |               |   |   |   |   |   |   |   |   |   | x  |    |    |
|                  |   | x |   |   |   |   |   | IEC804A lna CONTROL UNIT NOT OPERATIONAL. REPLY CONT OR POST           |               | x |   |   |   |   |   |   |   |   | x  |    | x  |
|                  |   | x |   |   |   |   |   | IEC805I I/O ERROR - CHECKPOINTS TERMINATED                             |               |   |   | x |   |   |   |   |   |   |    |    | x  |
|                  |   | x |   |   |   |   |   | IEC806I lna, LINE UNAVAILABLE, ENDING STATUS NOT RECEIVED              |               |   |   |   |   |   |   |   |   |   |    | x  | x  |



| Descriptor Codes |   |   |   |   |   |   |   | Operator Messages                                                                                                          | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|----------------------------------------------------------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                                                                            | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   |   |   | x |   |   | IED001I TCAM JOB jjj, sss, proc ADDRESS OF AVT addr                                                                        |               |   | x |   |   |   |   |   |   |   |    |    | x  |
| x                |   |   |   |   |   |   |   | IED002A SPECIFY TCAM PARAMETERS                                                                                            |               | x |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IED003A INVALID KEYWORD xxxx                                                                                               |               | x |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IED004A REQUIRED PARAMETER MISSING. SPECIFY xxx                                                                            |               | x |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IED005A MSUNITS (m) SPECIFICATION NOT PERMITTED. CONTINUE RESPONSE                                                         |               | x |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IED006A INVALID OPERAND ON KEYWORD. RESPECIFY xxx                                                                          |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IED007I xxx IS AN ILLEGAL DESTINATION                                                                                      |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   | x |   |   |   |   | IED008I TCAM OPEN ERROR xxx=y IN DCB zzz descriptor                                                                        |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   | x |   |   |   |   | IED009I CHECKPOINT DISK ALLOCATION ERROR - DATA SET NOT OPENED                                                             |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   | x |   |   |   |   | IED010I CHECKPOINT INSUFFICIENT CORE<br>( DATA SET NOT OPEN )<br>( ENVIRON xxx )<br>( INCIDENT xxx )<br>( CKREQ name xxx ) |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   | x |   |   |   | IED011I SYSTEM INTERVAL CANNOT BE ALTERED                                                                                  |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED012I TSO SESSION ON LINE xxx COMMAND REJECTED                                                                           |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED013I STOP REQUEST FOR SELF - VARY COMMAND REJECTED                                                                      |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IED014I TCAM ALREADY IN SYSTEM                                                                                             |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   | x |   |   |   |   | IED015I TCAM AP OPEN ERROR 043-x yyy zzz                                                                                   |               |   | x |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   | x |   |   |   | IED016I STATION xxx NOT FOUND                                                                                              |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED017I LINE xxx NOT OPEN                                                                                                  |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED018I xxx COMMAND INVALID                                                                                                |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED019I xxx ALREADY STARTED                                                                                                |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED020I xxx STARTED                                                                                                        |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED021I AUTO POLL STARTED FOR xxx                                                                                          |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED022I AUTO POLL ALREADY STARTED FOR xxx                                                                                  |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED023I TRACE STARTED FOR xxx                                                                                              |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED024I TRACE ALREADY STARTED FOR xxx                                                                                      |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED025I xxx ALREADY STOPPED                                                                                                |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED026I xxx STOPPED                                                                                                        |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED027I AUTO POLL STOPPED FOR xxx                                                                                          |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED028I AUTO POLL ALREADY STOPPED FOR xxx                                                                                  |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED029I TRACE STOPPED FOR xxx                                                                                              |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED030I TRACE ALREADY STOPPED FOR xxx                                                                                      |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED031I xxx QUEUE SIZE=yyy, BUFSIZE=bb, STATUS=zzz,...<br>PRIORITY=aaa,....                                                |               | x |   |   |   |   |   |   |   |   |    |    |    |

| Descriptor Codes |   |   |   |   |   |   |   | Operator Messages                                               | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|-----------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                 | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   |   | x |   |   |   | IED032I xxx LNSTAT=zzz,... ERR=aaa,...                          | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED033I xxx STATUS=yyy,... INTENSE=zz IN-SEQ=aaa<br>OUT-SEQ=bbb | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED034I xxx HAS NO yyy OPTION                                   | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED035I xxx OPTION yyy=zzz                                      | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED036I xxx ACTIVE=yyy,...                                      | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED037I xxx INACTIVE=yyy,...                                    | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED038I xxx IS ON LINE yyy zzz aaa                              | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED039I NO STATIONS INTERCEPTED                                 | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED040I INTERCEPTED STATIONS=xxx,...                            | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED041I PRIMARY=xxx                                             | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED042I xxx ALREADY PRIMARY                                     | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED043I SECONDARY=xxx                                           | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED044I xxx NOT ELIGILLE FOR PRIMARY                            | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED045I SYSTEM INTERVAL ALREADY ACTIVE                          | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED046I LINE FOR xxx IS OUTPUT ONLY STATION                     | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED047I SYSTEM INTERVAL IS xxx                                  | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED048I POLLING DELAY FOR xxx IS yyy                            | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED049I OLT CONTROLS LINE xxx COMMAND REJECTED                  | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED050I xxx OPTION yyy MODIFIED                                 | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED051I xxx SET FOR HOLD SEQ-OUT=yyy                            | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED052I xxx ALREADY SET FOR HOLD                                | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED053I xxx ALREADY RELEASED                                    | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED054I xxx RELEASED, SEQ-OUT=yyy                               | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED055I I/O TRACE CANNOT BE ALTERED                             | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED056I xxx OPTION yyy DATA FORMAT INVALID                      | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED057I xxx NOT CAPABLE OF AUTOPOLL                             | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED058I xxx SENSE COUNT=yy SETTING=zz                           | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED059I xxx LIST STATUS=zzz,...                                 | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED060I xxx CANNOT BE HELD                                      | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED061I POLLING DELAY FOR xxx CANNOT BE ALTERED                 | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED062I xxx OPTION yyy CANNOT ACCEPT SPECIFIED DATA             | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED063I CLOSE DOWN IN PROGRESS- [yyy] COMMAND REJECTED          | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IED064I LINE addr CONTROL UNIT NOT OPERATIONAL                  |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   | x |   |   |   | IED065I INITIALIZATION ERROR xxxx                               |               |   | x |   |   |   |   |   |   |   |    |    | x  |



| Descriptor Codes |   |   |   |   |   |   |   | Operator Messages                                                  | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |     |
|------------------|---|---|---|---|---|---|---|--------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|-----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                    | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12  |
|                  |   |   | x |   |   |   |   | IED066I UNABLE TO OPEN SYSPRINT                                    |               |   |   |   |   |   |   |   |   |   |    |    | x   |
|                  |   |   | x |   |   |   |   | IED067I TCAM INITIALIZATION BEGUN                                  |               | x |   |   |   |   |   |   |   |   |    |    | x   |
|                  |   |   | x |   |   |   |   | IED068I UNABLE TO OPEN IEDQDATA                                    |               |   |   |   |   |   |   |   |   |   |    |    | x   |
|                  |   |   | x |   |   |   |   | IED069I INVALID KEYLEN FOR IEDQDATA                                |               |   |   |   |   |   |   |   |   |   |    |    | x   |
|                  |   |   | x |   |   |   |   | IED070I IEDQDATA DOES NOT SPECIFY CONTIG SPACE IN CYLINDERS        |               |   |   |   |   |   |   |   |   |   |    |    | x   |
|                  |   |   | x |   |   |   |   | IED071I UNEQUAL PRIMARY AND SECONDARY EXTENTS ON IEDQDATA          |               |   |   |   |   |   |   |   |   |   |    |    | x   |
|                  |   |   | x |   |   |   |   | IED072I I/O ERROR ON IEDQDATA                                      |               | x |   |   |   |   |   |   |   |   |    |    | x x |
|                  |   |   | x |   |   |   |   | IED073I I/O ERROR ON SYSPRINT                                      |               | x |   |   |   |   |   |   |   |   |    |    | x x |
|                  |   |   | x |   |   |   |   | IED074I TCAM INITIALIZATION COMPLETE                               |               | x |   |   |   |   |   |   |   |   |    |    | x   |
|                  |   |   | x |   |   |   |   | IED075I END OF EXTENT. RECORD COUNT IS xxx                         |               |   |   |   |   |   |   |   |   |   |    |    | x   |
|                  |   |   | x |   |   |   |   | IED076I TCAM NON-REUSABLE DISK THRESHOLD CLOSEDOWN                 |               | x |   |   |   |   |   |   |   |   |    |    | x   |
|                  |   |   |   | x |   |   |   | IED077I xxx OPTION yyy DATA CHARACTER INVALID                      | x             |   |   |   |   |   |   |   |   |   |    |    |     |
|                  |   |   | x |   |   |   |   | IED078I DLQ TERM ERROR                                             |               |   |   |   |   |   |   |   |   |   |    |    | x   |
|                  |   |   | x |   |   |   |   | IED079I ENDING STATUS NOT RECEIVED FROM LINE addr-LINE UNAVAILABLE |               |   |   |   |   |   |   |   | x |   |    |    |     |
|                  |   |   |   | x |   |   |   | IED080I START OF TCAM SYSTEM DELAY                                 |               | x |   |   |   |   |   |   |   |   |    |    |     |
|                  |   |   |   | x |   |   |   | IED081I END OF TCAM SYSTEM DELAY                                   |               | x |   |   |   |   |   |   |   |   |    |    |     |
|                  |   |   | x |   |   |   |   | IED082I CHECKPOINT DISK ERROR-DATA SET NOT OPENED                  |               |   |   |   |   |   |   |   |   |   |    |    | x   |
|                  |   |   | x |   |   |   |   | IED083I CHECKPOINT DISK ERROR-RECOVERY FROM PREVIOUS RECORD        |               |   |   |   |   |   |   |   |   |   |    |    | x   |
|                  |   |   | x |   |   |   |   | IED084I CHECKPOINT DISK ERROR -- RECOVERED                         |               |   |   |   |   |   |   |   |   |   |    |    | x   |
|                  |   |   | x |   |   |   |   | IED085I CHECKPOINT DISK ERROR -- {CKREQ }RECORD IGNORED {INCIDENT} |               |   |   |   |   |   |   |   |   |   |    |    | x   |
|                  |   |   | x |   |   |   |   | IED086I CHECKPOINT DISK ERROR -- {ENVIRONMENT} {CKREQ,name }       |               |   |   |   |   |   |   |   |   |   |    |    | x   |
|                  |   |   | x |   |   |   |   | IED087I CHECKPOINT DISK ERROR -- CONTROL RECORD                    |               |   |   |   |   |   |   |   |   |   |    |    | x   |
|                  |   |   | x |   |   |   |   | IED088I xxx ON DIAL LINE - CANNOT BE VARIED                        | x             |   |   |   |   |   |   |   |   |   |    |    |     |
|                  |   |   | x |   |   |   |   | IED089I LINE ACTIVE - VARY TERMINAL COMMAND REJECTED               | x             |   |   |   |   |   |   |   |   |   |    |    |     |
|                  |   |   | x |   |   |   |   | IED090I xxx IS NOT A SINGLE ENTRY                                  | x             |   |   |   |   |   |   |   |   |   |    |    |     |
|                  |   |   | x |   |   |   |   | IED091I LINE FOR xxx NOT OPEN                                      | x             |   |   |   |   |   |   |   |   |   |    |    |     |
|                  |   |   | x |   |   |   |   | IED092I BISYNC ERROR - LINE xxx CANNOT BE STARTED                  | x             |   |   |   |   |   |   |   |   |   |    |    |     |
|                  |   |   | x |   |   |   |   | IED093I SET SYSTEM INTERVAL COMMAND ACCEPTED                       | x             |   |   |   |   |   |   |   |   |   |    |    |     |
|                  |   |   | x |   |   |   |   | IED094I CORE REQUESTED FOR ON-LINE TEST NOT AVAILABLE              |               |   |   |   |   |   |   |   |   |   |    |    | x   |

| Descriptor Codes |   |   |   |   |   |   |   | Operator Messages                                                      | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |   |
|------------------|---|---|---|---|---|---|---|------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|---|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                        | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |   |
|                  |   |   |   | x |   |   |   | IED095I MODIFY OLT REJECTED - OLT NOT ACTIVE                           | x             |   |   |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   | x |   |   |   |   | IED096I {CHECKPOINT<br>OPERATOR CONTROL } NO LONGER ACTIVE<br>COMWRITE |               |   | x |   |   |   |   |   |   |   |    |    | x  |   |
|                  |   |   |   | x |   |   |   | IED097I TCAM IS CLOSED DOWN                                            | -             | x |   |   |   |   |   |   |   |   |    |    |    | x |
|                  |   |   | x |   |   |   |   | IED098I DCB NOT OPEN FOR MESSAGE PROCESSING PROGRAM                    |               | x |   |   |   |   |   |   |   |   |    |    |    | x |
|                  |   |   |   | x |   |   |   | IED099I ROUTINE LOADED                                                 | x             |   |   |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   | x |   |   |   | IED100I ROUTINE DEACTIVATED                                            | x             |   |   |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   | x |   |   |   | IED101I RESTART IN PROCESS                                             | x             |   |   |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   | x |   |   |   | IED102I INVALID OPERAND                                                | x             |   |   |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   | x |   |   |   | IED103I ROUTINE ALREADY ACTIVE                                         | x             |   |   |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   | x |   |   |   | IED104I ROUTINE NOT ACTIVE                                             | x             |   |   |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   | x |   |   |   | IED105I RETURN CODE = xx                                               | x             |   |   |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   | x |   |   |   | IED106I MULTIPLE REQUEST                                               | x             |   |   |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   | x |   |   |   | IED107I COMWRITE NOT ACTIVE                                            | x             |   |   |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   | x |   |   |   | IED109I ROUTINE NOT DELETED                                            | x             |   |   |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   | x |   |   |   | IED110I LESS THAN 4 ENTRIES                                            | x             |   |   |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   | x |   |   |   | IED111I NO TRACE TABLE                                                 | x             |   |   |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   |   | x |   |   | IED112I TCAM REQUESTED COMWRITE CLOSDOWN                               |               |   | x |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   | x |   |   |   |   | IED113I I/O ERROR addr,statsens,recordtype,COMWRITE<br>CLOSING         |               |   |   |   |   |   |   |   |   |   |    |    | x  | x |
|                  |   |   |   |   | x |   |   | IED114I Sxxx ABEND COMWRITE CLOSING                                    |               |   | x |   |   |   |   |   |   |   |    |    |    | x |
|                  |   |   |   |   |   |   |   | IED115I userid DATA AREA EXCEEDS CORE                                  |               |   |   |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   |   |   |   |   | IED116I userid PARM LIST NOT ON FULLWORD BOUNDARY                      |               |   |   |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   |   |   |   |   | IED117I userid BLKSIZE EXCEEDS DEVICE SPECS                            |               |   |   |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   | x |   |   |   |   | IED118I PERMANENT I/O ERROR ON TRACE UNIT                              |               |   |   |   |   |   |   |   |   |   |    |    |    | x |
|                  |   |   |   |   | x |   |   | IED119I UNABLE TO OPEN ddname                                          |               |   |   |   |   |   |   |   |   |   |    |    |    | x |
|                  |   |   |   |   | x |   |   | IED120I BLOCK= PARM REQUIRES TAPE INPUT                                |               |   |   |   |   |   |   |   |   |   |    |    |    | x |
|                  |   |   |   |   | x |   |   | IED121I REQUESTED TIME NOT FOUND                                       |               |   |   |   |   |   |   |   |   |   |    |    |    | x |
|                  |   |   |   |   | x |   |   | IED122I INVALID MESSAGE CHAIN                                          |               |   |   |   |   |   |   |   |   |   |    |    |    | x |
|                  |   |   |   |   | x |   |   | IED123I INVALID PARAMETERS                                             |               |   |   |   |   |   |   |   |   |   |    |    |    | x |
|                  |   |   |   |   | x |   |   | IED124I QUEUE HAS BEEN WRAPPED                                         |               |   |   |   |   |   |   |   |   |   |    |    |    | x |
|                  |   |   |   | x |   |   |   | IED125I xxx BYTES NEEDED                                               | x             |   |   |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   |   | x |   |   | IED126I OLT REQUEST REJECTED, NO DCHB FOR CONTROL<br>TERMINAL          |               |   |   |   |   |   |   |   |   |   |    |    |    | x |
|                  |   |   |   |   | x |   |   | IED127I OLT REQUEST REJECTED, CONTROL TERMINAL<br>UNIDENTIFIED         |               |   |   |   |   |   |   |   |   |   |    |    |    | x |

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Figure 4. Routing and Descriptor Codes of TCAM Messages (Part 5 of 5)

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| Descriptor Codes |   |   |   |   |   |   |   | Operator Messages                                                                     | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |  |
|------------------|---|---|---|---|---|---|---|---------------------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|--|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                                       | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |
|                  |   |   |   |   |   | x |   | IED128I ALTERNATE PRINTER REQUESTED BY OLT ALREADY IN USE                             |               |   |   |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   |   | x |   | IED129I OLT REQUEST REJECTED, C.T. LINE CANNOT BE STARTED                             |               |   |   |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   |   | x |   | IED130I OLT REQUEST REJECTED, CONTROL TERMINAL NOT OPEN                               |               |   |   |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   |   | x |   | IED131I TRM CANCELLED, NOT ENTERED FROM SWITCHED C.T.                                 |               |   |   |   |   |   |   |   |   |   |    |    | x  |  |
| x                |   |   |   |   |   |   |   | IED132D CAN OLT USE FOR NON-CONCURRENT MODE LINES xxx,xxx,xxx,xxx... (up to 11 lines) |               |   |   |   |   |   |   |   | x |   |    |    | x  |  |
|                  |   |   |   |   |   | x |   | IED133I C.T. REQUESTED BY OLT ASSIGNED TO ANOTHER OLT                                 |               |   |   |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   |   | x |   | IED134I xxxxxxxx TERMINAL FAILED, OLT CANCELLED                                       |               |   |   |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   |   | x |   | IED135I message                                                                       |               |   |   |   |   |   |   |   |   |   |    |    | x  |  |
| x                |   |   |   |   |   |   |   | IED136D message                                                                       |               |   |   |   |   |   |   |   |   |   |    |    | x  |  |

Figure 5. Routing and Descriptor Codes of Master Scheduler Messages (Part 1 of 9)

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| Descriptor Codes |   |   |   |   |   |   |   |   | Message Texts | Routing Codes                                       |   |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|---|---------------|-----------------------------------------------------|---|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |               | #                                                   | * | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   |   | x |   |   |   |   | IEE019I       | cm QUOTE(S) MISSING.                                | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE023I       | cm CLASSNAME ERROR.                                 | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE025I       | UNIT ddd HAS NO PATH                                | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE026I       | cm NOT SUPPORTED.                                   | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE032I       | WRITELOG COMMAND PENDING. CLASSNAME = x.            | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE033I       | HALT OR WRITELOG CLOSE COMMAND HAS BEEN ISSUED      | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE034I       | WRITELOG EXECUTION DEFERRED. NO BACKUP DATASET      | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE037I       | LOG NOT SUPPORTED                                   |   |   |   | x |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE038I       | LOG NOT SUPPORTED. ser NOT MOUNTED.                 |   |   |   | x |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE039I       | LOG SYS1.SYSVLOG {x} NOT FOUND ON ddd<br>{y}        |   |   |   | x |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE040I       | LOG I/O ERROR ON ddd                                |   |   |   | x |   | x |   |   |   |   |    | x  |    |
|                  |   |   | x |   |   |   |   |   | IEE041I       | LOG NOW RECORDING ON SYS1.SYSVLOG {x} ON ddd<br>{y} | x |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE042I       | LOG DATA SET SYSVLOG {x} ON ddd CLOSED<br>{y}       | x |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE043I       | LOG DATA SET {x} QUEUED TO SYSOUT CALSS x<br>{y}    |   |   |   | x |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE044I       | {LOG} ABEND COMPLETION CODE = hhh<br>{SMF}          |   |   |   | x |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE045I       | LOG INACTIVE                                        |   |   |   | x |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE046I       | LOG NOW ACTIVE                                      |   |   |   | x |   |   |   |   |   |   |    |    |    |
|                  |   | x |   |   |   |   |   |   | IEE050A       | SMF OPTION CANCELED - REPLY U TO CONTINUE           |   |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE070I       | cpu and channel status                              | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | x | IEE070I       | CPU AND CHANNEL STATUS                              | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | x | IEE070I       | AB0123456                                           | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | x | IEE070I       | yyxxxxxxxx                                          | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | x | IEE071I       | STATUS OF DEVICES                                   | x | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | x | IEE071I       | 0123456789ABCDEF                                    | x | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | x | IEE071I       | cc xxxxxxxxxxxxxxxxx                                | x | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE072I       | NO STORAGE OFFLINE                                  | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE073I       | cm IMPROPER CHANNEL NUMBER SPECIFICATION            | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE090I       | cm-x I/O ERROR DUMP TERMINATED                      |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE091I       | cm-x SYS1.DUMP DATA SET FULL OR IN USE              | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE092I       | CORE DUMP SUCCESSFULLY COMPLETED                    | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE093I       | op OPERAND IS INVALID REPLY FOR DUMP COMMAND        | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE094D       | SPECIFY OPERAND(S) FOR DUMP COMMAND                 | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE095I       | cm-x INVALID RETURN CODE FROM SVC DUMP              | x |   |   |   |   |   |   |   |   |   |    |    |    |



Figure 5. Routing and Descriptor Codes of Master Scheduler Messages (Part 3 of 9)

IEE

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| Descriptor Codes |   |   |   |   |   |   |   |   | Message Texts                                                              | Operator Messages |   |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|---|----------------------------------------------------------------------------|-------------------|---|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                                                                            | #                 | * | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   | x |   |   |   |   |   | IEE142I ddd NOW RECEIVING HARDCOPY                                         |                   |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE143I OLD=console NEW=console VALDCMD=auth                               |                   |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE143I ROUTCDE=routcd T=a H=b                                             |                   |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE147I 'text'                                                             |                   |   | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   |   | IEE150I CHANGE OPTIONS IF DESIRED                                          |                   |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   |   | IEE151E DELETE REQUEST INCONSISTENT - xxxxxx                               |                   |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   |   | IEE152I *ENTER* *CANCEL* *D C,K*                                           |                   |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   |   | IEE153E ERROR - ENTRY GREATER THAN 126 CHARACTERS                          |                   |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   |   | IEE154I ILLEGAL CURSOR OPERATION - CURSOR REPOSITIONED                     |                   |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   |   | IEE155E NO HARD COPY-CON=Y, DEL=N                                          |                   |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   |   | IEE156E INVALID OPERAND - xxxxxx                                           |                   |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   |   | IEE157E DELETION REQUESTED                                                 |                   |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   |   | IEE158E REQUEST INCONSISTENT                                               |                   |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   |   | IEE159E MESSAGE WAITING                                                    |                   |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   |   | IEE160I UNVIEWABLE MESSAGE                                                 |                   |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   |   | IEE161I WARNING - CON=N,DEL=Y                                              |                   |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   | x | x | IEE162I CONTROL COMMAND DISPLAY                                            | x                 |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   |   | IEE163I MODE= {R }<br>{RD }                                                |                   |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   |   | IEE164I ILLEGAL LIGHT PEN - CURSOR DETECT                                  |                   |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   |   | IEE165I DEL UNCHANGED, NO TIMER                                            |                   |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   |   | IEE167E OUTPUT IN HOLD MODE                                                |                   |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   |   | IEE170E RETRYABLE ERROR. RECENT ACTION MAY NEED TO BE REPEATED.            |                   |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   |   | IEE170E PRESS THE CANCEL KEY TO RESTORE THE DISPLAY.                       |                   |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   |   | IEE171E CONDITIONAL ERROR. RECENT KEYBOARD ACTION MAY NEED TO BE REPEATED. |                   |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   |   | IEE171E PRESS CANCEL TO CONTINUE, OR SWITCH CONSOLES.                      |                   |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE191I REQUIRED DD ENTRY MISSING FROM PROCEDURE                           |                   | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE192I INVALID PROCEDURE PARM FIELD FORMAT                                |                   | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   | x | x | IEE250I CONSOLE / ALT COND AUTH ROUTCD                                     | x                 |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   | x | x | IEE250I {console / alt} H auth1 routcd                                     | x                 |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   |   | IEE250I {SYSLOG } auth2 routcd                                             |                   |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   | x | x | IEE250I console / alt {M }<br>{A[,P]}<br>{N[,P]}                           | x                 |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE298I cm INVALID CHARACTER                                               |                   | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE299I ddd REQ'D FOR HARDCPY                                              |                   | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE300I ddd/aaa INVALID ALTCON                                             |                   | x |   |   |   |   |   |   |   |   |   |    |    |    |

Figure 5. Routing and Descriptor Codes of Master Scheduler Messages (Part 4 of 9)

IEE

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| Descriptor Codes |   |   |   |   |   |   |   |   | Message Texts | Routing Codes                                                     |   |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|---|---------------|-------------------------------------------------------------------|---|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |               | #                                                                 | * | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   |   | x |   |   |   |   | IEE301I       | jjj CANCEL COMMAND ACCEPTED                                       | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE302I       | ddy ONLINE                                                        | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE303I       | ddy OFFLINE                                                       | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE304I       | jjj JOB RESET                                                     | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE305I       | { cm<br>NO CORE<br>(blanks)<br>CSCB USE<br>MODE } COMMAND INVALID | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE306I       | cm INVALID NUMERICS                                               | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE307I       | cm DELIMITER ERROR                                                | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE308I       | cm TERM LENGTH ERROR                                              | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE309I       | cm UNIDENTIFIABLE KEYWORD                                         | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE310I       | cm KEYWORD MISSING                                                | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE311I       | cm PARAMETER MISSING                                              | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE312I       | cm PARAMETERS CONFLICT                                            | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE313I       | utn UNIT REF INVALID                                              | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE314I       | cm UNIT NOT AVAILABLE                                             | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE315I       | cm UNIT NOT SUPPORTED                                             | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE316I       | jjj JOB NOT FOUND                                                 | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE317I       | jjj JOB SELECTED                                                  | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE318I       | QUEUE EMPTY                                                       | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE320I       | jjj ALL SYSOUT CANCELLED                                          | x | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE321I       | jjj SYSOUT CLASS x CANCELLED                                      | x | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE322I       | jjj JOB CANCELLED                                                 | x | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE323I       | cm CLASSNAME ERROR                                                | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE324I       | xxxx NOT LOGGED ON                                                | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE325I       | xxx REJECTED - TSO NOT ACTIVE                                     | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE327I       | USERS=nnnn id(regno) id(regno)                                    | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE328I       | cm COMMAND ABORTED                                                | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE330I       | jjj JOB HELD                                                      | x | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE331I       | jjj JOB RELEASED                                                  | x | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE332I       | QUEUE HELD                                                        | x | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE333I       | QUEUE RELEASED                                                    | x | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE334I       | HALT EOD SUCCESSFUL                                               | x | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE335I       | VOL PARAMETER MISSING                                             | x |   |   |   |   |   |   |   |   |   |    |    |    |

| Descriptor Codes |   |   |   |   |   |   |   |   | Message Texts                                                        | Routing Codes |   |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|---|----------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                                                                      | #             | * | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   |   | x |   |   |   |   | IEE338I ddd INACTIVE AS HARDCPY                                      |               | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE339I ddd CHANGING STATUS                                          |               | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE341I ttt NOT ACTIVE.                                              |               | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE342I cm REJECTED - TASK BUSY.                                     |               | x |   |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   |   | IEE343A ser, dsn, NOT MOUNTED                                        |               |   | x |   |   | x |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   |   | IEE344A dsn, NOT FOUND ON ser, ddd                                   |               |   | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE345I cm [ddd] AUTHORITY INVALID                                   |               |   | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   |   | IEE346I INPUT RDR JOBNAME OVER 8 CHARS                               |               |   | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE348I ddd UNAVAILABLE CONSOLE                                      |               |   |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE349I CONSOLE / ALT COND AUTH ROUTCD                               |               | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE349I console / alt {M} auth1 routed                               |               | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE349I {console / alt} {A[,P]} {N[,P]} H auth2 routed               |               | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   |   | IEE350I SMF SYS1.MAN {X}NOT DEFINED                                  |               |   |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   |   | IEE351I .SMF SYS1.MAN RECORDING NOT BEING USED                       |               |   |   | x |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   |   | IEE352A SMF MEMBER MISSING - REPLY WITH SMF VALUES                   |               |   | x |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   |   | IEE353A I/O ERROR ON SMFDEFLT READ - REPLY WITH SMF VALUES OR RE-IPL |               |   | x |   |   | x |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   |   | IEE354I SMF PARAMETERS                                               |               |   |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE355I SMF PARAMETER ERRORS                                         |               |   |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE355I {xxxx UNRECONGNIZABLE KEYWORD/FORMAT}                        |               |   |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   |   | IEE355I {keyword=value INVALID VALUE SPECIFIED}                      |               |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   |   | IEE355I {keyword - KEYWORD NOT SPECIFIED}                            |               |   |   |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   |   | IEE356A REPLY WITH SMF VALUES                                        |               |   | x |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   |   | IEE357A REPLY WITH SMF VALUES OR U                                   |               |   | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   |   | IEE358I SMF SYS1.MAN {X}NOT FOUND ON utn                             |               |   |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   |   | IEE359I INCOMPATIBLE SMF VALUES FOR OPT AND DSV. OPT=2 SUBSTITUTED   |               |   |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   |   | IEE360I SMF NOW RECORDING ON SYS1.MAN {X}ON utn                      |               |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   |   | IEE360I TIME=hh.mm.ss                                                |               |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   |   | IEE361I SMF DATA LOST -- SYS1.MANX/Y NOT AVAILABLE                   |               |   |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   |   | IEE361I TIME=hh.mm.ss                                                |               |   |   |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   |   | IEE362A SMF ENTER DUMP FOR SYS1.MAN {X}ON utn                        |               |   | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   |   | IEE362A {Y}                                                          |               |   |   |   |   |   |   |   |   |   |   |    |    |    |

Figure 5. Routing and Descriptor Codes of Master Scheduler Messages (Part 6 of 9)

| Descriptor Codes |   |   |   |   |   |   |   |   | Message Texts                                                                                                                                                               | Routing Codes |   |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                                                                                                                                                                             | #             | * | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   | x |   |   |   |   |   | IEE363I SMF {ser} {utn} {<br>DEVICE CAPACITY TOO SMALL FOR<br>BUFFER<br>DEVICE NOT IN SYSTEM<br>INCORRECT DEVICE TYPE<br>NOT DIRECT ACCESS<br>OFFLINE<br>PRIVATE<br>IS BUSY |               |   |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE364I SMF I/O ERROR ON utn                                                                                                                                                |               |   |   | x | o | o |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE371I DM COMMAND IGNORED                                                                                                                                                  |               | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE376I PATHddd LAST PATH TO DEVICE                                                                                                                                         |               | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE377I PATHddd TP - CANNOT BE VARIED                                                                                                                                       |               | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE378I PATHddd DOES NOT EXIST                                                                                                                                              |               | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE379I PATHddd NOT AVAILABLE                                                                                                                                               |               | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE380I ddd DEVICE TYPE INVALID                                                                                                                                             |               | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE381I ddd DEVICE UNALLOCATED                                                                                                                                              |               | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE382I DDR CURRENTLY ACTIVE                                                                                                                                                |               | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE390I NO ALTERNATE CONSOLE                                                                                                                                                |               |   | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE391I ALTERNATE CONSOLE IS adr                                                                                                                                            |               |   | x |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   |   | IEE395W MASTER SCHEDULER INITIALIZATION FAILED - RE-IPL                                                                                                                     |               |   | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE400I THESE MESSAGES CANCELLED- xx,xx,xx                                                                                                                                  |               |   |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE403I cm COMMAND ABORTED                                                                                                                                                  |               | x | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | o | o |   |   |   |   | IEE404I {M} dd xx yyy z<br>{S}                                                                                                                                              |               | x | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE415I INVALID PROCEDURE ON START CM                                                                                                                                       |               | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   | x | x |   | IEE450I UNIT STATUS TIME = hh.mm.ss<br>UNIT TYPE STATUS VOLSER VOLSTATE<br>ddd dddtyp x-yyy-z ser aaaa/bbbb                                                                 | x             |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   | x | x |   | IEE450I UNIT STATUS TIME = hh.mm.ss<br>OFFLINE DEVICES<br>UNIT TYPE<br>ddd dddtyp                                                                                           | x             |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   | x |   |   | IEE452I UNIT STATUS NUMBER OF UNITS REQUESTED<br>EXCEEDS NUMBER AVAILABLE                                                                                                   |               | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   | x |   |   | IEE453I UNIT STATUS INVALID OPERAND RE-ENTER                                                                                                                                |               | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   | x |   |   | IEE454I UNIT STATUS DEVICE DOES NOT EXIST                                                                                                                                   |               | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   | x |   |   | IEE455I UNIT STATUS NO DEVICES WITH REQUESTED<br>ATTRIBUTES                                                                                                                 |               | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE475I TASK jjj sss ABENDED. COMPLETION CODE hhh                                                                                                                           |               | x |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE500E CHANNEL xy NOT OPERATIONAL                                                                                                                                          |               |   | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   |   | IEE502I CH xy ONLINE                                                                                                                                                        |               |   | x |   |   |   |   |   |   |   |   |    |    |    |

Figure 5. Routing and Descriptor Codes of Master Scheduler Messages (Part 7 of 9)

| Descriptor Codes |   |   |   |   |   |   |   |   | Message Texts                                                           | Routing Codes |   |   |   |   |   |   |   |   |   |   |    |    |    |  |
|------------------|---|---|---|---|---|---|---|---|-------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|---|----|----|----|--|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                                                                         | #             | * | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |
|                  |   |   |   | x |   |   |   |   | IEE503I CH xy MARKED OFFLINE                                            |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   |   | IEE504I CPU y ONLINE [:CHANNELS OFFLINE ARE x]                          |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   |   | IEE505I CPU y OFFLINE                                                   |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  | x |   |   |   |   |   |   |   | IEE506E 2ND CPU DID NOT RESPOND TO EXTERNAL START                       |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  | x |   |   |   |   |   |   |   | IEE507E TIMER ON SECOND CPU NOT WORKING. VARY COMMANDS MAY BE AFFECTED. |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  | x |   |   |   |   |   |   |   | IEE508E BOTH PREFIX SWITCHES SET THE SAME                               |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   |   | IEE509I VARY REJECTED, CATASTROPHIC CHANNEL ERROR                       |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   |   | IEE510I STORAGE LOCATIONS xxxxxx TO yyyyyy OFFLINE                      |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  | x |   |   |   |   |   |   |   | IEE511E QUIESCE IS NOT POSSIBLE. BUSY DEVICES ARE: ddd                  |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  | x |   |   |   |   |   |   |   | IEE512E ddd BUSY. COMMAND IGNORED                                       |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  | x |   |   |   |   |   |   |   | IEE515E STORAGE PHYSICALLY REMOVED FROM SYSTEM                          |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   |   | IEE517I INVALID ADDRESS SPECIFIED IN VARY STORAGE                       |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   |   | IEE518I VARY STORAGE OFFLINE OVERLAPS SUPERVISOR                        |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  | x |   |   |   |   |   |   |   | IEE519E STORAGE ONLINE HAS IMPERFECT OVERLAP                            |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   |   | IEE520I VARY STORAGE OFFLINE CANCELED DUE TO SUBSEQUENT ONLINE          |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   |   | IEE521I CH xy INVALID                                                   |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   |   | IEE522I CPU y INVALID                                                   |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   |   | IEE523I INVALID COMMAND IN ONE CPU SYSTEM                               |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   |   | IEE524I STORAGE LOCATIONS xxxxxx TO yyyyyy ONLINE                       |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   |   | IEE525I LOGICAL STORAGE UNIT z IS NOW OFFLINE                           |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   |   | IEE526I LOGICAL STORAGE UNIT z IS NOW ONLINE                            |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   | x |   |   |   |   |   |   | IEE527E VARY REJECTED, WOULD REMOVE ACCESS TO CONSOLE                   |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   | x |   |   |   |   |   |   | IEE541E VARY REJECTED, VARYING OUT LAST PATH TO DEVICE ddd              |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   |   | IEE600I REPLY TO xx IS 'text'                                           |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   |   | IEE699I REPLY xx IGNORED; NON-DECIMAL ID                                |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   |   | IEE700I REPLY xx IGNORED; REPLY TOO LONG FOR REQUESTOR                  |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   |   | IEE701I REPLY xx IGNORED; NO REPLIES OUTSTANDING                        |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   |   | IEE702I REPLY xx IGNORED; IMPROPER USE OF DELIMITERS                    |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   |   | IEE703I REPLY xx. NOT REQUESTED FROM THIS CONSOLE                       |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   |   | IEE704I REPLY xx NOT OUTSTANDING.                                       |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   |   | IEE706I EOD OR SWITCH SMF NOT SUCCESSFUL                                |               |   | x |   |   |   |   |   |   |   |   |    |    |    |  |



IEE

Figure 5. Routing and Descriptor Codes of Master Scheduler Messages (Part 8 of 9)

IEE

| Descriptor Codes |   |   |   |   |   |   |   |   | Message Texts                                                                                                                  | Routing Codes |   |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|---|--------------------------------------------------------------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |                                                                                                                                | #             | * | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   | x |   |   |   | x | x | IEE800I NO ACTIVE TASKS                                                                                                        | x             |   |   |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   |   | IEE801D CHANGE PARTITIONS - REPLY YES/NO (,LIST)                                                                               |               |   | x |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   |   | IEE802A ENTER DEFINITION                                                                                                       | x             |   |   |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   |   | IEE803A CONTINUE DEFINITION                                                                                                    | x             |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE804I Pn= $\left\{ \begin{array}{l} ((jclass, psize) \\ ((jclass, psize0 H0, psize1 H1) \\ ((INACTIVE) \end{array} \right\}$ | x             |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE805I DEFINITION COMPLETED                                                                                                   |               |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE806I TOTAL SIZE OF PARTITIONS IS x BYTES TOO LARGE FOR STORAGE                                                              | x             |   |   |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   |   | IEE807A DEFINITION PARAMETER ERROR, REPLY AGAIN                                                                                | o             | o |   |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   |   | IEE808A P n NOT DEFINABLE - REPLY AGAIN                                                                                        | x             |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE809I SIZE DEFINITION OF Pxx OR LOWER EXCEEDS AVAILABLE SPACE                                                                | x             |   |   |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   |   | IEE810A PROBLEM PARTITIONS EXCEED 15, RESPECIFY                                                                                | x             |   |   |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   |   | IEE811A CHANGED PARTITIONS NOT ADJACENT, RESPECIFY                                                                             | x             |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE812I P n HAS xxxx EXCESS BYTES ADDED IN Hy                                                                                  | x             |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE813I cm yyy - FAILED                                                                                                        | x             |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE814I DEFINITION CANCELLED                                                                                                   |               |   |   |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   |   | IEE815A DEFINITION DELIMITER ERROR, REPLY AGAIN                                                                                | x             |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE816I CLASSES=jclass                                                                                                         | x             |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE817I TMSL=xxxx                                                                                                              | x             |   |   |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   |   | IEE818A TMSL SPECIFICATION NOT ACCEPTABLE, RESPECIFY                                                                           | x             |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE819I TIME SLICING IS NOT SUPPORTED IN THIS SYSTEM                                                                           | x             |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE820I TMSL VALUE LESS THAN MINIMUM; 20 MILLISEC DEFAULT USED                                                                 | x             |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   | x | x | IEE821I Pn jjj sss                                                                                                             | x             |   |   |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   |   | IEE822A NO PARTITION SPECIFIED FOR EXCESS BYTES, RESPECIFY                                                                     | x             |   |   |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   |   | IEE823A xxxx IS NOT SUPPORTED - REPLY AGAIN                                                                                    | x             |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE866I DEFINE COMMAND BEING PROCESSED                                                                                         |               |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   | x | x | IEE870I jjj qqqq                                                                                                               | x             |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE901I xxx NOT VERIFIED.                                                                                                      | x             |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE902I ddd ONLINE                                                                                                             | x             |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE903I ddd OFFLINE                                                                                                            | x             |   |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   |   | IEE904I ddd LOADED. NO MOUNT.                                                                                                  | x             |   |   |   |   |   |   |   |   |   |   |    |    |    |



IEF

Figure 6. Routing and Descriptor Codes of Job Scheduler Messages. (Part 1 of 6)

IEF

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                            | Routing Codes |        |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|--------------------------------------------------------------------------|---------------|--------|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                          | *             | 1      | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   | x |   |   |   |   | IEF110I Q MGR I/O ERR FOR jjj RETURN CODE                                |               |        | x |   |   |   |   |   |   |   |    | x  |    |
|                  |   |   | x |   |   |   |   | IEF125I jjj LOGGED ON TIME=hh.mm.ss                                      |               | NOTE 1 |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IEF126I jjj LOGGED OFF TIME=hh.mm.ss                                     |               | NOTE 1 |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IEF161I ddd - READER CLOSED                                              | x             |        |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IEF165I cm                                                               |               | x      |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEF166D REPLY Y/N TO EXECUTE/SUPPRESS COMMAND                            |               | x      |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEF182I jjj WILL RESTART IN Pn                                           |               |        | x |   |   |   |   |   |   |   |    |    |    |
|                  | x |   |   |   |   |   |   | IEF183E PY=(aaaK,bbbK,x) AFTER (cccK,dddK) NEEDED TO RESTART jjj         |               | x      |   |   |   |   |   |   |   |   |    |    |    |
|                  | x |   |   |   |   |   |   | IEF184E JOBCLASS x NEEDED IN Pn TO RESTART jjj                           |               | x      |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IEF185I COMMAND CANCELLED BY RESTART READER: START xxx                   | x             |        |   |   |   |   |   |   |   |   |    |    |    |
|                  | x |   |   |   |   |   |   | IEF189E REDEFINE Pn WITHOUT HIERARCHY ZERO TO RESTART jjj                |               | x      |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IEF190I COMD REJECTED FOR INITIATOR 'ident' - LIMIT MORE THAN 15         |               | x      |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IEF191I COMD REJECTED FOR INITIATOR 'ident' - FORCE MORE THAN 15         |               | x      |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IEF203I COMD REJECTED FOR INITIATOR 'ident' - TOO MANY OPERANDS          |               | x      |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IEF204I COMD REJECTED FOR INITIATOR 'ident' - TOO MANY CLASSES           |               | x      |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IEF205I COMD REJECTED FOR INITIATOR 'ident' - INVALID OPERAND            |               | x      |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IEF206I COMD REJECTED FOR INITIATOR 'ident' - NO CLASSES SPECIFIED       |               | x      |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IEF207I COMD REJECTED FOR INITIATOR 'ident' - STORAGE KEY UNAVAILABLE    |               | x      |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEF209I MAIN STORAGE UNAVAILABLE FOR jjj.sss.ppp                         |               |        | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEF222I COMD REJECTED FOR INITIATOR 'ident' - UNIQUE IDENT REQUIRED      |               | x      |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEF225D SHOULD jjj.sss.ppp [checkid] RESTART                             |               | x      |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEF228I jjj RESTART CANCELLED - I/O ERROR SCHEDULER WORK AREA            |               |        | x |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEF233A M ddd,ser,[labtyp], {jjj<br>jjj,sss<br>jjj,sss,dsn<br>jjj,,dsn } |               |        |   | a | b | a | b |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEF233A ddd,dsn                                                          |               |        |   | a | b | a | b |   |   |   |    |    |    |
|                  | x |   |   |   |   |   |   | IEF234E {R} ddd,ser[,SPACE=prm][,jjj]<br>{D}                             |               |        |   | o | o |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEF235I jjj.sss.ddn WAITING FOR VOLUMES                                  |               |        | x |   |   |   |   |   |   |   |    |    |    |

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts | Routing Codes                                                                                       |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|---------------|-----------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |               | *                                                                                                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   |   |   | x |   |   | IEF236I       | ALLOC. FOR jjj sss [ppp]                                                                            |   | x |   |   |   |   | x |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEF237I       | ddd ALLOCATED TO ddn                                                                                |   | x |   |   |   |   | x |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEF238A       | REPLY [DEVICE NAME][,'WAIT'][,,'NOSEP'] OR<br>'CANCEL'                                              |   | x | o | o |   |   | o |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEF239I       | jjj sss ddn WAITING FOR ALLOCATION                                                                  |   | x | x |   |   |   |   |   |   |    |    |    |
|                  | x |   |   |   |   |   |   | IEF243E       | UNIT xxx UNLOADED. VOLUME HAS ANS LABEL                                                             |   |   | x |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEF244I       | jjj sss ddn UNABLE TO ALLOCATE                                                                      |   | x | x | x |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEF247I       | jjj ALLOCATION RECOVERY<br>jjj ddd-list SYSIN/SYSOUT,<br>jjj ddd-list OFFLINE                       |   | x | o | o |   |   | o |   |   |    |    |    |
|                  |   | x |   |   |   |   |   | IEF248I       | jjj sss ddn ERROR ALLOCATING RESERVED VOLUME                                                        |   | x |   | x |   |   |   |   |   |    |    |    |
|                  |   | x |   |   |   |   |   | IEF248I       | ddd HAS RESERVED VOLUME ser                                                                         |   | x |   | x |   |   |   |   |   |    |    |    |
|                  |   | x |   |   |   |   |   | IEF249I       | FOLLOWING P/R & RSV VOLUMES ARE MOUNTED<br>ser ON ddd ccc-ccc                                       |   | x |   | x |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEF250I       | FOLLOWING MAY BE MOUNTED<br>ser ON dddtyp                                                           |   | x |   | x |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   | IEF250D       | REPLY DEVICE ADDRESSES OR GO                                                                        |   | x |   | x |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEF251I       | jjj JOB CANCELED                                                                                    |   | x | o | o |   |   | o |   |   |    |    |    |
|                  |   | x |   |   |   |   |   | IEF255I       | DIRECT ACCESS - PERMANENT I/O ERROR                                                                 |   |   |   | x |   |   |   |   |   |    |    | x  |
|                  |   | x |   |   |   |   |   | IEF268I       | ddd FOR ser ccc-ccc                                                                                 |   | x |   | x |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEF269A       | ddd ADDRESS INVALID OR OFFLINE. REPEAT REPLY                                                        |   | x |   | x |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEF270D       | I/O ERROR IN PRESRES READ. REPLY GO OR RE-IPL                                                       |   | x |   | x |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   | x |   |   | IEF271I       | VOLUME NOT CONSIDERED IN SYSTEM                                                                     |   | x |   | x |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEF277I       | jjj.{sss}.ddn ALLOC. FOR CONTROL VOLUME<br>{ppp}                                                    |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEF278I       | ddd NOT MOUNTED, I/O ERROR                                                                          |   | x | o | o |   |   | o |   |   |    |    | x  |
|                  |   |   |   |   | x |   |   | IEF279I       | ddd NOW MOUNTED [ ,SL ]<br>[ ,AL ]                                                                  |   | x | o | o |   |   | o |   |   |    |    |    |
|                  | x |   |   |   |   |   |   | IEF280E       | K ddd,ser, jjj[,sss][,SPACE=prm][,dsn]                                                              |   |   |   | o | o |   |   |   |   |    |    |    |
|                  | x |   |   |   |   |   |   | IEF280I       | ddd,dsn                                                                                             |   |   |   | o | o |   |   |   |   |    |    |    |
|                  |   | x |   |   |   |   |   | IEF281I       | ddd NOW OFF-LINE                                                                                    |   | x | o | o |   |   | o |   |   |    |    |    |
|                  |   | x |   |   |   |   |   | IEF282I       | ddd NOW UNLOADED                                                                                    |   |   | o | o | o |   | o |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IEF283I       | dsn NOT DELETED x<br>VOL SER NOS= ser[z],ser[z],ser[z],ser[z]<br>VOL SER NOS= ser[z],ser[z],ser[z]. |   |   | o | o | o |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEF289I       | jjj ACCT/SYSTEM ERROR                                                                               |   | x |   |   |   |   |   |   |   |    |    |    |

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts | Routing Codes                                                                    |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|---------------|----------------------------------------------------------------------------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |               | *                                                                                | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   | x |   |   |   |   | IEF292I       | RETAINED VOLUMES RELEASED FOR JOB jjj                                            |   |   |   | x | x |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IEF300I       | ddd WTR CLOSED -- QMGR I/O ERROR                                                 | x | x |   |   |   |   |   |   |   | x  |    |    |
|                  |   |   | x |   |   |   |   | IEF301I       | ddd WTR CLOSED                                                                   | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IEF303I       | ddd WTR CLOSED -- OUTPUT ERROR                                                   | x |   |   |   |   |   | x |   |   | x  |    |    |
|                  |   |   | x |   |   |   |   | IEF304I       | jjj, DSNAME=dsn,                                                                 |   | x |   | x |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IEF304I       | DDNAME=ddn, VOLUME=SER-ser                                                       |   | x |   | x |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IEF307I       | ddd WTR CLOSED - OUTPUT DCB FAILED TO OPEN                                       |   |   |   |   |   |   | x |   |   | x  |    |    |
|                  |   |   |   |   | x |   |   | IEF308I       | jjj - NOT ENOUGH CORE FOR PROCESSING                                             |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IEF312I       | INVALID BLKSIZE SPECIFIED FOR PROCEDURE LIBRARY                                  | x | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEF317I       | TEMPORARY FAILURE OF OPEN FOR JOBLIB, FETCHLIB,<br>OR STEPLIB                    |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IEF326I       | PERMANENT I/O ERROR ON BLDL LOCATE OF UCS/FCB<br>IMAGE IN IMAGE LIBRARY          |   | x |   |   |   |   | x |   |   | x  | x  |    |
|                  |   |   | x |   |   |   |   | IEF327I       | WTR ddd CLOSED PERMANENT I/O ERROR WHILE<br>LOADING UCS/FCB BUFFER               |   | x |   |   |   |   | x |   |   | x  | x  |    |
|                  |   |   | x |   |   |   |   | IEF328I       | WTR ddd CLOSED. PERMANENT I/O ERROR ON<br>UCS/FCB IMAGE VERIFICATION             |   | x |   |   |   |   | x |   |   | x  | x  |    |
|                  |   |   | x |   |   |   |   | IEF330I       | INTERPRETER ABENDED DURING JOB jjj COMPLETION<br>CODE hhh                        | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEF331I       | WTR ddd CLOSED. SETPRT NOP - UNCORRECTABLE<br>OUTPUT ERROR ON PREVIOUS OPERATION |   | x |   |   |   |   | x |   |   | x  | x  |    |
|                  |   |   | x |   |   |   |   | IEF334I       | QUEUE DEVICE I/O ERROR PROCESSING FOR JOB jjj                                    | x | x | x |   |   |   |   |   |   | x  |    |    |
|                  |   |   | x |   |   |   |   | IEF335I       | INSUFFICIENT QUEUE SPACE FOR JOB jjj                                             | x | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IEF336I       | QUEUE FULL AND WAITING                                                           |   | x |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEF382A       | ddd WTR WAIT DUE TO PAUSE                                                        |   | x |   |   |   |   | x |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEF383A       | ddd WTR, CHANGE FORM TO nnn                                                      |   |   |   |   |   |   | x |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IEF384I       | dsn NOT DELETED w<br>VOL SER NOS= ser x,ser x,ser x,ser x,ser x.                 |   |   |   | x |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IEF385I       | ddd DSO OPEN FAILURE OUTCLASS=s jjj                                              |   |   |   | o |   |   | o |   |   | x  |    |    |
|                  |   |   | x |   |   |   |   | IEF386I       | ddd DSO OUTPUT I/O ERROR OUTCLASS=s jjj                                          |   |   |   | o |   |   | o |   |   | x  |    |    |
|                  |   |   |   |   | x |   |   | IEF388I       | jjj.sss.ddn WAITING FOR DEVICES                                                  |   | x | o | o |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEF389I       | jjj.sss.ddn SEP REQUEST IGNORED                                                  |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   | x |   |   |   |   |   | IEF390E       | DSO, (s,j,devtyp) NEEDED TO RESTART jjj Pn                                       |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEF391I       | ddd DSO CLOSED                                                                   | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEF392I       | ddd DSO JOBCLASS=jclass,OUTCLASS=s                                               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEF393I       | ddd DSO COMMAND OR PROCEDURE ERROR                                               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEF394I       | ddd DSO PARTITION ERROR                                                          | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IEF395I       | ddd DSO JOBQ I/O ERROR MSGCLASS=s jjj                                            |   | x |   |   |   |   |   |   |   | x  |    |    |
|                  |   |   |   |   | x |   |   | IEF396I       | READER PARTITION ERROR                                                           | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEF397I       | ddd DSO END OF OUTPUT RECORD NOT WRITTEN                                         |   | x |   |   |   |   |   |   |   |    | x  |    |

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                             | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|---------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                           | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   | x |   |   |   |   | IEF398I ddd DSO OPEN UNSUCCESSFUL                                         |               |   | x |   |   |   |   |   |   |   |    | x  |    |
|                  |   |   | x |   |   |   |   | IEF399I DSO ABEND EXIT PROCEDURES COMPLETED                               |               |   | x |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEF401W I/O ERROR SCHEDULER WORK AREA                                     |               | x |   |   |   |   |   |   |   |   |    | x  |    |
|                  |   |   |   |   | x |   |   | IEF403I jjj STARTED [TIME=hh.mm.ss]                                       | NOTE 7        |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEF404I jjj ENDED [TIME=hh.mm.ss]                                         |               |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IEF406I ddd - READER CANNOT BE OPENED                                     | x             |   |   |   |   |   |   |   |   |   |    | x  |    |
|                  |   |   | x |   |   |   |   | IEF407I ddd - PROCLIB CANNOT BE OPENED FOR READER                         | x             | x |   |   |   |   |   |   |   |   |    | x  |    |
|                  |   |   | x |   |   |   |   | IEF408I ddd - jjj JOB NOT FOUND FOR READER                                | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IEF409I jjj,CLASS=cc,PRTY=pp,POS=nn,qqqq                                  | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IEF410I INCORRECT PARTITION FOR START COMMAND                             | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IEF412I SPOOL DEVICE I/O ERROR WRITING FOR JOB jjj                        | x             |   |   | x |   |   |   |   |   |   |    | x  |    |
|                  |   |   | x |   |   |   |   | IEF413I QUEUE DEVICE I/O ERROR INTERPRETING JOB jjj                       | x             | x |   | x |   |   |   |   |   |   |    | x  |    |
|                  |   |   | x |   |   |   |   | IEF414I QUEUE DEVICE I/O ERROR ENQUEUEING JOB jjj                         | x             | x |   | x |   |   |   |   |   |   |    | x  |    |
|                  |   |   | x |   |   |   |   | IEF415I I/O ERROR ON ddd PURGING JOB jjj                                  | x             | x |   | x |   |   |   |   |   |   |    | x  |    |
|                  |   |   | x |   |   |   |   | IEF416I SPOOL FULL AND WAITING jjj                                        | x             | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IEF417I PROCLIB DEVICE I/O ERROR READING FOR JOB jjj                      | x             | x |   |   |   |   |   |   |   |   |    | x  |    |
|                  |   |   | x |   |   |   |   | IEF418I SPOOL DEVICE I/O ERROR OPENING FOR JOB jjj                        | x             |   |   | x |   |   |   |   |   |   |    | x  |    |
|                  |   |   | x |   |   |   |   | IEF419I INPUT DEVICE I/O ERROR READING JOB jjj                            | x             |   |   |   |   |   |   |   |   |   |    | x  |    |
|                  |   |   |   | x |   |   |   | IEF420I RDR=jjj                                                           |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IEF421I INIT=jjj.sss.ppp (x) cond                                         |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IEF422I ddd I/O ERROR DURING SYSTEM RESTART (c)                           |               |   | x |   | x |   |   |   |   |   |    | x  |    |
| x                |   |   |   |   |   |   |   | IEF423A SPECIFY JOB QUEUE PARAMETERS                                      |               | x |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEF424A INVALID PARAMETER/FORMAT                                          |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IEF425I jjj EXCEEDED SPECIFIED QUEUE SPACE                                |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IEF426I QUEUE CRITICAL                                                    |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IEF427I COMD REJECTED FOR INITIATOR 'ident' -<br>INSUFFICIENT QUEUE SPACE | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IEF429I INITIATOR 'ident' WAITING FOR WORK                                |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IEF430I RESTART STEP NOT FOUND jjj                                        | x             | x |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEF431W SYSTEM RESTART I/O ERROR ON JOB QUEUE                             |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IEF432I START INIT REJECTED                                               | x             |   |   |   |   |   |   |   |   |   |    |    |    |

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                                                                             | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |        |
|------------------|---|---|---|---|---|---|---|---------------------------------------------------------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|--------|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                                                                           | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12     |
|                  |   |   | x |   |   |   |   | IEF438I SUBTASK OF utn TERMINATED. SYSTEM COMPLETION CODE hhh                                                             |               |   | x |   |   |   |   |   |   |   |    |    |        |
|                  |   |   | x |   |   |   |   | IEF440I I/O ERROR IN THE SYS1.SYSJOBQE DATA SET FOR xxxxx                                                                 |               |   | x |   |   |   |   |   |   |   |    | x  |        |
|                  |   |   | x |   |   |   |   | IEF441I SYSTEM RESTART ERROR ON<br>{jjj<br>FREELIST}, qqqq, [TTR=nnn]<br>QUEUE<br>[status], [sense], mod<br>{C<br>E<br>D} |               |   | x |   |   |   |   |   |   |   |    | x  |        |
|                  |   |   | x |   |   |   |   | IEF442I AUTO COMMANDS SUPPRESSED ON RESTART ERROR                                                                         |               |   | x |   |   |   |   |   |   |   |    |    | x      |
|                  |   |   | x |   |   |   |   | IEF443I WORK ON QUEUES: [HOLD], [ASB],<br>[OUTPUT=list], [RJE],<br>[INPUT=list], [BRDRQ]                                  |               |   | x |   |   |   |   |   |   |   |    |    | x      |
|                  |   |   | x |   |   |   |   | IEF444I SYSTEM RESTART ERROR TERMINATING JOB jjj                                                                          |               |   | x |   |   |   |   |   |   |   |    |    | x      |
|                  |   |   |   | x |   |   |   | IEF450I jjj.sss.[ppp] ABEND {Shhh<br>Udddd } [TIME=hh.mm.ss]<br>{Shhh Udddd}                                              |               |   | x |   |   |   |   |   |   |   |    |    |        |
|                  |   |   |   | x |   |   |   | IEF451I jjj.sss.[ppp] ENDED BY CC dddd [TIME=hh.mm.ss]                                                                    |               |   |   |   |   |   |   |   |   |   |    |    | NOTE 7 |
|                  |   |   |   | x |   |   |   | IEF452I xxx JOB NOT RUN - JCL ERROR [TIME=hh.mm.ss]                                                                       |               |   | x |   |   |   |   |   |   |   |    |    |        |
|                  |   |   |   | x |   |   |   | IEF453I jjj JOB FAILED - JCL ERROR [TIME=hh.mm.ss]                                                                        |               |   | x |   |   |   |   |   |   |   |    |    |        |
|                  |   | x |   |   |   |   |   | IEF454E DOS VTOC CANNOT BE CONVERTED TO OS VTOC                                                                           |               |   |   |   | x |   |   |   |   |   |    |    |        |
|                  |   |   | x |   |   |   |   | IEF460I WTP MESSAGE LIMIT EXCEEDED                                                                                        |               |   | x |   |   |   |   |   |   |   |    |    |        |
|                  |   |   | x |   |   |   |   | IEF461I I/O ERROR SYS1.SYSJOBQE, WTP PROCESSING jjj                                                                       |               |   | x |   |   |   |   |   |   |   |    |    | x      |
|                  |   |   | x |   |   |   |   | IEF462I NO RECORDS AVAILABLE SYS1.SYSJOBQE, WTP PROCESSING jjj                                                            |               |   | x |   |   |   |   |   |   |   |    |    |        |
|                  |   |   | x |   |   |   |   | IEF500I VOLUME NEEDED ON DIFFERENT UNIT                                                                                   |               |   |   |   | o | o |   |   |   |   |    |    |        |
|                  |   |   | x |   |   |   |   | IEF501I UNIT NEEDS DIFFERENT VOLUME                                                                                       |               |   |   |   | o | o |   |   |   |   |    |    |        |
|                  |   |   | x |   |   |   |   | IEF502I DUPLICATE SERIAL                                                                                                  |               |   |   |   | o | o |   |   |   |   |    |    |        |
|                  |   |   | x |   |   |   |   | IEF503I WRONG DENSITY OR INCORRECT LABEL                                                                                  |               |   |   |   | o | o |   |   |   |   |    |    |        |
|                  |   | x |   |   |   |   |   | IEF504A M dvtyp,ser,, {jjj<br>jjj,sss<br>jjj,sss,dsn<br>jjj,,dsn}                                                         |               |   |   |   | a | b | a | b |   |   |    |    |        |
|                  |   |   | x |   |   |   |   | IEF505I UNIT REQUIRED                                                                                                     |               |   |   |   | o | o |   |   |   |   |    |    |        |
|                  |   | x |   |   |   |   |   | IEF507I utn[,N] - SYS1.ACCT - text<br>IEF507D REPLY XXX OR XXX,N OR SKIP                                                  |               |   | x |   |   |   |   |   |   |   |    |    |        |
|                  |   |   | x |   |   |   |   | IEF510I VOLUME HAS ANS LABEL                                                                                              |               |   |   |   | x |   |   |   |   |   |    |    |        |
|                  |   | x |   |   |   |   |   | IEF533A M ddd,ser, {jjj<br>jjj,sss<br>jjj,sss,dsn<br>jjj,,dsn}                                                            |               |   |   |   | x |   | x |   |   |   |    |    |        |
|                  |   |   | x |   |   |   |   | IEF656I 16 EXTENTS EXCEEDED SPOOLING JOB [-jjj]                                                                           |               | x |   |   |   |   |   |   |   |   |    |    |        |

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                      | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|--------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                    | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   |   |   | x |   |   | IEF861I FOLLOWING RESERVED DATA SETS UNAVAILABLE TO jjj            |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEF862I FOLLOWING RESERVED DATA SETS UNAVAILABLE TO jjj,<br>IN Pnn |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IEF863I DSNAME=dsn                                                 |               | x |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEF864D REPLY 'RETRY' OR 'CANCEL' [OR 'WAIT']                      |               | x |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEF865A Q FULL - REPLY 'WAIT' OR 'CANCEL' - jjj.                   |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   | x |   |   |   |   |   | IEF866E SCHEDULER ABEND COMPLETION CODE hhh                        |               |   | x |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IEF867D CPO FULL -- REPLY 'WAIT' OR 'CANCEL' jjj                   |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IEF868I ddd WTR WAITING FOR WORK                                   |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IEF869I qqqq nnnn                                                  |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IEF871I SYSTEM ISSUED DISPLAY A                                    |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IEF875I PROC FAILED, JCL ERROR                                     |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IEF876I PROC FAILED, I/O ERROR                                     |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IEF877I PROC FAILED, INSUFFICIENT Q-SPACE                          |               | x |   |   |   |   |   |   |   |   |    |    |    |

IEH

Figure 7. Routing and Descriptor Codes of System Utility Messages

IEH

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                                                                     | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |  |  |
|------------------|---|---|---|---|---|---|---|-------------------------------------------------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|--|--|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                                                                   | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |  |
| x                |   |   |   |   |   |   |   | IEH220A jobname,stepname,utility<br>statement name, REPLY WITH<br>{'PASSWORD1'}<br>{'PASSWORD2'}<br>{'CPASSWORD'} |               |   |   |   |   |   |   |   |   |   |    |    | x  |  |  |
| x                |   |   |   |   |   |   |   | IEH807D cuu (or cuu/b) HAS UNEXPIRED DATA SETS, serial,<br>jobname, stepname.                                     |               |   |   |   |   | x |   |   |   |   |    |    |    |  |  |
|                  |   |   |   | x |   |   |   | IEH808I REPLY IN ERROR. REPLY WITH 'U' OR 'T', jobname,<br>stepname.                                              |               |   |   |   |   | x |   |   |   |   |    |    |    |  |  |
|                  |   |   | x |   |   |   |   | IEH809I {R} cuu (or cuu/b), serial, jobname, stepname,<br>{N}<br>[NOW OFFLINE]                                    |               |   |   |   |   | x |   |   |   |   |    |    |    |  |  |
| x                |   |   |   |   |   |   |   | IEH841D cuu (or cuu/b for a 2321 volume) CONFIRM REQUEST<br>TO INITIALIZE                                         |               |   |   |   |   | x |   |   |   |   |    |    |    |  |  |
| x                |   |   |   |   |   |   |   | IEH848D IS ANOTHER TAPE MOUNTED FOR THIS RESTORE<br>JOB. REPLY Y OR N.                                            |               |   |   |   |   | x |   |   |   |   |    |    |    |  |  |

IEJ

Figure 8. Routing and Descriptor Codes of FORTRAN IV E Messages

IEJ

| Descriptor Codes |   |   |   |   |   |   |   | Operator Messages                                                                                                                                                                     | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |  |   |
|------------------|---|---|---|---|---|---|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|--|---|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                                                                                                                                       | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |   |
|                  |   |   |   |   |   | x |   | IEJ010I I/O ERROR, COMPILATION TERMINATED. SYNAD<br>FOLLOWS.                                                                                                                          |               |   |   |   |   |   |   |   |   |   |    |    |    |  | x |
|                  |   |   |   |   |   | x |   | IEJ010I SYNAD - xxx...xxx                                                                                                                                                             |               |   |   |   |   |   |   |   |   |   |    |    |    |  | x |
|                  |   |   |   |   |   |   |   | <u>Note:</u> For complete descriptions of this and other<br>IEJ messages, refer to the publication<br>IBM System/360 Operating System: FORTRAN IV E<br>Programmer's Guide, GC28-6603. |               |   |   |   |   |   |   |   |   |   |    |    |    |  |   |

IEK

Figure 9. Routing and Descriptor Codes of FORTRAN IV H Messages

IEK

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                         | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |   |
|------------------|---|---|---|---|---|---|---|---------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|---|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                       | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |   |
|                  |   |   |   |   |   | x |   | IEK403I OPEN ERROR ON SYSPRINT        |               |   |   |   |   |   |   |   |   |   |    |    |    | x |
|                  |   |   |   |   |   | x |   | IEK404I SYNCHRONOUS ERROR ON SYSPRINT |               |   |   |   |   |   |   |   |   |   |    |    |    | x |

IEM

Figure 10. Routing and Descriptor Codes of PL/I Messages

IEM

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                        | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                      | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   |   |   |   |   | x | T IEM3862I I/O ERROR ON SYSPRINT                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | T IEM3876I UNABLE TO OPEN SYSPRINT                   |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | T IEM3896I SYSPRINT BLOCKSIZE IS NOT OF FORM 4+N*125 |               |   |   |   |   |   |   |   |   |   |    |    | x  |

IEP

Figure 11. Routing and Descriptor Codes of COBOL E Messages

IEP

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                              | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|----------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                            | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   |   |   |   |   | x | IEP000A XXX...                                                             |               | x |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IEP850I TABLE OF DEBUG REQUESTS OVERFLOWED.<br>RUN TERMINATED.             |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   | x | IEP854I IDENTIFICATION DIVISION NOT FOUND.<br>RUN TERMINATED.              |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   | x | IEP855I DEBUG EDIT RUN COMPLETE. INPUT FOR<br>COBOL COMPILATION ON SYSUT4. |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   | x | IEP990D 'AWAITING REPLY'                                                   |               | x |   |   |   |   |   |   |   |   |    |    | x  |

IEQ

Figure 12. Routing and Descriptor Codes of COBOL F Messages

IEQ

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                        | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |
|------------------|---|---|---|---|---|---|---|----------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                      | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| NONE             |   |   |   |   |   |   |   | IEQ000A xxx...                                                       | NOTE 8        |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IEQ990D 'AWAITING REPLY'                                             |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IEQ999I NO DD CARD FOR DDNAME.                                       |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IEQ0003I PERMANENT I/O ERROR ON * * * * *. COMPILATION<br>ABANDONED. |               |   |   |   |   |   |   |   |   |   |    |    |



| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                          | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|----------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                        | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   |   |   | x |   |   | IER001A - COL 1 OR 1-15 NOT BLANK      |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER002A - EXCESS CARDS                 |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER003A - NO CONTIN CARD               |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER004A - INVALID OP DELIMITER         |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER005A - STMT DEFINER ERR             |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER006A - OP DEFINER ERR               |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER007A - SYNTAX ERR - xxx             |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER008A - FLD OR VALUE GT 8 CHAR - xxx |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER009A - EXCESS INFO ON CARD - xxx    |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER010A - NO S/M CARD                  |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER011A - TOO MANY S/M KEYWORDS        |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER012A - NO FLD DEFINER               |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER013A - INVALID S/M KEYWORD          |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER014A - DUPLICATE S/M KEYWORD        |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER015A - TOO MANY PARAMETERS          |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER016A - INVALID VALUES IN FLD        |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER017A - ERR IN DISP LENGTH VALUE     |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER018A - CTL FLD ERR                  |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER019A - SIZE-SKIPREC ERR             |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER020A - INVALID REC KEYWORD          |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER021A - NO TYPE DEFINER              |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER022A - RCD FORMAT NOT F/V           |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER023A - NO LENGTH DEFINER            |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER024A - ERR IN LENGTH VALUE          |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER025A - RCD SIZE GT MAX              |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER026A - L1 NOT GIVEN                 |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER027A - CF BEYOND RCD                |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER028A - TOO MANY EXITS               |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER029A - IMPROPER EXIT                |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER030A - MULTIPLY DEFINED EXIT        |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IER031A - INVALID MODS OP CHAR         |               |   | x |   |   |   |   |   |   |   |    |    |    |

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                                                                                                                               | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |  |
|------------------|---|---|---|---|---|---|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|--|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                                                                                                                             | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |
|                  |   |   |   |   | x |   |   | IER032A - EXIT E61 REQUIRED                                                                                                                                                 |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER033A - CF SEQ INDIC E REQUIRED                                                                                                                                           |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER034A - PARAM ERR FOR MODS                                                                                                                                                |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER035A - DUPLICATE MOD RTN IN PHASE                                                                                                                                        |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER036I - B = xxxxxx                                                                                                                                                        |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER037I - G = xxxxxx                                                                                                                                                        |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER038I - NMAX = xxxxxx                                                                                                                                                     |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER039A - INSUFFICIENT CORE                                                                                                                                                 |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER040A - INSUFFICIENT WORK UNITS                                                                                                                                           |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER041A - N GT NMAX                                                                                                                                                         |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER042A - UNITS ASGN ERROR                                                                                                                                                  |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER043A - DATA SET ATTRIBUTES NOT SPECIFIED                                                                                                                                 |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER044I - EXIT Exx INVALID OPTION                                                                                                                                           |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER045I - END SORT PH                                                                                                                                                       |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER046A - SORT CAPACITY EXCEEDED                                                                                                                                            |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER047A - RCD CNT OFF, IN xxxxxx, OUT xxxxxx                                                                                                                                |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER048I - NMAX EXCEEDED                                                                                                                                                     |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER049I - SKIP MERGE PH                                                                                                                                                     |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER050I - END MERGE PH                                                                                                                                                      |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER051A - UNENDING MERGE                                                                                                                                                    |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER052I - EOJ                                                                                                                                                               |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER053A - OUT OF SEQ                                                                                                                                                        |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER055I - INSERT xxxxxx, DELETE xxxxxx                                                                                                                                      |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER056A - SORTIN/SORTOUT NOT DEFINED                                                                                                                                        |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER057A - SORTIN NOT SORTWK01                                                                                                                                               |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER058A - SORTOUT A WORK UNIT                                                                                                                                               |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER059A - RCD LNG INVALID FOR DEVICE                                                                                                                                        |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER060A - DSCB NOT DEFINED                                                                                                                                                  |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   | x |   |   |   |   | IER061A - I/O ERR, jobname,stepname,unit address,device<br>type,ddname,operation attempted,error<br>description,last seek address or block<br>count,access method (SYNADAF) |               |   |   |   | o | o |   | o |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER062A - L E ERR                                                                                                                                                           |               |   | x |   |   |   |   |   |   |   |    |    |    |  |

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                              | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |  |
|------------------|---|---|---|---|---|---|---|--------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|--|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                            | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |
|                  |   |   |   |   | x |   |   | IER063A - OPEN ERR xxxxxxxx                |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER064A - DELETE ERR                       |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER065A - PROBABLE DECK STRUCTURE ERROR    |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER066A - APROX RCD CNT xxxxxx             |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER067I - INVALID EXEC OR ATTACH PARAMETER |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IER068A - OUT OF SEQ SORTINxx              |               |   | x |   |   |   |   |   |   |   |    |    |    |  |

IEU

Figure 14. Routing and Descriptor Codes of Assembler F Messages

IEU

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                                                                             | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|---------------------------------------------------------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                                                                           | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   |   |   |   | x |   | IEU996I ASSEMBLY TERMINATED. INSUFFICIENT STORAGE                                                                         |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IEU997I OPEN FAILED FOR SYSPRINT, NOLIST OPTION USED                                                                      |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IEU998I ASSEMBLY TERMINATED, OPEN FAILED FOR DATA SET (ddname)                                                            |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IEU999I ASSEMBLY TERMINATED, jobname, stepname, unit address, device type, ddname, operation attempted, error description |               |   |   |   |   |   |   |   |   |   |    |    | x  |

IEW

Figure 15. Routing and Descriptor Codes of Linkage Editor - Loader Messages

IEW

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                          | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|--------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                        | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   |   |   | x |   |   | IEW119I ERROR - USER PROGRAM HAS ABNORMALLY TERMINATED |               |   | x |   |   |   |   |   |   |   |    |    | x  |

IEX

Figure 16. Routing and Descriptor Codes of ALGOL Messages

IEX

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|--------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                              | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   |   |   |   | x |   | IEX201I T nnnnn DD CARD FOR (ddname) INCORRECT OR MISSING.   |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IEX210I T nnnnn UNRECOVERABLE I/O ERROR ON DATA SET (ddname) |               |   |   |   |   |   |   |   |   |   |    |    | x  |

IEY

Figure 17. Routing and Descriptor Codes of FORTRAN IV G Messages

IEY

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                           | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |   |
|------------------|---|---|---|---|---|---|---|---------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|---|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                         | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |   |
|                  |   |   |   |   |   | x |   | IEY034I I/O ERROR [COMPILATION TERMINATED]<br>xxx...xxx |               |   |   |   |   |   |   |   |   |   |    |    |    | x |
|                  |   |   |   |   |   | x |   | IEY035I UNABLE TO OPEN ddname                           |               |   |   |   |   |   |   |   |   |   |    |    |    | x |

IFA

Figure 18. Routing and Descriptor Codes for SMF DUMP Messages

IFA

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                                | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |  |
|------------------|---|---|---|---|---|---|---|------------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|--|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                              | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |
|                  | x |   |   |   |   |   |   | IFA006A REQUEST MADE TO DUMP ACTIVE<br>ACTIVE SMF DATA SET -<br>REPLY CANCEL |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   |   | x |   | IFA007I SMF DUMP CANCELLED                                                   |               |   | x |   |   |   |   |   |   |   |    |    |    |  |

IFB

Figure 19. Routing and Descriptor Codes of Environment Recording Messages

IFB

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                   | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|-----------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                 | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   | x |   |   |   |   | IFB001I I/O ERROR DURING OBR/SDR                                |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IFB002I CHANNEL DETECTED ERROR ON ddd RECORDED,xxxx,<br>op,stat |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IFB003I OBR/SDR RECORDING AREA FULL                             |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IFB004I OBR/SDR DISK AREA FORMAT ERROR                          |               | x |   |   |   |   |   |   |   |   |    |    |    |
| NONE             |   |   |   |   |   |   |   | IFBF05W MACHINE ERROR. RELOAD OS/360                            | NOTE 1        |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   | IFBF06W MACHINE ERROR. RELOAD OS/360                            |               |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   | IFBF07S MACHINE ERROR. EXECUTE SEREP                            |               |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   | IFBF08S MACHINE ERROR. EXECUTE SEREP                            |               |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   | IFBF09S MACHINE ERROR. EXECUTE SEREP                            |               |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   | IFBF0AS MACHINE ERROR. EXECUTE SEREP                            |               |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IFBF0BI MACHINE ERROR.                                          |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IFB0CI MACHINE ERROR.                                           |               | x |   |   |   |   |   |   |   |   |    |    |    |
| NONE             |   |   |   |   |   |   |   | IFBF0DS MACHINE ERROR. EXECUTE SEREP                            | NOTE 1        |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IFBF0EI MACHINE ERROR. RECORD LOST.                             |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IFBF0FI MACHINE ERROR. BFR SEG x DSBL                           |               |   | x |   |   |   |   |   |   |   |    |    |    |

IFC

Figure 20. Routing and Descriptor Codes of IFCDIP00 and IFCERE00 Messages

IFC

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                             | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|---------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                           | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   |   |   |   |   | x | IFC001I D=ddd N=x F=trck* L=trck* S=recd**                                |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   | x | IFC002I INVALID INPUT                                                     |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   | x | IFC003I I/O ERRORS IN FORMATTING DISK                                     |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   | x | IFC004I END OF DATA SET BEFORE PROGRAM COMPLETE                           |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   | x | IFC005I I/O ERROR ON OUTPUT DEVICE                                        |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   | x | IFC006I HEADER RECORD INCORRECT                                           |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   | x | IFC007I END OF DATA SET BEFORE PROGRAM COMPLETE                           |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   | x | IFC008I READ DISK FAILURE                                                 |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   | x | IFC009I WRITE DISK FAILURE                                                |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   | x | IFC00AI PARAMETER FIELD ERROR                                             |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   | x | IFC00BI STAT RECORD KEY DIFFERS FROM THE EXPECTED --<br>EXPCD xxx REC xxx |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   | x | IFC00CI INPUT NOT ACCUMULATIVE DATA SET                                   |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   | x | IFC00DI ACCUMULATION OUTPUT TERMINATED - ERROR                            |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   | x | IFC00EI JOB TERMINATED DUE TO INPUT ERRORS                                |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   | x | IFC00FI ddname DD STATEMENT INCORRECT STEP TERM                           |               | x |   |   |   |   |   |   |   |   |    |    |    |



| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                               | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |   |  |
|------------------|---|---|---|---|---|---|---|-----------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|---|--|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                             | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |   |  |
|                  |   |   |   |   |   | x |   | IFD100I message                                                             |               |   |   |   |   |   |   |   |   |   |    |    | x  |   |  |
|                  |   |   |   |   |   | x |   | IFD101D message                                                             |               |   |   |   |   |   |   |   |   |   |    |    | x  |   |  |
|                  |   |   |   |   |   | x |   | IFD102I OLTS RUNNING                                                        |               |   | x |   |   |   |   |   |   |   |    |    | x  |   |  |
|                  |   |   |   |   |   | x |   | IFD103I UCB NOT READY BIT ON - ddd TESTS BYPASSED                           |               |   |   |   |   |   |   |   |   |   |    |    |    | x |  |
|                  |   |   |   |   |   | x |   | IFD104E TO FORCE COMMUNICATION WITH OLTEP EXECUTIVE,<br>ENTER ANY CHARACTER |               |   |   |   |   |   |   |   |   |   |    |    |    | x |  |
|                  |   |   |   |   |   | x |   | IFD105D ENTER -- DEV/TEST/OPT/                                              |               |   |   |   |   |   |   |   |   |   |    |    |    | x |  |
|                  |   |   |   |   |   | x |   | IFD106I INPUT DATA DOES NOT CONTAIN 3 SLASHES                               |               |   |   |   |   |   |   |   |   |   |    |    |    | x |  |
|                  |   |   |   |   |   | x |   | IFD107I OPTIONS ARE xxx,...,xxx                                             |               |   |   |   |   |   |   |   |   |   |    |    |    | x |  |
|                  |   |   |   |   |   | x |   | IFD108I ILLEGAL ENTRY IN DEV FLD--xx                                        |               |   |   |   |   |   |   |   |   |   |    |    |    | x |  |
|                  |   |   |   |   |   | x |   | IFD109I ddd NOT OFFLINE                                                     |               |   |   |   |   |   |   |   |   |   |    |    |    | x |  |
|                  |   |   |   |   |   | x |   | IFD110I TESTABLE DEVICES MAY NOT EXCEED 16                                  |               |   |   |   |   |   |   |   |   |   |    |    |    | x |  |
|                  |   |   |   |   |   | x |   | IFD111I NO DEVICES AVAILABLE FOR TEST                                       |               |   |   |   |   |   |   |   |   |   |    |    |    | x |  |
|                  |   |   |   |   |   | x |   | IFD112I ILLEGAL ENTRY IN TEST FLD--xx                                       |               |   |   |   |   |   |   |   |   |   |    |    |    | x |  |
|                  |   |   |   |   |   | x |   | IFD113I NO xxxxx SECTIONS FOUND                                             |               |   |   |   |   |   |   |   |   |   |    |    |    | x |  |
|                  |   |   |   |   |   | x |   | IFD114I ALL GRAPHICS ON CONTROL UNIT NOT OFFLINE                            |               |   |   |   |   |   |   |   |   |   |    |    |    | x |  |
|                  |   |   |   |   |   | x |   | IFD115I ILLEGAL ENTRY IN OPT FLD --xxxxxxxxxxx                              |               |   |   |   |   |   |   |   |   |   |    |    |    | x |  |
|                  |   |   |   |   |   | x |   | IFD116D LINE ddd IS ONLINE, CAN IT BE TESTED.<br>REPLY, YES OR NO           |               |   |   |   |   |   |   |   |   |   |    |    |    | x |  |
|                  |   |   |   |   |   | x |   | IFD117I SECTION xxxxyyy NOT FOUND                                           |               |   |   |   |   |   |   |   |   |   |    |    |    | x |  |
|                  |   |   |   |   |   | x |   | IFD118I UNREADABLE TAPE LABEL - ddd                                         |               |   |   |   |   |   |   |   |   |   |    |    |    | x |  |
|                  |   |   |   |   |   | x |   | IFD119I NONSTANDARD TAPE LABEL - ddd                                        |               |   |   |   |   |   |   |   |   |   |    |    |    | x |  |
|                  |   |   |   |   |   | x |   | IFD120D CAN VOL DATA ON ddd BE DESTROYED.<br>REPLY, YES OR NO               |               |   |   |   |   |   |   |   |   |   |    |    |    | x |  |
|                  |   |   |   |   |   | x |   | IFD121I xx MESSAGE CANCELLED BY OLTEP                                       |               |   |   |   |   |   |   |   |   |   |    |    |    | x |  |
|                  |   |   |   |   |   | x |   | IFD122I VOL ON ddd CANNOT BE USED AS SCRATCH -<br>SECURITY PROTECTED        |               |   |   |   |   |   |   |   |   |   |    |    |    | x |  |
|                  |   |   |   |   |   | x |   | IFD123I VOL ON ddd CANNOT BE USED AS SCRATCH -<br>UNEXPIRED DATE            |               |   |   |   |   |   |   |   |   |   |    |    |    | x |  |
|                  |   |   |   |   |   | x |   | IFD124I C E VOL IS NOT ON UNIT ddd                                          |               |   |   |   |   |   |   |   |   |   |    |    |    | x |  |
|                  |   |   |   |   |   | x |   | IFD125I UNREADABLE LABEL ON ddd                                             |               |   |   |   |   |   |   |   |   |   |    |    |    | x |  |
|                  |   |   |   |   |   | x |   | IFD126I SENSE TO BIN 0 OF ddd DOES NOT INDICATE CE<br>VOL MOUNTED           |               |   |   |   |   |   |   |   |   |   |    |    |    | x |  |
|                  |   |   |   |   |   | x |   | IFD127I NO UCB FOR ADDRESS ddd                                              |               |   |   |   |   |   |   |   |   |   |    |    |    | x |  |

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                                                                                                                                  | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |
|------------------|---|---|---|---|---|---|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|--|---|--|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                                                                                                                                | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |
|                  |   |   |   |   |   | x |   | IFD128I TEST BYPASSED. CHANNEL DATA PROTECTION HAS NOT BEEN PERFORMED                                                                                                          |               |   |   |   |   |   |   |   |   |   |    |    | x  |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |
|                  |   |   |   |   |   | x |   | IFD129I FIRST ERROR COMMUNICATION<br>xxxxxyyy zzz UNIT ddd                                                                                                                     |               |   |   |   |   |   |   |   |   |   |    |    |    | x |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |
|                  |   |   |   |   |   | x |   | IFD130I ddd INT REQ                                                                                                                                                            |               |   |   |   |   |   |   |   |   |   |    |    |    | x |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |
|                  |   |   |   |   |   | x |   | IFD131I SENSE TO ddd FAILED                                                                                                                                                    |               |   |   |   |   |   |   |   |   |   |    |    |    | x |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |
|                  |   |   |   |   |   | x |   | IFD132I C E BIT WILL NOT RESET - ddd                                                                                                                                           |               |   |   |   |   |   |   |   |   |   |    |    |    | x |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |
|                  |   |   |   |   |   | x |   | IFD133I TIMER NOT STEPPING. TIMING TEST BYPASSED.                                                                                                                              |               |   |   |   |   |   |   |   |   |   |    |    |    | x |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |
|                  |   |   |   |   |   | x |   | IFD135D ARE TIME DEPENDENT DEVICES ACTIVE (TP, 1419).<br>REPLY, YES OR NO                                                                                                      |               |   |   |   |   |   |   |   |   |   |    |    |    | x |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |
|                  |   |   |   |   |   | x |   | IFD136I TIME DEPENDENT DEVICES ARE ACTIVE. TIMING<br>TEST BYPASSED.                                                                                                            |               |   |   |   |   |   |   |   |   |   |    |    |    | x |   |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |
|                  |   |   |   |   |   | x |   | IFD137I SNS - xxxxxxxxxxxx<br>CSW - XXyyyyyyyyyyyyyy                                                                                                                           |               |   |   |   |   |   |   |   |   |   |    |    |    |   | x |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |
|                  |   |   |   |   |   | x |   | IFD138I DEVICE ddd NOT OPERATIONAL CC=3                                                                                                                                        |               |   |   |   |   |   |   |   |   |   |    |    |    |   | x |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |
|                  |   |   |   |   |   | x |   | IFD139D REPLY {<br>B TO BYPASS, R TO RETRY<br>B TO BYPASS, R TO RETRY, P TO PROCEED<br>B TO BYPASS, R TO RETRY, P TO PROCEED<br>(MAY DESTROY DATA)<br>R TO RETRY, P TO PROCEED |               |   |   |   |   |   |   |   |   |   |    |    |    |   | x |   |   |   |   |   |   |   |   |   |   |   |   |  |   |  |
|                  |   |   |   |   |   | x |   | IFD140D IS CE VOL IN BIN 0 OF ddd. REPLY YES OR NO                                                                                                                             |               |   |   |   |   |   |   |   |   |   |    |    |    |   |   | x |   |   |   |   |   |   |   |   |   |   |   |  |   |  |
|                  |   |   |   |   |   | x |   | IFD141D VERIFY CHANNEL x RELEASE TO OLTS.<br>REPLY, YES OR NO                                                                                                                  |               |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   | x |   |   |   |   |   |   |   |   |   |   |  |   |  |
|                  |   |   |   |   |   | x |   | IFD142D OLTS WAITING FOR CHANNEL x. REPLY, PROCEED<br>OR CANCEL                                                                                                                |               |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   | x |   |   |   |   |   |   |   |   |   |   |  |   |  |
|                  |   |   |   |   |   | x |   | IFD143D VERIFY OLTS BYPASS SK/SM ON ddd.<br>REPLY, PROCEED OR CANCEL                                                                                                           |               |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |   | x |   |   |   |   |   |   |   |   |   |  |   |  |
|                  |   |   |   |   |   | x |   | IFD144D 30 SEC TIMEOUT WITH NO INTERRUPT - UNIT ddd.<br>REPLY, WAIT/CANCEL                                                                                                     |               |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |   |   | x |   |   |   |   |   |   |   |   |  |   |  |
|                  |   |   |   |   |   | x |   | IFD145D IS ddd OFFLINE IN ALL SHARING SYSTEMS.<br>REPLY, YES OR NO                                                                                                             |               |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   | x |   |   |   |   |   |   |   |  |   |  |
|                  |   |   |   |   |   | x |   | IFD146I SEE SRL - ONLINE TEST EXECUTIVE PROGRAM                                                                                                                                |               |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   | x |   |   |   |   |   |   |  |   |  |
|                  |   |   |   |   |   | x |   | IFD147I ILLUSTRATIVE EXAMPLES                                                                                                                                                  |               |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   |   | x |   |   |   |   |   |  |   |  |
|                  |   |   |   |   |   | x |   | IFD147I DEV-SPECIFICATION OF DEVICES TO BE TESTED                                                                                                                              |               |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   |   |   | x |   |   |   |   |  |   |  |
|                  |   |   |   |   |   | x |   | IFD147I 181/ TEST DEVICE 181                                                                                                                                                   |               |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   |   |   |   | x |   |   |   |  |   |  |
|                  |   |   |   |   |   | x |   | IFD147I 185-187/ TEST DEVICES 185,186, AND 187                                                                                                                                 |               |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   |   |   |   |   | x |   |   |  |   |  |
|                  |   |   |   |   |   | x |   | IFD147I 285-286,184/ TEST DEVICES 285,286, AND 184                                                                                                                             |               |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   |   |   |   |   | x |   |   |  |   |  |
|                  |   |   |   |   |   | x |   | IFD147I CH282/ TEST CHANNEL 2                                                                                                                                                  |               |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   |   |   |   |   |   | x |   |  |   |  |
|                  |   |   |   |   |   | x |   | IFD147I NDR/ NO DEVICE REQUIRED FOR TEST                                                                                                                                       |               |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   |   |   |   |   |   |   | x |  |   |  |
|                  |   |   |   |   |   | x |   | IFD147I /(SLASH ALONE) TEST PREVIOUSLY SELECTED<br>DEVICES                                                                                                                     |               |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  | x |  |

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts | Routing Codes                                               |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|---------------|-------------------------------------------------------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |               | *                                                           | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   |   |   |   |   | x | IFD148I       | ILLUSTRATIVE EXAMPLES                                       |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD148I       | TEST-TEST TYPE, SECTION, ROUTINES                           |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD148I       | 2400/ TAPE TESTS                                            |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD148I       | 2400A/ SECTION A OF TAPE TEST 2400                          |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD148I       | 2400C,2/ RTN. 2, SEC. C, TEST 2400                          |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD148I       | 2400A-C,E,G/ SEC A,B,C,E, AND G OF TEST 2400                |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD148I       | IOEPZZ/ SEC. ZZ. OF EDIT-PRINT FUNCTION                     |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD148I       | R2540AA/ SEC. AA OF READER TEST 2540                        |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD148I       | /(SLASH ALONE) RUN PREVIOUSLY SELECTED TESTS                |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD149I       | TABLE OF OPTIONS                                            |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD149I       | TO REQUEST TO OMIT BY                                       |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD149I       | OPTION OPTION OPTION DEFAULT                                |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD149I       | TESTING LOOP TL NTL NTL                                     |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD149I       | TL (VALUE)                                                  |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD149I       | ERROR LOOP EL NEL NEL                                       |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD149I       | EL (VALUE)                                                  |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD149I       | ERROR PRINT EP NEP EP                                       |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD149I       | CONTROL PRINT CP NCP CP                                     |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD149I       | PARALLEL PRINT PP NPP NPP                                   |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD149I       | PP (LEVEL)                                                  |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD149I       | FIRST ERROR COMMUNICATION FE NFE FE                         |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD149I       | MANUAL INTER-VENTION MI NMI NMI                             |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD149I       | PRINT PR NPR PR                                             |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD149I       | REMOTE RE NRE NRE                                           |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD149I       | ILLUSTRATIVE EXAMPLES                                       |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD149I       | OPT-SPECIFICATION OF OPTIONS                                |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD149I       | PP, NMI/                                                    |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD149I       | FE, EXT=...../                                              |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD150I       | TEST BYPASSED. xxxxxxxxxxxx ON ddd                          |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD151I       | TEST BYPASSED. CHANNEL NOT A 2880                           |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD152I       | TEST BYPASSED. CHANNEL CANNOT BE QUIESCED                   |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD153I       | TEST BYPASSED. CPU NOT SUPPORTED FOR CHANNEL TESTING        |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD154E       | message                                                     |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD155I       | TEST SECTIONS MAY NOT EXCEED 26                             |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD156I       | DEVICE ddd STATUS CHANGED. BYPASS TESTS                     |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD157I       | CATASTROPHIC ERROR ON DEVICE ddd                            |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD158I       | ww xxxxyyy [UNIT ddd]                                       |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD159I       | MODULE xxxxxxxx NOT FOUND                                   |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD160I       | INSUFFICIENT CORE                                           |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD161I       | FOR HELP, ENTER - PROMPT yyyy TO SUBSEQUENT IFD105D MESSAGE |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   |   | x | IFD162I       | UNIT ddd,DSNAME=xxxxxxx COULD NOT BE SCRATCHED              |   |   |   |   |   |   |   |   |   |    |    | x  |

IFD

Figure 21. Routing and Descriptor Codes of OLTEP Message (Part 4 of 4)

IFD

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                  | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |  |
|------------------|---|---|---|---|---|---|---|----------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|--|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |
|                  |   |   |   |   |   | x |   | IFD163I *RETAIN/370 READY                                      |               |   |   |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   |   | x |   | IFD164I UNABLE TO ESTABLISH CONTACT WITH RETAIN/370 CENTER     |               |   |   |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   |   | x |   | IFD165I ENTRY IN DEV FLD NOT ALLOWABLE BY REMOTE               |               |   |   |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   |   | x |   | IFD167I PERMANENT REI ERROR STATUS=XXyyyyyyyyyyyyyyy, SENSE=xx |               |   |   |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   |   | x |   | IFD168E TO COMMUNICATE WITH REMOTE SPECIALIST ENTER MESSAGE    |               |   |   |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   |   | x |   | IFD169I *RETAIN/370 TERMINATED                                 |               |   |   |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   |   | x |   | IFD170I MESSAGE xx ANSWERED BY REMOTE                          |               |   |   |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   |   | x |   | IFD173I REPLY CODE xx NOT VERIFIED                             |               |   |   |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   |   | x |   | IFD174I UNABLE TO RESTORE LABEL ON DEVICE ddd                  |               |   |   |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   |   | x |   | IFD176I MUTUALLY EXCLUSIVE OPTIONS HAVE BEEN SELECTED          |               |   |   |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   |   | x |   | IFD212I CANNOT DATA PROTECT DEVICE ddd                         |               |   |   |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   |   | x |   | IFD255I message                                                |               |   |   |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   |   | x |   | IFD505I TIME INTERVAL EXPIRED, NO LINE ACTIVITY                |               |   |   |   |   |   |   |   |   |   |    |    | x  |  |

Figure 22. Routing and Descriptor Codes of Graphic Programming Services Messages

IFF

IFF

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                            | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |   |
|------------------|---|---|---|---|---|---|---|----------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|---|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                          | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |   |
|                  |   |   | x |   |   |   |   | IFF001I utn - REQUEST IGNORED - LACK OF STORAGE          |               |   | x |   |   |   |   |   |   |   |    |    |    | x |
|                  |   |   | x |   |   |   |   | IFF002I utn - REQUEST IGNORED - PERMANENT I/O ERROR      |               |   | x |   |   |   |   |   |   |   |    |    |    | x |
|                  |   |   | x |   |   |   |   | IFF003I utn - REQUEST IGNORED - NO 2250 BUFFER AVAILABLE |               |   | x |   |   |   |   |   |   |   |    |    |    | x |
|                  |   |   | x |   |   |   |   | IFF004I utn - REQUEST IGNORED - OPEN FAILURE ON SYSBFDMP |               |   | x |   |   |   |   |   |   |   |    |    |    | x |
|                  |   |   | x |   |   |   |   | IFF005I jjj,sss,utn,dev,ddn,op,                          |               |   | x |   |   |   |   |   |   |   |    |    | x  | x |
|                  |   |   | x |   |   |   |   | IFF005I err, {***,acs}                                   |               |   | x |   |   |   |   |   |   |   |    |    | x  | x |
|                  |   |   |   |   |   |   |   | IFF005I {rel,acs}                                        |               |   |   |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   |   |   |   |   | IFF005I {trk,acs}                                        |               |   |   |   |   |   |   |   |   |   |    |    |    |   |



Figure 23. Routing and Descriptor Codes of Machine-Check Handler and Dynamic Device Reconfiguration Messages (Part 1 of 3)

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                              | Routing Codes                                  |   |   |   |   |   |   |   |   |   |    |    |    |  |  |
|------------------|---|---|---|---|---|---|---|------------------------------------------------------------|------------------------------------------------|---|---|---|---|---|---|---|---|---|----|----|----|--|--|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                            | *                                              | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |  |
| NONE             |   |   |   |   |   |   |   | IGF001W [S] {P<br>B<br>U} aaaaaa [CPU ID {1}<br>{2}]       |                                                |   |   |   |   |   |   |   |   |   |    |    |    |  |  |
|                  |   |   |   |   |   |   |   | IGF002W [S] SUPVR [MC CPU ID {1}<br>{2}]                   |                                                |   |   |   |   |   |   |   |   |   |    |    |    |  |  |
|                  |   |   |   |   |   |   |   |                                                            | IGF003W [S] UNEX MCI                           |   |   |   |   |   |   |   |   |   |    |    |    |  |  |
|                  |   |   |   |   |   |   |   |                                                            | IGF004W [S] PGM CHK [CPU ID {1}<br>{2}]        |   |   |   |   |   |   |   |   |   |    |    |    |  |  |
|                  |   |   |   |   |   |   |   |                                                            | IGF006W [S] I/O ERR {CPU ID {1}<br>{2}}<br>cua |   |   |   |   |   |   |   |   |   |    |    |    |  |  |
|                  |   |   |   |   |   |   |   |                                                            | IGF010W S NOT M/xx [CPU ID {1}<br>{2}]         |   |   |   |   |   |   |   |   |   |    |    |    |  |  |
|                  |   |   |   |   |   |   |   |                                                            | IGF011W S MCI-NIP [CPU ID {1}<br>{2}]          |   |   |   |   |   |   |   |   |   |    |    |    |  |  |
|                  |   |   |   |   |   |   |   |                                                            | IGF012W [S] MCI-CCH {CPU ID {1}<br>{2}}<br>c   |   |   |   |   |   |   |   |   |   |    |    |    |  |  |
|                  |   |   |   |   |   |   |   |                                                            | IGF013W [S] CHAN ERR {CPU ID {1}<br>{2}}<br>c  |   |   |   |   |   |   |   |   |   |    |    |    |  |  |
|                  |   | x |   |   |   |   |   | IGF014I {I cua csw<br>W S cua csw}                         |                                                |   | x |   |   |   |   |   |   |   |    |    |    |  |  |
|                  |   | x |   |   |   |   |   | IGF015I {I UNEX ERR<br>W [S] UNEX ERR}                     |                                                |   | x |   |   |   |   |   |   |   |    |    |    |  |  |
|                  |   | x |   |   |   |   |   | IGF020I ABEND                                              |                                                |   | x |   |   |   |   |   |   |   |    |    |    |  |  |
|                  |   | x |   |   |   |   |   | IGF021I nnnnnnnn                                           |                                                |   | x |   |   |   |   |   |   |   |    |    |    |  |  |
|                  |   | x |   |   |   |   |   | IGF022I RAM xx                                             |                                                |   | x |   |   |   |   |   |   |   |    |    |    |  |  |
|                  |   | x |   |   |   |   |   | IGF023I BLDL DLT                                           |                                                |   | x |   |   |   |   |   |   |   |    |    |    |  |  |
|                  |   | x |   |   |   |   |   | IGF024I {P address {S}<br>B }<br>U }                       |                                                |   | x |   |   |   |   |   |   |   |    |    |    |  |  |
|                  |   | x |   |   |   |   |   | IGF025I {MSTRSCHD<br>bbbbbbbb}                             |                                                |   | x |   |   |   |   |   |   |   |    |    |    |  |  |
|                  |   | x |   |   |   |   |   | IGF026I {RDR xx<br>WTR xx<br>I/T xx<br>SYTSK xx<br>STC xx} |                                                |   | x |   |   |   |   |   |   |   |    |    |    |  |  |
|                  |   | x |   |   |   |   |   | IGF027I STORAGE DAMAGE aaaaaa-bbbbb JOB ABEND (DS<br>OPEN) |                                                |   | x |   |   |   |   |   |   |   |    |    |    |  |  |
|                  |   | x |   |   |   |   |   | IGF027I jjj(dsn) (dsn) ...; jjj(dsn);...                   |                                                |   | x |   |   |   |   |   |   |   |    |    |    |  |  |
|                  |   | x |   |   |   |   |   | IGF028I I/O ERR                                            |                                                |   | x |   |   |   |   |   |   |   |    |    |    |  |  |
|                  |   | x |   |   |   |   |   | IGF029I cua csw                                            |                                                |   | x |   |   |   |   |   |   |   |    |    |    |  |  |
|                  |   | x |   |   |   |   |   | IGF032I aaaaaa                                             |                                                |   | x |   |   |   |   |   |   |   |    |    |    |  |  |

NOTE 1

IGF

Figure 23. Routing and Descriptor Codes of Machine-Check Handler and Dynamic Device Reconfiguration Messages (Part 2 of 3)

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                                               | Routing Codes |        |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|---------------------------------------------------------------------------------------------|---------------|--------|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                                             | *             | 1      | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   | x |   |   |   |   | IGF033E RUN EREP                                                                            |               |        | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IGF040I TSO {S} {ND}<br>{R} {AB}                                                            |               |        | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IGF041I STAT ERR                                                                            |               |        | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IGF042I HSM-ERR                                                                             |               |        | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IGF043I {HIR} CNT<br>{ECC}                                                                  |               |        | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IGF044I ECC SUCCESSFUL                                                                      |               |        | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IGF045I {MULT BIT x <sub>1</sub> x <sub>2</sub> x <sub>3</sub> }<br>{MULTIPLE BIT ERROR}    |               |        | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IGF046I n SEC xx                                                                            |               |        | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IGF047I n BUFFER                                                                            |               |        | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IGF048I HIR SUCCESSFUL                                                                      |               |        | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IGF049I MODE STATUS SECTORS DELETED                                                         | x             |        |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IGF049I MULT                                                                                | x             |        |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IGF049I hir - mode ECC - mode 00-10 nnnnnnnnn<br>status                                     | x             |        |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IGF049I thr-ddddddddd THR-ddddddddd 11-21 nnnnnnnnnn<br>BUFR                                | x             |        |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IGF049I CNT-ddddddddd CNT-ddddddddd 22-31 nnnnnnnnnn<br>status                              | x             |        |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IGF049I HIR, {R}, aaaa/bbbb, cccc/dddd ECC, {R},<br>{Q}, aaaa/bbbb, cccc/dddd, BUF DEL=xxxx | x             |        |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IGF050W [S] TOD ERROR                                                                       |               | 1      |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IGF051I HRT ERROR                                                                           |               |        | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IGF052I xxxx BUF PG DELETED                                                                 |               |        | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IGF053I MODE STATUS {RECORD} COUNT-n THRESHOLD-n<br>{QUIET}                                 | x             |        |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   | BUFFER {ENABLED}<br>{DISABLED}                                                              |               |        |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IGF054E SYS1.LOGREC FULL                                                                    |               |        |   | x |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IGF055I QUIET MODE [CPU,ECC]<br>[ECC]                                                       |               |        | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IGF056I I/O ERR IN RECORDER                                                                 |               |        | x |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   | x |   |   |   |   | IGF057E DISK FORMAT ERROR                                                                   |               |        | x |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   | x |   |   |   | IGF061I MODE SWITCH COMPLETE                                                                |               | x      |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IGF063I SVC BLDL DLT                                                                        |               |        | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IGF500I {jjj, SWAP xxx TO yyy<br>{jjj, SWAP xxx TO yyy, 2314}<br>SWAP xxx TO yyy            |               | x      |   | o | o |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IGF500D {REPLY 'YES', DEVC, OR 'NO'}<br>{REPLY 'YES' OR 'NO'}                               |               | x      |   | o | o |   |   |   |   |   |    |    |    |
| NONE             |   |   |   |   |   |   |   | IGF501D SWAP SYSRES FROM xxx TO yyy                                                         |               | NOTE 1 |   |   |   |   |   |   |   |   |    |    |    |



IGF

Figure 23. Routing and Descriptor Codes of Machine-Check Handler and Dynamic Device Reconfiguration Messages (Part 3 of 3)

IGF

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                      | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|--------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                    | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   | x |   |   |   |   | IGF503I ERROR ON yyy, SELECT NEW DEVICE                            |               | x |   | x |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IGF504I AN ERP IS IN PROCESS FOR xxx                               |               |   |   | x |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IGF505I SWAP FROM xxx TO yyy COMPLETE                              |               |   | x | x |   |   |   |   |   |   |    |    |    |
| NONE             |   |   |   |   |   |   |   | IGF507A VOLUME ON DEVICE yyy UNIDENTIFIABLE, SWAP<br>SYSRES TO zzz | NOTE 1        |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IGF508I OPERATOR INITIATED [SYSRES] SWAP CANCELLED BY<br>SYSTEM    |               |   |   |   | x |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IGF509I jjj, SWAP xxx                                              |               | x |   |   | x |   |   |   |   |   |    |    |    |
|                  | x |   |   |   |   |   |   | IGF509D REPLY DEVC, OR 'NO'                                        |               | x |   |   | x |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IGF510I SYSRES RESIDES ON xxx                                      |               |   |   |   | x |   |   |   |   |   |    |    |    |
|                  | x |   |   |   |   |   |   | IGF511A WRONG VOLUME MOUNTED ON yyy                                |               | x |   | x |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IGF512I TAPE DDR TERMINATED                                        |               |   |   | x | x |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IGF513I yyy INVALID FOR SWAP                                       |               | x | o | o |   |   |   |   |   |   |    |    |    |

IHC

Figure 24. Routing and Descriptor Codes of FORTRAN IV Object Program Messages

IHC

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts    | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                  | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| x                |   |   |   |   |   |   |   | IHC001A PAUSE xx |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   | x |   | IHC002I STOP x   |               |   | x |   |   |   |   |   |   |   |    |    |    |

IHD

Figure 25. Routing and Descriptor Codes of COBOL Object Program Messages

IHD

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                                                                                                                                     | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                                                                                                                                   | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   |   |   |   | x |   | IHD980I I/O ERROR, jobname,stepname,unit address, device type,ddname,operation attempted,error description,actual block and track address in hex (shown in BBCCHHR format),QISAM. |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHD981I I/O ERROR ,jobname,stepname,unit address, device type,ddname,operation attempted,error description,block and track address,BISAM.                                         |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHD982I I/O ERROR ,jobname,stepname,unit address, device type,ddname,operation attempted,error description,block and track address, BSAM/QSAM.                                    |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHD983I I/O ERROR ,jobname,stepname,unit address, device type,ddname,operation attempted, error description,block and track address, BDAM.                                        |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHD984I AN ISAM FILE MAY NOT BE OPENED FOR OUTPUT MORE THAN ONCE.                                                                                                                 |               |   |   |   |   |   |   |   |   |   |    |    | x  |

Figure 26. Routing and Descriptor Codes of PL/I Object Program Messages (Part 1 of 6)

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| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                             | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|---------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                           | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   |   |   |   | x |   | IHE003I SOURCE PROGRAM ERROR IN STATEMENT nnnnn                           |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE004I INTERRUPT IN ERROR HANDLER - PROGRAM TERMINATED                   |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE005I PSEUDO-REGISTER VECTOR TOO LONG - PROGRAM NOT EXECUTED            |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE006I NO MAIN PROCEDURE. PROGRAM TERMINATED.                            |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE009I IHEDUM*. NO PLIDUMP DD CARD. EXECUTION TERMINATED.                |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE010I PROGRAM ENDED BY OS360. RETURN CODE = hhh (a hexadecimal number). |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE011I KEY ERROR WHEN CLOSING FILE AT END OF TASK                        |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE018I FILE name - FILE TYPE NOT SUPPORTED                               |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE020I FILE name - ATTEMPT TO READ OUTPUT FILE                           |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE021I FILE name - ATTEMPT TO WRITE INPUT FILE                           |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE022I GET/PUT STRING EXCEEDS STRING SIZE                                |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE023I FILE name - OUTPUT TRANSMIT ERROR NOT ACCEPTABLE                  |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE024I FILE name - PRINT OPTION/FORMAT ITEM FOR NON-PRINT FILE           |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE025I DISPLAY - MESSAGE OR REPLY AREA LENGTH ZERO                       |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE026I FILE name - DATA DIRECTED INPUT - INVALID ARRAY DATUM             |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE027I GET STRING - UNRECOGNIZABLE DATA NAME                             |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE029I FILE name - UNSUPPORTED FILE OPERATION                            |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE030I FILE name - REWRITE/DELETE NOT IMMEDIATELY PRECEDED BY READ       |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE031I FILE name - INEXPLICABLE I/O ERROR                                |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE032I FILE name - OUTSTANDING READ FOR UPDATE EXISTS                    |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE033I FILE name - NO COMPLETED READ EXISTS (INCORRECT NCP VALUE)        |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE034I FILE name - TOO MANY INCOMPLETE I/O OPERATIONS                    |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE035I FILE name - EVENT VARIABLE ALREADY IN USE                         |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE036I FILE name - IMPLICIT OPEN FAILURE, CANNOT PROCEED                 |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE037I FILE name - ATTEMPT TO REWRITE OUT OF SEQUENCE                    |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE038I FILE name - ENDFILE FOUND UNEXPECTEDLY IN MIDDLE OF DATA ITEM.    |               |   |   |   |   |   |   |   |   |   |    |    | x  |

Figure 26. Routing and Descriptor Codes of PL/I Object Program Messages (Part 2 of 6)

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| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                          | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                        | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   |   |   |   | x |   | IHE039I FILE name - ATTEMPT TO CLOSE FILE NOT OPENED IN CURRENT TASK   |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE100I FILE name - UNRECOGNIZABLE DATA NAME                           |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE110I FILE name - RECORD CONDITION SIGNALLED                         |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE111I FILE name - RECORD VARIABLE SMALLER THAN RECORD SIZE           |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE112I FILE name - RECORD VARIABLE LARGER THAN RECORD SIZE            |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE113I ATTEMPT TO WRITE/LOCATE ZERO LENGTH RECORD                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE114I FILE name - ZERO LENGTH RECORD READ                            |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE120I FILE name - PERMANENT INPUT ERROR                              |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE121I FILE name - PERMANENT OUTPUT ERROR                             |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE122I FILE name - TRANSMIT CONDITION SIGNALLED                       |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE130I FILE name - KEY CONDITION SIGNALLED                            |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE131I FILE name - KEYED RECORD NOT FOUND                             |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE132I FILE name - ATTEMPT TO ADD DUPLICATE KEY                       |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE133I FILE name - KEY SEQUENCE ERROR                                 |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE134I FILE name - KEY CONVERSION ERROR                               |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE135I FILE name - KEY SPECIFICATION ERROR                            |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE136I FILE name - KEYED RELATIVE RECORD/TRACK OUTSIDE DATA SET LIMIT |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE137I FILE name - NO SPACE AVAILABLE TO ADD KEYED RECORD             |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE140I FILE name - END OF FILE ENCOUNTERED                            |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE150I FILE name - CANNOT BE OPENED, NO DD CARD                       |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE152I FILE name - FILE TYPE NOT SUPPORTED                            |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE153I FILE name - BLOCKSIZE NOT SPECIFIED                            |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE154I FILE name - UNDEFINEDFILE CONDITION SIGNALLED                  |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE155I FILE name - ERROR INITIALIZING REGIONAL DATA SET               |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE156I FILE name - CONFLICTING ATTRIBUTE AND ENVIRONMENT PARAMETERS   |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE157I FILE name - CONFLICTING ENVIRONMENT AND/OR DD PARAMETERS       |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE158I FILE name - KEYLENGTH NOT SPECIFIED                            |               |   |   |   |   |   |   |   |   |   |    |    | x  |

Figure 26. Routing and Descriptor Codes of PL/I Object Program Messages (Part 3 of 6)

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| Descriptor Codes |   |   |   |   |   |   |   | Messages Texts                                                                                | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|-----------------------------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                                               | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   |   |   |   | x |   | IHE159I FILE name - INCORRECT BLOCKSIZE AND/OR LOGICAL RECORD SIZE IN STATEMENT NUMBER xxx    |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE160I FILE name - LINESIZE GREATER THAN IMPLEMENTATION DEFINED MAXIMUM LENGTH               |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE161I FILE name - CONFLICTING ATTRIBUTE AND DD PARAMETERS                                   |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE200I rtname - X LT 0 IN SQRT (X)                                                           |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE202I rtname - X LT 0 IN LOG(X) OR LOG2(X) OR LOG10(X)                                      |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE203I rtname - ABS(X) GE (2**50)*K IN SIN(X) OR COS(X) (K=PI) OR SIND(X) OR COSD(X) (K=180) |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE204I rtname - ABS(X) GE (2**50)*K IN TAN(X) (K=PI) OR TAND(X) (K=180)                      |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE206I rtname - X=Y=0 IN ATAN(Y,X) AND ATAND(Y,X)                                            |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE208I rtname - ABS(X) GT 1 IN ATANH(X)                                                      |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE209I rtname - X=0, Y LE 0 IN X**Y                                                          |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE210I rtname - X=0, Y NOT POSITIVE REAL IN X**Y                                             |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE211I rtname - Z=+I OR -I IN ATAN(Z) OR Z=+1 OR -1 IN ATANH(Z)                              |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE212I rtname - ABS(X) GE (2**18)*K IN SIN(X) OR COS(X) (K=PI) OR SIND(X) OR COSD(X) (K=180) |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE213I rtname - ABS(X) GE (2**18)*K IN TAN(X) (K=PI) OR TAND(X) (K=180)                      |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE300I OVERFLOW                                                                              |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE310I SIZE                                                                                  |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE320I FIXEDOVERFLOW                                                                         |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE330I ZERODIVIDE                                                                            |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE340I UNDERFLOW                                                                             |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE350I STRINGRANGE                                                                           |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE360I AREA CONDITION RAISED IN ALLOCATE STATEMENT                                           |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE361I AREA CONDITION RAISED IN ASSIGNMENT STATEMENT                                         |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE362I AREA SIGNED                                                                           |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE380I IHISTR - STRUCTURE OR ARRAY LENGTH GE 16**6 BYTES                                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE381I IHISTR - VIRTUAL ORIGIN OF ARRAY GE 16**6 OR LE -16**6                                |               |   |   |   |   |   |   |   |   |   |    |    | x  |

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                                                     | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|---------------------------------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                                                   | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   |   |   |   | x |   | IHE400I DELAY STATEMENT EXECUTED - NO TIMER FUNCTION IN SYSTEM                                    |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE401I TIME STATEMENT EXECUTED - NO TIMER FUNCTION IN SYSTEM                                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE500I SUBSCRIPTRANGE                                                                            |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE501I CONDITION                                                                                 |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE550I ATTEMPT TO WAIT ON AN INACTIVE AND INCOMPLETE EVENT                                       |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE551I TASK VARIABLE ALREADY ACTIVE                                                              |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE552I EVENT ALREADY BEING WAITED ON                                                             |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE553I WAIT ON MORE THAN 255 INCOMPLETE EVENTS                                                   |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE554I ACTIVE EVENT VARIABLE AS ARGUMENT TO COMPLETION                                           |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE555I INVALID TASK VARIABLE AS ARGUMENT TO PRIORITY PSEUDO-VARIABLE                             |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE556I EVENT VARIABLE ACTIVE IN ASSIGNMENT STATEMENT                                             |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE557I EVENT VARIABLE ALREADY ACTIVE                                                             |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE558I ATTEMPT TO WAIT ON AN I/O EVENT IN WRONG TASK                                             |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE559I UNABLE TO CALL TASK DUE TO INSUFFICIENT MAIN STORAGE.                                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE560I UNABLE TO CALL TASK DUE TO MORE THAN 255 TASKS ACTIVE.                                    |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE571I TASK (name) TERMINATED. COMPLETION CODE= hhh.                                             |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE572I TASK (name) TERMINATED. COMPLETION CODE = hhh. EVENT VARIABLE OVERWRITTEN OR DESTROYED.   |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE573I TASK (name) TERMINATED. COMPLETION CODE = hhh. TASK VARIABLE OVERWRITTEN OR DESTROYED.    |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE574I TASK (name) TERMINATED. COMPLETION CODE = hhh. INVALID FREE STATEMENT.                    |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE575I TASK (name) TERMINATED. COMPLETION CODE = hhh. DISPLAY STATEMENT. REPLY NOT WAITED FOR.   |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE576I TASK (name) TERMINATED. COMPLETION CODE = hhh. TOO MUCH MAIN STORAGE REQUESTED.           |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE577I TASK (name) TERMINATED WHILE STILL ACTIVE -- END OF BLOCK REACHED IN ATTACHING TASK.      |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE579I TASK (name) TERMINATED. COMPLETION CODE = hhh. ABNORMAL TERMINATION DURING PUT STATEMENT. |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE600I CONVERSION CONDITION SIGNALLED                                                            |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE601I CONVERSION ERROR IN F-FORMAT INPUT                                                        |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE602I CONVERSION ERROR IN E-FORMAT INPUT                                                        |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE603I CONVERSION ERROR IN B-FORMAT INPUT                                                        |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE604I ERROR IN CONVERSION FROM CHARACTER STRING TO ARITHMETIC                                   |               |   |   |   |   |   |   |   |   |   |    |    | x  |

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                                         | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|---------------------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                                       | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   |   |   |   | x |   | IHE605I ERROR IN CONVERSION FROM CHARACTER STRING TO BIT STRING                       |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE606I ERROR IN CONVERSION FROM CHARACTER STRING TO PICTURED CHARACTER STRING        |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE607I CONVERSION ERROR IN P-FORMAT INPUT (DECIMAL)                                  |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE608I CONVERSION ERROR IN P-FORMAT INPUT (CHARACTER)                                |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE609I CONVERSION ERROR IN P-FORMAT INPUT (STERLING)                                 |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE700I INCORRECT E(W,D,S) SPECIFICATION                                              |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE701I F FORMAT W SPECIFICATION TOO SMALL                                            |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE702I A FORMAT W UNSPECIFIED AND LIST ITEM NOT TYPE STRING                          |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE703I B FORMAT W UNSPECIFIED AND LIST ITEM NOT TYPE STRING                          |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE704I A FORMAT W UNSPECIFIED ON INPUT                                               |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE705I B FORMAT W UNSPECIFIED ON INPUT                                               |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE706I UNABLE TO ASSIGN TO PICTURED CHARACTER STRING                                 |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE798I ONSOURCE OR ONCHAR PSEUDOVARIBLE USED OUT OF CONTEXT                          |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE799I RETURN ATTEMPTED FROM CONVERSION ON-UNIT BUT SOURCE FIELD NOT MODIFIED        |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE800I INVALID OPERATION                                                             |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE801I PRIVILEGED OPERATION                                                          |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE802I EXECUTE INSTRUCTION EXECUTED                                                  |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE803I PROTECTION VIOLATION                                                          |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE804I ADDRESSING INTERRUPT                                                          |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE805I SPECIFICATION INTERRUPT                                                       |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE806I DATA INTERRUPT                                                                |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE810I PROTECTION EXCEPTION UNPROCESSED AFTER MULTIPLE-EXCEPTION IMPRECISE INTERRUPT |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE811I ADDRESSING EXCEPTION UNPROCESSED AFTER MULTIPLE-EXCEPTION IMPRECISE INTERRUPT |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE812I SPECIFICATION EXCEPTION UNPROCESSED AFTER                                     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE813I DATA EXCEPTION UNPROCESSED AFTER MULTIPLE-EXCEPTION IMPRECISE INTERRUPT       |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IHE814I ZERODIVIDE UNPROCESSED AFTER MULTIPLE-EXCEPTION IMPRECISE INTERRUPT           |               |   |   |   |   |   |   |   |   |   |    |    | x  |

Figure 26. Routing and Descriptor Codes of PL/I Object Program Messages (Part 6 of 6)

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| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                             | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |   |
|------------------|---|---|---|---|---|---|---|---------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|---|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                           | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |   |
|                  |   |   |   |   |   | x |   | IHE815I OVERFLOW UNPROCESSED AFTER MULTIPLE-EXCEPTION IMPRECISE INTERRUPT |               |   |   |   |   |   |   |   |   |   |    |    | x  |   |
|                  |   |   |   |   |   | x |   | IHE900I TOO MANY ACTIVE ON-UNITS AND ENTRY PARAMETER PROCEDURES           |               |   |   |   |   |   |   |   |   |   |    |    |    | x |
|                  |   |   |   |   |   | x |   | IHE902I GOTO STATEMENT REFERENCES A LABEL IN AN INACTIVE BLOCK            |               |   |   |   |   |   |   |   |   |   |    |    |    | x |

Figure 27. Routing and Descriptor Codes of Maintenance Program Analyzer Messages (Part 1 of 2)

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                    | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |
|------------------|---|---|---|---|---|---|---|------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                  | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| NONE             |   |   |   |   |   |   |   | IHG001I NO BLANK AFTER OP (image of control card)                |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IHG002I OP CODE IN ERROR (image of control card)                 |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IHG003I OPERAND IN ERROR (image of control card)                 |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IHG004I NOT AN UAP CTL CARD (image of control card)              |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IHG005I PRIOR CARD THIS TYPE (image of control card)             |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IHG006I IS NOT CONT OF PREV (image of control card)              |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IHG007I LAST CARD PROCESSED EXPECTED A CONTINUATION NONE ENTERED |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IHG008I LIBSEQ CARD MISSING OR CARD NUMBER DUPLICATED            |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IHG009I ALIAS TABLE IS FULL (image of control card)              |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IHG010I DATA TABLE IS FULL (image of control card)               |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IHG011I NO SPACE/BASE JOB CD                                     |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IHG012I LIBSEQ TABLE IS FULL (image of control card)             |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IHG013I IHGUAP PARM ERROR                                        |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IHG014I CARD FORMAT ERROR                                        |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IHG015I DU/DP DATA MISSING                                       |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IHG016I FELIB TABLE IS FULL (image of control card)              |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IHG017I FEITEM TABLE IS FULL (image of control card)             |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IHG018I DUPLICATE ALIAS CARD (image of alias card)               |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IHG021I DISTN ERROR. CHANGE TYPE SHOULD BE M OR R OR D.          |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IHG022I DISTN ERROR. CT HDR CARD MISSING OR MISPUNCHED.          |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IHG023I BLDL PERM I/O ERROR.                                     |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IHG024I DISTN ERROR. DISTN CTL CARD MISSING OR MISPUNCHED.       |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IHG025I DISTN ERROR. SYSLIN DD CARD MISSING OR MISPUNCHED.       |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IHG026I DISTN ERROR. LE EXEC CARD MISSING OR MISPUNCHED.         |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IHG027I DISTN ERROR. CHANGE TYPE SHOULD BE A OR R.               |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IHG031I member HAS BEEN DELETED.                                 |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IHG032I member WAS NOT IN DIRECTORY.                             |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IHG033I member, PERM I/O ERROR.                                  |               |   |   |   |   |   |   |   |   |   |    |    |
|                  |   |   |   |   |   |   |   | IHG040I NO CHANGE TO LIBRARY ON LIBSEQ CARD libname              |               |   |   |   |   |   |   |   |   |   |    |    |

NOTE 8

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Figure 27. Routing and Descriptor Codes of Maintenance Program Analyzer Messages (Part 2 of 2)

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| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                          | Routing Codes                     |   |   |   |   |   |   |   |   |   |    |    |    |  |
|------------------|---|---|---|---|---|---|---|------------------------------------------------------------------------|-----------------------------------|---|---|---|---|---|---|---|---|---|----|----|----|--|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                        | *                                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |
| NONE             |   |   |   |   |   |   |   | IHG041I changepds member name DIST CTL CD MEMBER OR LIBRARY NAME ERROR |                                   |   |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   |   |   |   | IHG042I TABLE AREA OVERFLOW                                            |                                   |   |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   |   |   |   |                                                                        | IHG043I I/O ERROR                 |   |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   |   |   |   |                                                                        | IHG044I changepds NOT PROCESSED   |   |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   |   |   |   |                                                                        | IHG050I UPDATE ANALYSIS COMPLETED |   |   |   |   |   |   |   |   |   |    |    |    |  |

IHI

Figure 28. Routing and Descriptor Codes of ALGOL Object Program Messages

IHI

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                         | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |  |
|------------------|---|---|---|---|---|---|---|-------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|--|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                       | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |
|                  |   |   |   |   |   |   | x | IHI032I SC=nnnnn DSN=nn. UNRECOVERABLE I/O ERROR      |               |   |   |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   |   |   | x | IHI041I SC=nnnnn DSN=nn. DD CARD INCORRECT OR MISSING |               |   |   |   |   |   |   |   |   |   |    |    | x  |  |

IHJ

Figure 29. Routing and Descriptor Codes of Checkpoint/Restart Messages

IHJ

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                                               | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |  |
|------------------|---|---|---|---|---|---|---|---------------------------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|--|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                                             | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |
|                  |   |   |   |   |   |   | x | IHJ000I CHKPT jjj [(ddn)] NOT TAKEN (xx)                                                    |               |   | x |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   |   |   | x | IHJ001I jjj (ddn,utn,ser) INVLD checkid (xx)                                                |               |   | x |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   |   |   | x | IHJ002I jjj (ddn,utn,ser) ERROR checkid                                                     |               |   | x |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   |   |   | x | IHJ004I jjj (ddn,utn,ser) CHKPT checkid                                                     |               |   | x |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   |   |   | x | IHJ005I jjj (ddn,utn,ser) ENQS checkid                                                      |               |   | x |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   |   |   | x | IHJ006I jjj RESTARTING AT {<br>wwwww xxxxxx<br>yyyyyy zzzzzz<br>wwwww xxxxxx yyyyyy zzzzzz} |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   |   |   | x | IHJ007I RESTART NOT SUCCESSFUL FOR jjj (xx)                                                 |               |   | x |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   |   |   | x | IHJ008I jjj RESTARTED                                                                       |               |   | x |   |   |   |   |   |   |   |    |    | x  |  |

IHK

Figure 30. Routing and Descriptor Codes of Remote Job Entry and Conversational Remote Job Entry Messages (Part 1 of 5)

IHK

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                                             | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|-------------------------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                                           | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   | x |   |   |   |   | IHK000I RJSTART ACCEPTED termid unitname                                                  |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK001I { uuuu kkk { OFF<br>OFF termid<br>ON termid unitname }<br>NO USERS IN DIRECTORY } | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IHK003I RJEND ACCEPTED termid                                                             |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK004I NO JOB(S) IN SYSTEM [jobname]                                                     | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IHK005I JOB(S) NOT COMPLETE jobname userid                                                | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   | x |   | IHK007I JOB DELETED jobname                                                               |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IHK011I MSG PENDING STARTUP { NONE<br>termid<br>termid NONE }                             | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK012I MSG QUEUED FOR DELIVERY { userid<br>termid<br>TERMINALS }                         |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK013I MSG IGNORED { userid<br>termid<br>DISK ERROR }                                    |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK014I MAX JOBS EXCEEDED jobname                                                         |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IHK016I RJE CLOSED DOWN                                                                   |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   | x |   | IHK019I JOB WAITING DELIVERY jobname                                                      | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK024I IPL REQD FOR START RJE                                                            |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   | x |   | IHK025I START RJE REJECTED                                                                | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   | x | IHK026I CENOUT jobname (class,....,class)                                                 | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   | x |   | IHK027I { termid { I<br>A unitname<br>P unit uuu }<br>NO ACTIVE WORK STATIONS }           | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   | x | IHK028I { jobname uuu {aaa} {COMP} {I<br>N/A} {INCP} {D nnn} }<br>NO DEFERRED OUTPUT uuu  | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   | x | IHK030I DELETED FROM USER DIRECTORY userid key                                            | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   | x | IHK031I ADDED TO USER DIRECTORY userid key                                                | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   | x | IHK032I USER DIRECTORY FULL userid key                                                    | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   | x | IHK033I MSGS DELETED FOR WORK STATION termid                                              | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   | x | IHK034I MSG CANNOT BE ADDED {BRDCST } termid<br>{DELAYED}                                 | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   | x | IHK035I INVALID SLOT NUMBER BRDCST                                                        | x             |   |   |   |   |   |   |   |   |   |    |    |    |

Figure 30. Routing and Descriptor Codes of Remote Job Entry and Conversational Remote Job Entry Messages (Part 2 of 5)

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                                                                                                                                                                                                                                                                                                                         | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |  |
|------------------|---|---|---|---|---|---|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|--|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                                                                                                                                                                                                                                                                                                                       | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |
|                  |   |   |   | x |   |   |   | IHK036I BRDCST {NONE<br>{nn message}                                                                                                                                                                                                                                                                                                                                  | x             |   |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   | x |   |   |   |   | IHK037I INFORM INACTIVE WORK STATION jobname userid<br>termid {N<br>{O}                                                                                                                                                                                                                                                                                               |               | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IHK038I INVALID LINENAME SHOW                                                                                                                                                                                                                                                                                                                                         | x             |   |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IHK040I INVALID USERID operation                                                                                                                                                                                                                                                                                                                                      | x             |   |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IHK041I INVALID PROTECTION KEY userid                                                                                                                                                                                                                                                                                                                                 | x             |   |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IHK042I INVALID TERMID operation                                                                                                                                                                                                                                                                                                                                      | x             |   |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IHK047I REQD PARAMETER MISSING operation                                                                                                                                                                                                                                                                                                                              | x             |   |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IHK048I ILLEGAL DELIMITER operation                                                                                                                                                                                                                                                                                                                                   | x             |   |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IHK049I ILLEGAL CONTINUATION operation                                                                                                                                                                                                                                                                                                                                | x             |   |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IHK050I UNDEFINED KEYWORD operation                                                                                                                                                                                                                                                                                                                                   | x             |   |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IHK051I MULTIPLE USE OF KEYWORD operation                                                                                                                                                                                                                                                                                                                             | x             |   |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IHK055I INCORRECT TEXT LENGTH operation                                                                                                                                                                                                                                                                                                                               | x             |   |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   | x |   |   |   |   | IHK060I ABNORMAL CENTRAL CLOSEDOWN                                                                                                                                                                                                                                                                                                                                    |               | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IHK061I OUT OF SPACE {SYSIN jobname<br>SYS1.SYSJOBQE<br>EMITTER WORKAREA}                                                                                                                                                                                                                                                                                             |               | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   | x |   |   |   |   | IHK063I DISK ERROR { WRITING TABLE ENTRY (1)<br>ROLLIN TABLES RJE ABORTED (2)<br>BRDCST DIRECTORY (3)<br>BRDCST MSG (4)<br>DELAYED MSG DIRECTORY (5)<br>DELAYED MSG (6)<br>JED [jobname/PURGE SYSTEM] (7)<br>Q MGR RJE ABORTED (8)<br>Q MGR (jobname) (9)<br>(volume serial jobname ddname) (10)<br>IN CLOSEDOWN (11)<br>addr,dev,ddname,op,err,trkaddr, accmeth (12) |               | x |   | x |   |   |   |   |   |   |    | x  |    |  |
|                  |   |   | x |   |   |   |   | IHK064I LINE xxx NOT OPERATIONAL                                                                                                                                                                                                                                                                                                                                      |               | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   | x |   |   |   |   | IHK065I UNABLE TO OPEN DDNAME=xxxxxxxx                                                                                                                                                                                                                                                                                                                                |               | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   | x |   |   |   |   | IHK066I termid NOW RESPONDING TO POLLING                                                                                                                                                                                                                                                                                                                              |               | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   | x |   |   |   |   | IHK067I termid NOT RESPONDING TO POLLING                                                                                                                                                                                                                                                                                                                              |               | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IHK068I RJE SUBTASK ABENDED                                                                                                                                                                                                                                                                                                                                           |               | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IHK200I LOGOFF userid                                                                                                                                                                                                                                                                                                                                                 | x             |   |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IHK201I ACTIVE CRJE USER userid lineaddress time                                                                                                                                                                                                                                                                                                                      | x             |   |   |   |   |   |   |   |   |   |    |    |    |  |

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Figure 30. Routing and Descriptor Codes of Remote Job Entry and Conversational Remote Job Entry Messages (Part 3 of 5)

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| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                              | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|----------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                            | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   |   | x |   |   |   | IHK202I USERID INVALID/NOT FOUND { SHOW<br>MSG<br>USERID } ICR userid      | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK203I START OF CRJE MESSAGES                                             | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK204I USERID PREVIOUSLY ASSIGNED userid                                  | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK205I INVALID PASSWORD password                                          | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK206I TEXT MUST BE 1 TO 40 CHARACTERS LONG { BRDCST<br>chars<br>MSG }    | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK207I DELETED FROM USER LIST-userid                                      | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK208I ADDED TO USER LIST-userid                                          | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK209I MSG NOT SAVED BRDCST chars                                         | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK210I LINEADDRESS INVALID/NOT FOUND lineaddress                          | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK211I JOB NOT IN SYSTEM jobname                                          | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IHK212I LOGON userid                                                       | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK213I END OF CRJE MESSAGES                                               | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK214I CENOUT jobname                                                     | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK215I START CRJE REJECTED                                                | x             | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IHK216I DISK ERROR { ACTIVE AREA } { START<br>{ CRJE.SYSLIB } { (dsname) } |               |   |   | x |   |   |   |   |   |   |    | x  |    |
|                  |   |   |   | x |   |   |   | IHK217I CRJE BROADCAST MESSAGES START                                      | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK218I CRJE BROADCAST MESSAGES END                                        | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK219I OUT OF MAIN STORAGE [START]                                        |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK220I nnn LINE NOT OPERATIONAL                                           |               |   |   |   |   |   |   |   | x |   |    | x  |    |
|                  |   |   |   | x |   |   |   | IHK221I LOGONS SUPPRESSED                                                  | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK222I ABNORMAL CRJE CLOSEDOWN                                            |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK223I CRJE NOW ACTIVE                                                    |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK224I NO ACTIVE AREA FOR RESTART                                         |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK225I CRJE BROADCAST MESSAGE(S) DELETED [nnnn]                           | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK226I OPERAND MISSING/INVALID command operand                            | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK227I NO JOBS IN SYSTEM                                                  | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK228I UNABLE TO OPEN { ACTIVE } [RLN=xxxx]<br>{ ddname }                 |               |   | x |   |   |   |   |   |   |   |    | x  | x  |
|                  |   |   |   | x |   |   |   | IHK229I LOGONS RESUMED                                                     | x             |   |   |   |   |   |   |   |   |   |    |    |    |

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Figure 30. Routing and Descriptor Codes of Remote Job Entry and Conversational Remote Job Entry Messages (Part 4 of 5)

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| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                          | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|--------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                        | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   | x |   |   |   |   | IHK230I CRJE CLOSED DOWN                               |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK231I JOB NOT COMPLETE jobname [userid]              | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK232I NO CRJE BROADCAST MESSAGES                     | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK233I NO CRJE DELAYED MESSAGES [userid]              | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK234I ACTIVE AREA NOT ON 2311 OR 2314                |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK235I DD CARD NOT IN PROCEDURE {dsname}<br>{ddname}  |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK236I MAXIMUM NO. OF CRJE USER MESSAGES REACHED      |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK237I MAXIMUM BRDCST IDENTIFIER EXCEEDED - LAST=nnnn | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK238I SPECIFIC SHOW SESS MAXIMUM EXCEEDED - userid   | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK239I SHOW SESS NOT IN EFFECT [userid]               | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK240I ACTIVE AREA OUT OF SPACE                       |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK241I LIBRARY I/O ERROR ddname CRJE.LIB.userid       |               |   |   |   | x |   |   |   |   |   |    | x  |    |
|                  |   |   |   | x |   |   |   | IHK242I ACTIVE AREA I/O ERROR-ABNORMAL CRJE CLOSEDOWN  |               |   | x |   | x |   |   |   |   |   |    |    | x  |
|                  |   |   |   | x |   |   |   | IHK243I LINE BEING ACTIVATED lineaddress               | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK244I LINE DEACTIVATED lineaddress                   | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK245I {nnn}<br>{NO} ACTIVE CRJE USERS                | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK246I QUEUE MANAGER DISK ERROR [jobname]             |               |   | x |   | x |   |   |   |   |   |    |    | x  |
|                  |   |   |   | x |   |   |   | IHK247I NO CRJE USERS                                  | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK248I INACTIVE CRJE USER userid                      | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK249I SHOW SESS IN EFFECT [userid]                   | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK250I SHOW SESS RELEASED [userid]                    | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK251I LINE NOT ACTIVE lineaddress                    | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK252I USER LIST FULL [userid]                        | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK253I JOB WAITING DELIVERY jobname                   | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK254I ILLEGAL DELIMITER command operand              | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK255I MESSAGES DELETED FOR userid                    | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK256I MSG QUEUED FOR DELIVERY userid                 | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK257I JOB COMPLETE jobname userid                    | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK258I MODIFY BEING PROCESSED lineaddress             | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK259I INVALID BRDCST IDENTIFIER operand              | x             |   |   |   |   |   |   |   |   |   |    |    |    |

IHK

Figure 30. Routing and Descriptor Codes of Remote Job Entry and Conversational Remote Job Entry Messages (Part 5 of 5)

IHK

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                            | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|----------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                          | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   | x |   |   |   |   | IHK260I NO SPACE AVAILABLE FOR SYNTAX CHECKER WORK AREA  |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IHK261I ACTIVE AREA CONTAINS MULTIPLE EXTENTS            |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK263I REQUIRED PARAMETER MISSING { START }<br>{ EXEC } | x             | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK264I LINE NOT OPEN lineaddress                        | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK265I LINE ALREADY ACTIVE lineaddress                  | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IHK267I MAXIMUM NO. OF CRJE BROADCAST MESSAGES REACHED   |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK268I CRJE BRDCST MESSAGE ADDED nnnn                   | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK269I CRJE BRDCST MESSAGE REPLACED nnnn                | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IHK270I ACTIVE AREA I/O ERROR                            |               | x | x |   |   |   |   |   |   |   | x  |    |    |
|                  |   |   |   | x |   |   |   | IHK271I MODIFY DEACTIVATE UNSUCCESSFUL lineaddress       | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IHK272I JOB DELETED jobname                              | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IHK273I OUT OF SPACE CRJE.SYSLIB (dsname)                |               | x | x |   |   |   |   |   |   |   | x  |    |    |
|                  |   |   |   | x |   |   |   | IHK274I CRJE SUBTASK ABEND xxx                           |               | x |   |   |   |   |   |   |   |   |    |    |    |



Figure 31. Routing and Descriptor Codes for Generalized Trace Facility Messages (Part 2 of 2)

IHL

IHL

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                           | Routing Code |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|-------------------------------------------------------------------------|--------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                         | *            | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| x                |   |   |   |   |   |   |   | IHL112A UNALLOWABLE PARENTHESIS IN FOR THE PROMPTING SEQUENCE -- xxxxxx |              |   | x |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IHL113A LMT ERROR. EXCEEDED 50 DEVICES FOR IO=                          |              |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   |   |   | IHL114A LMT ERROR. EXCEEDED 50 DEVICES FOR SIO=                         |              |   | x |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IHL115A INVALID INTERRUPT CODE SPECIFIED                                |              |   | x |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IHL116A INVALID SVC NUMBER SPECIFIED                                    |              |   | x |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IHL117A LMT ERROR. EXCEEDED 50 SVC NUMBERS                              |              |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IHL118I ERROR IN IHLxxxx. yyy DISABLED. TIME=hh.mm.ss                   |              |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IHL120I INVALID SYSTEM FOR GTF -- INITIALIZATION TERMINATED             |              |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IHL121I SYS1.PARMLIB INPUT INDICATED                                    |              |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IHL122I MEMBER NOT SPECIFIED. PARMLIB IGNORED                           |              |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IHL123I MEMBER ddn NOT FOUND. PARMLIB IGNORED                           |              |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IHL124I GTF PARMLIB INPUT ERROR                                         |              |   | x |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IHL125A RESPECIFY TRACE OPTIONS OR REPLY U                              |              |   | x |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IHL126A ILLEGAL SPECIFICATION OF TRACE OPTIONS                          |              |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IHL127I GTF PARMLIB I/O ERROR text                                      |              |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IHL128I GTF MODULE mod NOT FOUND                                        |              |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IHL130I INSUFFICIENT CORE FOR TRACE INITIALIZATION                      |              |   | x |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   | x |   |   |   |   | IHL131I GTF PARMLIB ERROR DURING OPEN -- cc                             |              |   | x |   |   |   |   |   |   |   |    |    |    |

IKA

Figure 32. Routing and Descriptor Codes of Graphic Job Processor and Satellite Graphic Job Processor Messages (Part 1 of 2)

IKA

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                     | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |  |
|------------------|---|---|---|---|---|---|---|---------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|--|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                   | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |
|                  |   |   | x |   |   |   |   | IKA001I utn - GWRITE REG 15 = dd                  |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   | x |   |   |   |   | IKA002I utn - GCNTRL ALM, REG 15 = dd             |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   | x |   |   |   |   | IKA003I utn - GCNTRL STR, REG 15 = dd             |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   | x |   |   |   |   | IKA004I utn - GCNTRL RMV, REG 15 = dd             |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   | x |   |   |   |   | IKA005I utn - GREAD CUR, REG 15 = dd              |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   | x |   |   |   |   | IKA006I utn - BUF SEG OVFL                        |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   | x |   |   |   |   | IKA007I utn - OF UNKNOWN ORIGIN                   |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   | x |   |   |   |   | IKA008I utn - CST ENTRY NOT ON FULLWORD BOUNDARY  |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   | x |   |   |   |   | IKA011I utn - lmd - OCTxxxxx ERR                  |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IKA013I prn BAD KEY                               |               | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   | x |   |   |   |   | IKA024I utn - EXTRACT RECORD, UNKNOWN KEY         |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   | x |   |   |   |   | IKA029I utn - lmd - BAD POST CODE                 |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   | x |   |   |   |   | IKA032I utn PSTENTRY LNG INVALID                  |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   | x |   |   |   |   | IKA035I utn - lmd - CCTCCR VIOLATION              |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   | x |   |   |   |   | IKA037I utn LOG ON                                |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IKA040I prn PARM LNG INVALID                      |               | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IKA041I MAKE prn { ALPHA<br>NUMERIC<br>A THRU O } |               | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IKA042I prn INVALID                               |               | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IKA043I DONT USE MODIFY                           |               | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IKA044I I/O ERR, GFX                              |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   | x |   |   |   |   |   | IKA045E INFORM USER ON utn                        |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IKA046I START GFX IGNORED                         |               | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IKA047I jjj - SYSOUT FOR Y DELETED                |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IKA048I jjj SYSOUT ON Y                           |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IKA049I DEQ ERR, CODE=hh                          |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IKA050I utn LOG OFF                               |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   | x |   |   |   |   |   | IKA051E GFX READY                                 |               | x | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IKA053I MAKE MSGF UNIQUE                          |               | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IKA054I GFX STOPPED                               |               | x | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IKA055I utn UNSUCCESSFUL SPAR dd                  |               |   | x |   |   |   |   |   |   |   |    |    |    |  |





IKD

Figure 33. Routing and Descriptor Codes of Satellite Graphic Job Processor Messages

IKD

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                        | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |  |
|------------------|---|---|---|---|---|---|---|--------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|--|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                      | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |
| x                |   |   |   |   |   |   |   | IKD001D utn - INITIALIZATION FAILURE |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
| x                |   |   |   |   |   |   |   | IKD002D utn - LINE ERROR             |               |   | x |   |   |   |   |   |   | x |    |    |    |  |
| x                |   |   |   |   |   |   |   | IKD003D utn - SYNCHRONIZATION ERROR  |               |   | x |   |   |   |   |   |   |   |    |    |    |  |
|                  |   | x |   |   |   |   |   | IKD005I utn - DCB NOT OPENED         |               |   | x |   |   |   |   |   |   | x |    |    |    |  |

IKF

Figure 34. Routing and Descriptor Codes of American National Standard COBOL Messages

IKF

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                  | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |  |
|------------------|---|---|---|---|---|---|---|----------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|--|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |
| x                |   |   |   |   |   |   |   | IKF000A- xxx                                                   |               |   | x |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   |   | x |   | IKF111I- EXCEPTIONAL I/O CONDITION SENSED PROCESSING<br>ddname |               |   | x |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   |   | x |   | IKF888I- 'UNSUCCESSFUL SORT FOR sort-file-name'                |               |   | x |   |   |   |   |   |   |   |    |    | x  |  |
| x                |   |   |   |   |   |   |   | IKF990D- 'AWAITING REPLY'                                      |               |   | x |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   |   | x |   | IKF999I- UNSUCCESSFUL OPEN FOR ddname.                         |               |   | x |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   |   | x |   | IKF0003I-D message                                             |               |   | x |   |   |   |   |   |   |   |    |    | x  |  |

| Descriptor Codes |   |   |   |   |   |   |   | Operator Messages                                                    | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|----------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                      | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   | x |   |   |   |   | IKJ000I cm userid                                                    |               | x |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IKJ001D START ERROR - REPLY, 'MEMBER NAME', 'U',OR 'CANCEL'          | x             |   |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IKJ002D START ERROR - REPLY, 'LIST', 'U', OR 'CANCEL'                | x             |   |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IKJ003D START ERROR - REPLY, 'FORM', 'FORM=ALL', 'U', OR 'CANCEL'    | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ004I START REJECTED - OPEN FOR SYS.PARMLIB                        | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ005I MEMBER OF SYS1.PARMLIB NOT FOUND                             | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ006I START REJECTED - I/O ERROR READING SYS1.PARMLIB              | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ007I START REJECTED - TIME SHARING IS IN PROCESS                  | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ008I BLDL FAILED FOR MODULE mod FOR TSO LINK PACK AREA            | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ009I START REJECTED - BLDL FAILED FOR A TSO MODULE                | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ010I START REJECTED - BLDL FAILED FOR A TSO DRIVER MODULE, mod    | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ011I START REJECTED - MODULE, mod, COULD NOT INITIALIZE           | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ012I DRIVER=PARAMETER DOES NOT HAVE A RIGHT PARENTHESIS           | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ013I {LPA=} PARAMETER IS NOT ALLOWED ON THE START {DUMP=} COMMAND | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ014I START REJECTED - I/O ERROR SEARCHING SYS1. LINKLIB DIRECTORY | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ015I THE TIME SHARING SYSTEM CANNOT BE INITIALIZED                | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ016I REGNMAX=nn - REGIONS STARTED=xx                              | x             | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ017I SMF NOT ACTIVE, SMF PARAMETER IGNORED                        | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ018I SMF OPI BIT IS SET - SMF PARAMETER IGNORED                   | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ019I TSO IS INITIALIZED                                           | x             | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ021I START REJECTED - INVALID CORE REQUEST FOR TSC                | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   | x |   |   |   |   |   | IKJ024D TSO STOP IN PROGRESS, REPLY 'U' OR 'FSTOP'                   |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ025I TSO UNABLE TO TERMINATE DUE TO REGION FAILURE                |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ026I HOLD AND REGSIZE SPECIFIED FOR SAME REGION=n                 | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  | x |   |   |   |   |   |   | IKJ027D REPLY 'HOLD', 'REGSIZE', 'U', OR 'CANCEL'                    | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ030I ddname,xxxxx,yyyyy SWAP DATA SET FORMAT                      | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ031I SWAP DATA SET(S) ARE FULL                                    |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ033I ddname SWAP DATA SET OPEN FAILED                             | x             |   |   |   |   |   |   |   |   |   |    | x  |    |
|                  | x |   |   |   |   |   |   | IKJ034D FORMAT ddname SWAP DATA SET, REPLY 'YES' OR 'NO'             | x             |   |   |   |   |   |   |   |   |   |    |    |    |

| Descriptor Codes |   |   |   |   |   |   |   | Operator Messages                                                    | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|----------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                      | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   |   | x |   |   |   | IKJ035I dd INVALID SWAP DEVICE,ddname                                | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ036I SWAP DATA SET STRUCTURE INVALID                              | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ037I I/O ERROR WHILE SWAPPING OUT TJID=xxxx                       |               | x |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IKJ040D RESPECIFY 'BACKGROUND=nn' OR 'CANCEL'                        | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ041I BACKGROUND PERCENTAGE INVALID                                | x             |   |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IKJ043D RQEL PARM NOT SUPPLIED FOR REGION nn - SPECIFY OR CANCEL     | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ050I UNABLE TO START TS REGION nn PROTECTION KEY UNAVAILABLE      | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ051I TIME SHARING REGION nn HAS TERMINATED                        | x             | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ052I TIME SHARING REGION nn HAS STARTED                           | x             | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ053I INSUFFICIENT MAIN STORAGE AVAILABLE FOR TS REGION nn         | x             |   |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IKJ054D REPLY 'RETRY' OR 'CANCEL'                                    | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ055I TIME SHARING REGION xx HAS FAILED - TSO CANNOT BE TERMINATED |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ060I START REJECTED - UNABLE TO ESTABLISH A STAE ENVIRONMENT      |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ061I THIS KEYWORD IS INVALID - ccccccc=nnnn                       | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ062I TSO REGION nn NO LONGER AVAILABLE FOR LOGONS                 |               | x |   |   |   |   |   |   |   |   | x  |    |    |
|                  |   |   |   | x |   |   |   | IKJ063I THIS KEYWORD IS MISSING - ccccccc                            | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ064I THE VALUE OF THIS KEYWORD IS INVALID - ccccccc=nnnn          | x             |   |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IKJ066D REPLY 'keyword=value', ['U'] or 'CANCEL'                     | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ067I THE ABOVE KEYWORD AND ITS VALUE WILL BE IGNORED              | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ072I ccccccc=nnnn EXCEEDS MAXIMUM OF MAX                          | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ073I REGION nn NOT ACTIVE, REGSIZE/HOLD IGNORED                   | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ074I nn DOES NOT EXIST, REGSIZE INVALID                           | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ075I TSO/SMF OPTIONS CANNOT EXCEED aaaaa bbbbb                    | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ076I SUM OF REGSIZE AND LSQA EXCEEDS MAX - 16382                  | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ078I jjj sss TSO IS STOPPING                                      | x             | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ079I jjj sss TSO HAS BEEN MODIFIED                                | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ080I TSO MODIFY CANCELLED BY OPERATOR                             | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ083I nn NOT ACTIVE, HOLD INVALID                                  | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ084I nn DOES NOT EXIST, HOLD INVALID                              | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ085I TSO MODIFY/STOP SUBTASK TERMINATED                           |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ086I REGION nn HAS FAILED, REGSIZE/HOLD IGNORED                   |               | x |   |   |   |   |   |   |   |   |    |    |    |

| Descriptor Codes |   |   |   |   |   |   |   | Operator Messages                                             | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|---------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                               | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   |   | x |   |   |   | IKJ090I TSO DUMP FUNCTION INOPERATIVE                         | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ091I TSO DUMP DATA SET ON INVALID DEVICE                   | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ092I TSO DUMP INCOMPLETE - UNABLE TO DUMP ALL OF STORAGE   | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   | x |   |   |   |   |   | IKJ093I TSO MAIN STORAGE DUMP COMPLETE SWAP UNITS RESERVED    |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ094I TSO DUMP OF MAIN STORAGE BYPASSED                     | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ095I ddd TSO UNIT, DUMP DATA SET FULL                      |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ401I START TCAM BEFORE TSO                                 | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   | x |   |   |   | IKJ402I TCAM PROCEDURE DOES NOT SUPPORT TSO                   | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IKJ403I LINEGROUP FOR DD ddn NOT OPENED                       |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   | x |   |   |   |   |   | IKJ500I BRDR OPEN ERROR code                                  |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ501I BRDR INVALID INPUT                                    |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ502I BRDR SYNAD synad                                      |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ503I BRDR REQUIRED DD MISSING FROM PROC                    |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ504I BRDR R/I ERROR code                                   |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ505I BRDR PARAMETER MISSING                                |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ506I BRDR MISSING VOL volser FOR JOB jjj                   |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ507I BRDR INCONSISTENT VOLSER/DEVICE volser devtype        |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ508I BRDR DATA SET NOT FOUND ON VOL 'volser' FOR JOB 'jjj' |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ509I BRDR QUEUE READ ERROR                                 |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ510I BRDR QUEUE DELETE ERROR                               |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ511I BRDR QUEUE DEQUEUE ERROR                              |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ512I BRDR QUEUE ENQUEUE ERROR                              |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ513I BRDR JOB 'jjj' WAS CANCELLED                          |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ514I BRDR INVALID VOLUME FOR JOB 'jjj'                     |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ520I SUBMIT QUEUE FULL                                     |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ549I TIME SHARING JOB jjj CANCELLED                        |               |   | x |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ570I SEND NOT SUPPORTED IN THIS SYSTEM                     | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ571I INVALID USERID(S) userid, userid,...                  | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ572I USER(S) userid NOT LOGGED ON, MESSAGE CANCELLED       | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ573I SEND SYNTAX ERROR. COMMAND REJECTED                   | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ574I NO SPACE IN BROADCAST DATA SET FOR MAIL NOTICES       | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ575I DATA SET SYS1.BROADCAST NOT USABLE                    | x             |   |   |   |   |   |   |   |   |   |    |    |    |

| Descriptor Codes |   |   |   |   |   |   |   | Operator Messages                                                                                                        | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |  |
|------------------|---|---|---|---|---|---|---|--------------------------------------------------------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|--|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                                                                          | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |  |
|                  |   |   |   | x |   |   |   | IKJ576I NO BROADCAST MESSAGE(S)                                                                                          | x             |   |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IKJ578I BROADCAST MSGNO=nn                                                                                               | x             |   |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IKJ579I CANNOT EXECUTE SEND                                                                                              | x             |   |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   | x |   |   |   | IKJ580I MESSAGE TRUNCATED TO 115 CHARACTERS                                                                              | x             |   |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   | x |   |   |   |   | IKJ600I TSOLOGON {I/O<br>OBTAIN } ERROR,<br>{OPEN<br>DDNAME ddname, USER<br>{userid } ,PROC {PROC<br>{UNKNOWN} {UNKNOWN} |               | x |   |   |   |   |   |   |   |   |    | x  |    |  |
|                  |   |   | x |   |   |   |   | IKJ601I TSOLOGON ABEND nnn, USER<br>{userid } ,PROC {procname<br>{UNKNOWN} {UNKNOWN}                                     |               | x |   |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   | x |   |   |   |   | IKJ602I INCONSISTENT AUTHORIZATION DATA FOR userid                                                                       |               | x |   |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   | x |   |   |   |   | IKJ603I TSOLOGON TERMINATED, INSTALLATION EXIT<br>{ABEND } nnn<br>{ERROR }                                               |               | x |   |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   | x |   |   | IKJ605I TSOLOGON TERMINATED. TOO MANY ATTEMPTS.<br>USER {userid<br>{UNKNOWN}                                             |               | x |   |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   | x |   |   | IKJ606I TSOLOGON REJECTED, USERID, userid, IN USE                                                                        |               | x |   |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   |   |   | x |   |   | IKJ607I TSOLOGON REJECTED. nnnnK REGION. NOT AVAILABLE.<br>USER userid                                                   |               | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   | x |   |   |   |   | IKJ608I TSOLOGON TERMINATED. {srname } ERROR nnn.<br>{macname<br>USER {userid } ,PROC {procname<br>{UNKNOWN} {UNKNOWN}   |               | x |   |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   | x |   |   |   |   | IKJ609I TSOLOGON REQUIRED DDNAME, ddname, MISSING                                                                        |               | x |   |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   | x |   |   |   |   | IKJ610I TSOLOGON REGION NOT INITIALIZED                                                                                  |               | x |   |   |   |   |   |   |   |   |    |    | x  |  |
| x                |   |   |   |   |   |   |   | IKJ650D TSO NOT ACTIVE. TSTRACE WAITING.                                                                                 | x             | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   | x |   |   |   |   | IKJ651I NO VALUE SPECIFIED FOR TRACE WRITER TRPARM                                                                       | x             | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   | x |   |   |   |   | IKJ652I ZERO VALUE SPECIFIED FOR TRACE WRITER TRPARM                                                                     | x             | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   | x |   |   |   |   | IKJ653I TRACE WRITER ALREADY ACTIVE                                                                                      | x             |   |   |   |   |   |   |   |   |   |    |    |    |  |
| x                |   |   |   |   |   |   |   | IKJ654D TSO STOPPED, TSTRACE WAITING                                                                                     | x             | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   | x |   |   |   |   | IKJ655I TRACE WRITER CANNOT ESTABLISH STAE ENVIRONMENT                                                                   | x             | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   | x |   |   |   |   | IKJ656I INSUFFICIENT SPACE AVAILABLE FOR TRACE<br>WRITER BUFFER                                                          | x             | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   | x |   |   |   |   | IKJ657I NO DD STATEMENT FOR TRACE DATA SET                                                                               | x             | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   | x |   |   |   |   | IKJ658I I/O ERROR ON TRACE DATA SET                                                                                      | x             | x |   |   |   |   |   |   |   |   |    |    | x  |  |
|                  |   |   | x |   |   |   |   | IKJ659I TRACE DATA SET BLKSIZE LESS THAN MINIMUM<br>ALLOWED                                                              | x             | x |   |   |   |   |   |   |   |   |    |    |    |  |
|                  |   |   |   |   | x |   |   | IKJ660I TRACE WRITER TRPARM VALUE EXCEEDS MAXIMUM<br>ALLOWED                                                             | x             | x |   |   |   |   |   |   |   |   |    |    |    |  |

IKJ

Figure 35. Routing and Descriptor Codes of TSO Messages (Part 5 of 5)

IKJ

| Descriptor Codes |   |   |   |   |   |   |   | Operator Messages                                    | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                      | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   |   | x |   |   |   | IKJ661I NON-NUMERIC CHARACTER IN TRACE WRITER TRPARM | x             |   |   | x |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ662I TSTRACE TERMINATED                           | x             | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   | x |   |   |   |   | IKJ663I TSO ACTIVE, TSTRACE RECORDING                | x             | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   | x |   | IKJ681I I/O ERROR DURING TRACE PROCESSOR PROGRAM     |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IKJ682I UNABLE TO OPEN SYSPRINT DATA SET             |               |   |   |   |   |   |   |   |   |   |    |    | x  |

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                              | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|----------------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                            | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|                  |   |   |   |   | x |   |   | IMA002I DATA SET ASSOCIATED WITH THE //xxxx DD CARD CANNOT BE OPENED       |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IMA101I SYSLIB I/O ERROR device, operation, error condition, access method |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   | x |   | IMA102I SYSLIB DD SPECIFICATION ERROR                                      |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   | x |   | IMA103I CSECT ABSENT - ALL CSECTS FOLLOW                                   |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   | x |   | IMA104I VERIFY REJECT - SET NO GO SWITCH                                   |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   | x |   | IMA105I INVALID CARD OR NO GO SWITCH SET                                   |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   | x |   | IMA106I PATCH OVERLAPS - CHECK DUMP                                        |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   | x |   | IMA107I DS AREA NOT INCLUDED IN TEXT                                       |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   | x |   | IMA109I ERROR - ODD NUMBER DIGITS - IGNORED                                |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   | x |   | IMA110I NO DIRECTORY SSI - SETSSI IGNORED                                  |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   | x |   | IMA111I PREVIOUS ERROR - SETSSI IGNORED                                    |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   | x |   | IMA112I MEMBER NOT FOUND - SETSSI IGNORED                                  |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   | x |   | IMA114I PERMISSION TO UPDATE VTOC DENIED                                   |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   | x |   | IMA116I ENTER IMASPZAP CONTROL STATEMENT OR END                            |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   | x |   | IMA117D REQUEST PERMISSION TO OPEN VTOC FOR UPDATE REPLY Y OR N            |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   | x |   | IMA118I SYSPRINT DD NOT IN INPUT                                           |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IMB001I SYSPRINT DD STATEMENT MISSING                                      |               |   |   |   |   |   |   |   |   |   |    |    | x  |
|                  |   |   |   |   |   | x |   | IMB002I SNAPDUMP DD STATEMENT MISSING                                      |               |   |   |   |   |   |   |   |   |   |    |    | x  |
| x                |   |   |   |   |   |   |   | IMC001A SPECIFY SELECT PARAMETERS                                          | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IMC002A COMMAND ERROR - ENTER QDUMP PARAMETERS                             | x             |   |   |   |   |   |   |   |   |   |    |    |    |
| NONE             |   |   |   |   |   |   |   | IMC003A QUEUE NOT FOUND ON SPECIFIED DEVICE - ENTER QDUMP PARAMETERS       | NOTE 1        |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   | x |   | IMC004I QDUMP COMPLETED                                                    | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   | x |   | IMC005I SPECIFIED QUEUE IS EMPTY                                           | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   |   | x |   | IMC006I THESE JOBS NOT FOUND<br>jobname 1<br>jobname 2, etc.               | x             |   |   |   |   |   |   |   |   |   |    |    |    |
| NONE             |   |   |   |   |   |   |   | IMC007E K ddd, {SCRCH}/JQDUMP<br>{ser}                                     | NOTE 1        |   |   |   |   |   |   |   |   |   |    |    |    |
| NONE             |   |   |   |   |   |   |   | IMC008A M ddd, {SCRCH}/JQDUMP<br>{SLTAPE}                                  |               |   |   |   |   |   |   |   |   |   |    |    |    |
| NONE             |   |   |   |   |   |   |   | IMC009A ENTER TODAY'S DATE IN THE FOLLOWING FROM YYDDD                     |               |   |   |   |   |   |   |   |   |   |    |    |    |
| NONE             |   |   |   |   |   |   |   | IMC010I TAPE IS STANDARD LABELED, DSN=JQDUMP                               |               |   |   |   |   |   |   |   |   |   |    |    |    |

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts | Routing Codes                                                                                                                                                                      |        |   |   |   |   |   |   |   |   |    |    |    |   |
|------------------|---|---|---|---|---|---|---|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---|---|---|---|---|---|---|---|----|----|----|---|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |               | *                                                                                                                                                                                  | 1      | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |   |
| NONE             |   |   |   |   |   |   |   | IMC012E       | TAPE PROTECTED FROM USE                                                                                                                                                            | NOTE 1 |   |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   |   |   |   |   | IMC013A       | adr, INT REQ                                                                                                                                                                       |        |   |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   |   |   |   |   | IMC014E       | TAPE HAS USACII LABELS                                                                                                                                                             |        |   |   |   |   |   |   |   |   |    |    |    |   |
| x                |   |   |   |   |   |   |   | IMC016I       | PERMANENT I/O ERROR ON ddname - EXECUTION TERMINATED                                                                                                                               |        |   |   |   |   |   |   |   |   |    |    | x  |   |
|                  |   |   |   | x |   |   |   | IMC017I       | FILE {OSJQDIN } CANNOT BE<br>{OSJQDOUT}<br>OPENED                                                                                                                                  |        |   |   |   |   |   |   |   |   |    |    |    | x |
|                  |   |   |   |   | x |   |   | IMD150I       | FILE PRINTER CANNOT BE OPENED                                                                                                                                                      |        |   |   |   |   |   |   |   |   |    |    |    | x |
|                  |   |   |   |   |   | x |   | IMD151I       | INSUFFICIENT MAIN STORAGE - EXECUTION TERMINATED                                                                                                                                   |        |   |   |   |   |   |   |   |   |    |    |    | x |
|                  |   |   |   |   |   |   | x | IMD152I       | SYSUT1 IS DATA CELL - DEVICE NOT SUPPORTED                                                                                                                                         |        |   |   |   |   |   |   |   |   |    |    |    | x |
|                  |   |   |   |   |   |   | x | IMD153I       | PERMANENT I/O ERROR ON ddname - EXECUTION TERMINATED                                                                                                                               |        |   |   |   |   |   |   |   |   |    |    |    | x |
|                  |   |   |   |   |   |   | x | IMD154D       | REPLY DUMP XXXXXX, SAME, OR END                                                                                                                                                    |        | x |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   |   |   |   | x | IMD155D       | REPLY WITH GO, DESIRED FUNCTION, OR END                                                                                                                                            |        | x |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   |   |   |   | x | IMD156I       | REPLY WITH STOP TO TERMINATE CURRENT DUMP                                                                                                                                          |        | x |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   |   |   |   | x | IMD157I       | MOUNT NEW DUMP TAPE                                                                                                                                                                |        | x | x |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   |   |   |   | x | IMD158I       | I/O ERROR ON TAPE {ENTIRE TAPE WILL BE PRINTED<br>ONLY NUCLEUS AND SQA WILL<br>BE PRINTED<br>SELECT OPTION TO RETRY }                                                              |        | x |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   |   |   |   | x | IMD159I       | IMDPRDMP PROGRAM CHECK {ENTIRE TAPE WILL BE<br>PRINTED<br>ONLY NUCLEUS AND SQA<br>WILL BE PRINTED<br>SELECT OPTION TO RETRY<br>LINKPACK AREA MAP<br>ABORTED<br>QCB TRACE ABORTED } |        | x |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   |   |   |   | x | IMD161I       | FORMAT ERROR {ENTIRE TAPE WILL BE PRINTED<br>ONLY NUCLEUS AND SQA WILL BE<br>PRINTED<br>SELECT OPTION TO RETRY<br>LINKPACK AREA MAP ABORTED<br>QCB TRACE ABORTED }                 |        | x |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   |   |   |   | x | IMD162I       | JOB jobname {NOT FOUND }<br>{ROLLED OUT }                                                                                                                                          |        | x |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   |   |   |   | x | IMD163I       | GO FUNCTIONS TO BE PERFORMED [ongo operands]                                                                                                                                       |        | x |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   |   |   |   | x | IMD164I       | TAPE IS PRE-FORMATTED DUMP REMAINING PARAMETERS<br>IGNORED                                                                                                                         |        | x |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   |   |   |   | x | IMD165I       | ERROR ON PRECEDING CONTROL STATEMENT<br>[error descriptor]                                                                                                                         |        | x |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   |   |   |   | x | IMD167I       | INVALID DUMP NUMBER REPLY                                                                                                                                                          |        | x |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   |   |   |   | x | IMD168I       | DUMP DATA SET EMPTY - DD xxxxxxxx                                                                                                                                                  |        | x |   |   |   |   |   |   |   |    |    |    |   |
|                  |   |   |   |   |   |   | x | IMD176I       | TAPE DD NOT TAPE DEVICE AND NO SYSUT1 DD                                                                                                                                           |        |   |   |   |   |   |   |   |   |    |    |    |   |

| Descriptor Codes |   |   |   |   |   |   |   | Message Texts                                                         | Routing Codes |   |   |   |   |   |   |   |   |   |    |    |    |
|------------------|---|---|---|---|---|---|---|-----------------------------------------------------------------------|---------------|---|---|---|---|---|---|---|---|---|----|----|----|
| 1                | 2 | 3 | 4 | 5 | 6 | 7 | 8 |                                                                       | *             | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| x                |   |   |   |   |   |   |   | IMD181I DELETE ERROR - mod                                            |               |   |   |   |   | x |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IMD199D CONTINUE CONTROL STATEMENT OR RESPECIFY IF REQUESTED          | x             |   |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IMD200I INVALID CONTINUATION                                          |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IMD201I INVALID KEYWORD BEGINNING WITH xxx                            |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IMD202I INVALID PARENTHESES                                           |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IMD203I INVALID PARM VALUE FOR KEYWORD keywd                          |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IMD204I LENGTH OF PARM INVALID FOR KEYWORD keywd                      |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IMD205I DUPLICATE KEYWORD - keywd                                     |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IMD206I EXCESSIVE NO. PARM VALUES FOR KEYWORD keywd                   |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IMD207I INVALID DELIMITER FOR KEYWORD keywd                           |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IMD208I START VALUE EXCEEDS STOP VALUE IN STMTS ABOVE                 |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IMD209I INVALID USR EID OR RANGE                                      |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IMD210I ABOVE STMT IGNORED - RESPEC OR REPLY "RUNEDIT" WHEN CONTN REQ |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IMD211I EDIT OPTIONS IN EFFECT -- option list                         |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IMD212I RCD ON PG nnnn RET CODE ret cde RECVD FR MODULE mod           |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IMD213I PROCESSING CONTINUES - BYPASSING INTERFACE                    |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IMD214I CURRENT EDIT FUNCTION TERMINATED                              |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IMD215I FURTHER RECS REQUIRING mod WILL BE DUMPED IN HEX              |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IMD216I RCD AND OTHER INFO ON PG nnnn. PGM CHECK IN MODULE mod        |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IMD217I SYSM DATA, JOB OR TCB SELECTION NOT ALLOWED                   |               | x |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IMD218D REPLY 'C' TO EDIT W/O JOB/TCB SELECTION, 'S' TO TERMINATE     |               | x |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IMD219D EDIT DUMP - NO SELECT. REPLY DDNAME OR '0' TO TERMINATE       |               | x |   |   |   |   |   |   |   |   |    |    |    |
|                  |   |   |   |   | x |   |   | IMD220I NO EDIT DD CARD - ddname                                      |               | x |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IMD224I NO IMPUT BLOCKSIZE - ddname                                   |               | x |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IMD225I REG/PART nnnK TOO SMALL FOR EDIT BUFFER                       |               | x |   |   |   |   |   |   |   |   |    |    |    |
| x                |   |   |   |   |   |   |   | IMD226I START TIME NOT FOUND                                          |               | x |   |   |   |   |   |   |   |   |    |    |    |

| Descriptor Codes                  |   |   |   |   |   |   |   | Message Texts | Routing Codes                    |   |   |   |   |   |   |   |   |   |    |                                                    |    |  |  |  |  |  |  |  |  |  |  |
|-----------------------------------|---|---|---|---|---|---|---|---------------|----------------------------------|---|---|---|---|---|---|---|---|---|----|----------------------------------------------------|----|--|--|--|--|--|--|--|--|--|--|
| 1                                 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |               | *                                | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11                                                 | 12 |  |  |  |  |  |  |  |  |  |  |
|                                   |   |   |   |   |   | x |   | xxx...        | COBOL E                          |   | x |   |   |   |   |   |   |   |    |                                                    |    |  |  |  |  |  |  |  |  |  |  |
| NONE                              |   |   |   |   |   |   |   | NOTE 8        |                                  |   |   |   |   |   |   |   |   |   |    |                                                    |    |  |  |  |  |  |  |  |  |  |  |
|                                   |   |   |   |   |   |   |   |               |                                  |   |   |   |   |   |   |   |   |   |    | MAINTENANCE ANALYSIS LOG                           |    |  |  |  |  |  |  |  |  |  |  |
|                                   |   |   |   |   |   |   |   |               |                                  |   |   |   |   |   |   |   |   |   |    | CHANGE ITEM BYPASSED - CHANGE LEVELS DO NOT CHECK. |    |  |  |  |  |  |  |  |  |  |  |
|                                   |   |   |   |   |   |   |   |               |                                  |   |   |   |   |   |   |   |   |   |    | CHANGE ITEM BYPASSED - EXCEPT CARD.                |    |  |  |  |  |  |  |  |  |  |  |
|                                   |   |   |   |   |   |   |   |               |                                  |   |   |   |   |   |   |   |   |   |    | CHANGE ITEM BYPASSED - LOCAL-FIX FLAG ON.          |    |  |  |  |  |  |  |  |  |  |  |
|                                   |   |   |   |   |   |   |   |               |                                  |   |   |   |   |   |   |   |   |   |    | CHANGE ITEM BYPASSED - NOT IN SYSTEM.              |    |  |  |  |  |  |  |  |  |  |  |
|                                   |   |   |   |   |   |   |   |               |                                  |   |   |   |   |   |   |   |   |   |    | CHANGE ITEM BYPASSED - PTF FLAGS DO NOT CHECK.     |    |  |  |  |  |  |  |  |  |  |  |
|                                   |   |   |   |   |   |   |   |               |                                  |   |   |   |   |   |   |   |   |   |    | CHANGE ITEM EXPECTS PTF. PTF FLAG SET OFF.         |    |  |  |  |  |  |  |  |  |  |  |
|                                   |   |   |   |   |   |   |   |               |                                  |   |   |   |   |   |   |   |   |   |    | FORCE AND EXCEPT BOTH SPECIFIED. FORCE OVERRIDES.  |    |  |  |  |  |  |  |  |  |  |  |
|                                   |   |   |   |   |   |   |   |               |                                  |   |   |   |   |   |   |   |   |   |    | FORCED MODIFICATION TO A LFF. LFF FLAG RETAINED.   |    |  |  |  |  |  |  |  |  |  |  |
|                                   |   |   |   |   |   |   |   |               |                                  |   |   |   |   |   |   |   |   |   |    | FORCED MODIFICATION TO A PTF. PTF FLAG RETAINED.   |    |  |  |  |  |  |  |  |  |  |  |
|                                   |   |   |   |   |   |   |   |               |                                  |   |   |   |   |   |   |   |   |   |    | FORCED REPLACEMENT TO A LFF. LFF FLAG SET OFF.     |    |  |  |  |  |  |  |  |  |  |  |
|                                   |   |   |   |   |   |   |   |               |                                  |   |   |   |   |   |   |   |   |   |    | FORCED REPLACEMENT TO A PTF. PTF FLAG SET OFF.     |    |  |  |  |  |  |  |  |  |  |  |
|                                   |   |   |   |   |   |   |   |               |                                  |   |   |   |   |   |   |   |   |   |    | LIBRARY BYPASSED - COULD NOT BE OPENED.            |    |  |  |  |  |  |  |  |  |  |  |
| NEW MEMBER TO BE ADDED TO SYSTEM. |   |   |   |   |   |   |   |               |                                  |   |   |   |   |   |   |   |   |   |    |                                                    |    |  |  |  |  |  |  |  |  |  |  |
| UPDATE ANALYSIS HAD COMPLETED.    |   |   |   |   |   |   |   |               |                                  |   |   |   |   |   |   |   |   |   |    |                                                    |    |  |  |  |  |  |  |  |  |  |  |
|                                   |   |   |   |   |   | x |   | xxx...        | PL/I OBJECT PROGRAM              |   | o | o |   |   |   |   |   |   |    |                                                    |    |  |  |  |  |  |  |  |  |  |  |
|                                   |   |   |   |   |   | x |   | xyy...        | AMERICAN NATIONAL STANDARD COBOL |   | x |   |   |   |   |   |   |   |    | x                                                  |    |  |  |  |  |  |  |  |  |  |  |

### Problem Determination

Problem determination is the activity required to identify a failing hardware unit or program and determine who is responsible for maintenance.

Problem determination is accomplished by using procedures specified by IBM. In some cases, these procedures may be initiated by a message or code which requires operator or programmer response. The response may include the requirement for additional problem-related data to be collected and will attempt, where possible, to indicate "probable" failure responsibility.

Problem determination information is included for applicable messages and codes under the heading "Problem Determination." Standard problem determination actions are identified as items of Tables I and II. Unique actions are identified following the list of standard actions to be taken. In any case, it is intended that the specified actions be taken before calling IBM for support.

**Table I**

| If the problem recurs, follow the problem determination aids specified by the associated message or code before calling IBM for support:                                                                                                                                                      |                                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Make sure that MSGLEVEL=(1,1) was specified in the JOB statement.                                                                                                                                                                                                                          | 12. Execute the SEREP program, and save the resulting output.                                                                              |
| 2. Save the console sheet from the primary console. In systems with Multiple Console Support (MCS), save a copy of the hard copy log.                                                                                                                                                         | 13. Save all the associated output.                                                                                                        |
| 3. Save the job stream associated with the job.                                                                                                                                                                                                                                               | 14. In the normal response to this message, the programmer/operator requested to execute a specific program. Save all output from program. |
| 4. Save the system output (SYSOUT) associated with the job.                                                                                                                                                                                                                                   | 15. Save the program listing associated with the job.                                                                                      |
| 5. Make sure that the failing job step includes a:                                                                                                                                                                                                                                            | 16. Save the dump.                                                                                                                         |
| a. SYSABEND DD statement.                                                                                                                                                                                                                                                                     | 17. Have the system generation (SYSGEN) output available from                                                                              |
| b. SYSUDUMP DD statement.                                                                                                                                                                                                                                                                     | a. Stage I            b. Stage II                                                                                                          |
| c. PLIDUMP DD statement.                                                                                                                                                                                                                                                                      | 18. Execute the IFCEREPO service aid program, specifying PARM= to dump the SYS1.LOGREC data set. Save the resulting output.                |
| 6. Make sure that the PARM parameter of the EXEC statement specifies:                                                                                                                                                                                                                         | 19. Save the assembly listing associated with the job.                                                                                     |
| a. MAP                      e. CORE, if applicable                                                                                                                                                                                                                                            | 20. Save the control cards associated with the job.                                                                                        |
| b. LIST                     f. XREF                                                                                                                                                                                                                                                           | 21. Save the compiler output associated with the job.                                                                                      |
| c. DIAG                    g. DUMP                                                                                                                                                                                                                                                            | 22. Save the source input associated with the job.                                                                                         |
| d. MSG=AP                                                                                                                                                                                                                                                                                     | 23. Save the source program listing associated with the job.                                                                               |
| 7. Execute the LISTIDR function of the IMBLIST service aid program to obtain a list of all members with a PTF or local fix, and save the output. Execute the program against the:                                                                                                             | 24. Run OLTEP diagnostics for the problem device and save the output.                                                                      |
| a. SYS1.LINKLIB data set.                                                                                                                                                                                                                                                                     | 25. Execute the IEHLIST system utility program to obtain a list of the                                                                     |
| b. SYS1.SVCLIB data set.                                                                                                                                                                                                                                                                      | a. volume table of contents of the associated volume, specifying the FORMAT option.                                                        |
| c. library containing the program that issued the message.                                                                                                                                                                                                                                    | b. volume table of contents of the associated volume, specifying the DUMP option.                                                          |
| 8. Execute the IMCJQDMP or IMCOSJQD service aid program to obtain a formatted copy of the contents of the SYS1.SYSJOBQE data set. For IMCOSJQD, specify the select option:                                                                                                                    | c. directory of the associated data set.                                                                                                   |
| a. ALL.                                                                                                                                                                                                                                                                                       | d. the system catalog.                                                                                                                     |
| b. JOBNAME.                                                                                                                                                                                                                                                                                   | 26. Execute the IEBPTPCH data set utility to                                                                                               |
| c. QCR. Save the resulting output.                                                                                                                                                                                                                                                            | a. print the directory of the applicable data set.                                                                                         |
| 9. Execute the IMBLIST service aid program to obtain:                                                                                                                                                                                                                                         | b. print the applicable data set.                                                                                                          |
| a. an object module listing, specifying the LISTOBJ function.                                                                                                                                                                                                                                 | c. print the applicable member.                                                                                                            |
| b. a load module map and cross-reference listing, specifying the OUTPUT=BOTH option of the LISTLOAD function.                                                                                                                                                                                 | d. print the applicable procedure.                                                                                                         |
| 10. Have a copy of the Message Control Program (MCP) available.                                                                                                                                                                                                                               | 27. Have the linkage editor/loader map available.                                                                                          |
| 11. Execute the IMDSADMP service aid program, specifying the TYPE=HI option, to dump the contents of main storage on magnetic tape. After restarting the system, execute the IMDPRDMP service aid program, specifying the GO option, to print the dump tape produced by the IMDSADMP program. | 28. Save the associated volume.                                                                                                            |
| If a tape is not available, execute the IMDSADMP specifying the TYPE=LO option, to dump the contents of main storage directly to the printer.                                                                                                                                                 | 29. Contact IBM for programming support.                                                                                                   |
| Save the resulting dump output.                                                                                                                                                                                                                                                               | 30. Contact IBM for hardware support.                                                                                                      |

Table I

| If the problem recurs, follow the problem determination aids specified by the associated message or code before calling IBM for support:                                                                                                                                                      |                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Make sure that MSGLEVEL=(1,1) was specified in the JOB statement.                                                                                                                                                                                                                          | 12. Execute the SEREP program, and save the resulting output.                                                                                       |
| 2. Save the console sheet from the primary console. In systems with Multiple Console Support (MCS), save a copy of the hard copy log.                                                                                                                                                         | 13. Save all the associated output.                                                                                                                 |
| 3. Save the job stream associated with the job.                                                                                                                                                                                                                                               | 14. In the normal response to this message, the programmer/operator was requested to execute a specific program. Save all output from that program. |
| 4. Save the system output (SYSOUT) associated with the job.                                                                                                                                                                                                                                   | 15. Save the program listing associated with the job.                                                                                               |
| 5. Make sure that the failing job step includes a:                                                                                                                                                                                                                                            | 16. Save the dump.                                                                                                                                  |
| a. SYSABEND DD statement.                                                                                                                                                                                                                                                                     | 17. Have the system generation (SYSGEN) output available from                                                                                       |
| b. SYSUDUMP DD statement.                                                                                                                                                                                                                                                                     | a. Stage I            b. Stage II                                                                                                                   |
| c. PLIDUMP DD statement.                                                                                                                                                                                                                                                                      | 18. Execute the IFCEREPO service aid program, specifying PARM=(N), to dump the SYS1.LOGREC data set. Save the resulting output.                     |
| 6. Make sure that the PARM parameter of the EXEC statement specifies:                                                                                                                                                                                                                         | 19. Save the assembly listing associated with the job.                                                                                              |
| a. MAP                    e. CORE, if applicable                                                                                                                                                                                                                                              | 20. Save the control cards associated with the job.                                                                                                 |
| b. LIST                  f. XREF                                                                                                                                                                                                                                                              | 21. Save the compiler output associated with the job.                                                                                               |
| c. DIAG                  g. DUMP                                                                                                                                                                                                                                                              | 22. Save the source input associated with the job.                                                                                                  |
| d. MSG=AP                                                                                                                                                                                                                                                                                     | 23. Save the source program listing associated with the job.                                                                                        |
| 7. Execute the LISTDR function of the IMBLIST service aid program to obtain a list of all members with a PTF or local fix, and save the output. Execute the program against the:                                                                                                              | 24. Run OLTEP diagnostics for the problem device and save the output.                                                                               |
| a. SYS1.LINKLIB data set.                                                                                                                                                                                                                                                                     | 25. Execute the IEHLIST system utility program to obtain a list of the                                                                              |
| b. SYS1.SVCLIB data set.                                                                                                                                                                                                                                                                      | a. volume table of contents of the associated volume, specifying the FORMAT option.                                                                 |
| c. library containing the program that issued the message.                                                                                                                                                                                                                                    | b. volume table of contents of the associated volume, specifying the DUMP option.                                                                   |
| 8. Execute the IMCJQDMP or IMCOSJQD service aid program to obtain a formatted copy of the contents of the SYS1.SYSJOBQE data set. For IMCOSJQD, specify the select option:                                                                                                                    | c. directory of the associated data set.                                                                                                            |
| a. ALL.                                                                                                                                                                                                                                                                                       | d. the system catalog.                                                                                                                              |
| b. JOBNAME.                                                                                                                                                                                                                                                                                   | 26. Execute the IEBTPCH data set utility to                                                                                                         |
| c. QCR. Save the resulting output.                                                                                                                                                                                                                                                            | a. print the directory of the applicable data set.                                                                                                  |
| 9. Execute the IMBLIST service aid program to obtain:                                                                                                                                                                                                                                         | b. print the applicable data set.                                                                                                                   |
| a. an object module listing, specifying the LISTOBJ function.                                                                                                                                                                                                                                 | c. print the applicable member.                                                                                                                     |
| b. a load module map and cross-reference listing, specifying the OUTPUT=BOTH option of the LISTLOAD function.                                                                                                                                                                                 | d. print the applicable procedure.                                                                                                                  |
| 10. Have a copy of the Message Control Program (MCP) available.                                                                                                                                                                                                                               | 27. Have the linkage editor/loader map available.                                                                                                   |
| 11. Execute the IMDSADMP service aid program, specifying the TYPE=HI option, to dump the contents of main storage on magnetic tape. After restarting the system, execute the IMDPRDMP service aid program, specifying the GO option, to print the dump tape produced by the IMDSADMP program. | 28. Save the associated volume.                                                                                                                     |
| If a tape is not available, execute the IMDSADMP specifying the TYPE=LO option, to dump the contents of main storage directly to the printer.                                                                                                                                                 | 29. Contact IBM for programming support.                                                                                                            |
| Save the resulting dump output.                                                                                                                                                                                                                                                               | 30. Contact IBM for hardware support.                                                                                                               |

Table II

| GTF FOR PROBLEM DETERMINATION                                                                                                                                                                                                                                                                                                                                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Format 1: Tracing without prompting for event keywords.                                                                                                                                                                                                                                                                                                                                                                         |
| Before reproducing the problem, have the system operator issue a START GTF command specifying tape output, MODE=EXT and TIME=YES. In response to message IHL100A, he should type TRACE=opt, where opt is the trace option keyword indicated for the particular message or code, within the text of his reply.                                                                                                                   |
| When data for the problem has been recorded, run the IMDPRDMP service aid program using the EDIT statement to format the trace output, specifying DDNAME=(ddname of the trace data set).                                                                                                                                                                                                                                        |
| Format 2: Tracing with prompting for event keywords.                                                                                                                                                                                                                                                                                                                                                                            |
| Before reproducing the problem, have the system operator issue a START GTF command specifying tape output, MODE=EXT and TIME=YES. In response to the message IHL100A, he should specify the trace option keywords indicated for the associated message or code within the text of his reply. Then, in response to the message IHL101A, he should specify the event keywords also indicated with the associated message or code. |
| When data for the problem has been recorded, run the IMDPRDMP service aid program using the EDIT statement to format the trace output, specifying DDNAME=(ddname of the trace data set).                                                                                                                                                                                                                                        |
| Format 3: Specialized tracing action.                                                                                                                                                                                                                                                                                                                                                                                           |
| Before reproducing the problem, have the system operator issue a START GTF command specifying tape output, MODE=EXT and TIME=YES. In response to message IHL100A, he should type 'TRACE=SYS,USR'. The DD statement for a data set in error should specify DCB=DIAGNS=TRACE.                                                                                                                                                     |
| When data for the problem has been recorded, execute the EDIT function of IMDPRDMP specifying the options SYS and USR=FFF.                                                                                                                                                                                                                                                                                                      |

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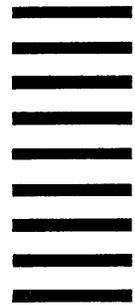
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