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DPS 6 SNA FILE TRANSFER FACILITY USER'S GUIDE

SUBJECT

Operating Concepts and Procedures for the SNA File Transfer Facility

SPECIAL INSTRUCTIONS

This is the first revision to CR60-00, dated August 1983. The manual was extensively revised and rewritten. Section 3 was moved to the *SNA Host System Programmer's Guide*. Section 5, Appendix E, and Appendix F are new, and Appendix B is completely reorganized. In other sections, change bars in the margin indicate new and changed technical information, while asterisks denote deletions.

HARDWARE SUPPORTED

The SNA File Transfer Facility executes on DPS 6 and DPS 6/22 systems, disk-based microSystem 6/10 systems, and microSystem 6/20 systems under control of the MOD 400 Executive.

SOFTWARE SUPPORTED

This manual supports Release 1.2 of the SNA File Transfer Facility.

ORDER NUMBER CR60-01

March 1985



PREFACE

This manual is written for operators and users of the Systems Network Architecture (SNA) File Transfer Facility (SFT). SFT consists of two products: SFT-H, which executes on an IBM host * computer, and SFT-6, which executes on a DPS 6 system.

The main topics discussed in this manual are:

- Concepts of SFT (Section 1)
- SFT-H operating procedures (Section 2)
- SFT-H utility control language (Section 3)
- Using SFT to transfer files (Section 4)
- SFT-6 operating procedures (Section 5)
- Summary of utility control language (Appendix A)
- Error and informational messages (Appendix B)
- Condition codes (Appendixes C and D)
- ABEND codes (Appendix E)
- Sample SFT job (Appendix F).

Configuration and installation information for the IBM host is contained in the <u>SNA Host System Programmer's Guide</u>. Configuration information for SFT-6 is contained in the <u>DPS 6/SNA</u> <u>Administrator's Guide</u>.

In this manual, the term MOD 400 refers to the GCOS 6 MOD 400 Executive, which executes on DPS 6 hardware. Unless otherwise noted, DPS 6 refers to DPS 6, disk-based microSystem 6/10, or microSystem 6/20 hardware.

USER COMMENTS FORMS are included at the back of this manual. These forms are to be used to record any corrections, changes, or additions that will make this manual more useful.

CR60-01

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The following symbols are used in this manual:

- Uppercase letters (for example, LISTHST) indicate commands or directives that you must reproduce exactly as shown.
- Lowercase letters (for example, lu_name) indicate a symbolic variable whose exact value you must supply.
- Square brackets [] indicate an optional entry.
- Braces {} enclose items from which you must make a choice.
- In utility control language examples, a caret ([^]) is used in MOD 400 pathnames; the equivalent character on an IBM host is a logical not (⁻).

The following conventions are used to indicate the relative levels of topic headings used in this manual:

Lev	<u>el</u>	Heading Format
1 (highest)	ALL CAPITAL LETTERS, UNDERLINED
2		Initial Capital Letters, Underlined
3		ALL CAPITAL LETTERS, NOT UNDERLINED
4		Initial Capital Letters, Not Underlined

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The following publications constitute the DPS 6 SNA manual set for Release 1.2 of SNA.

<u>Order Number</u>

<u>Manual Title</u>

CR56	IBM Distributed Data Processing Overview
CR57	DPS 6 SNA Administrator's Guide
CR5 8	SNA Interactive Terminal Facility User's Guide
CR59	SNA Remote Job Entry Facility User's Guide
CR6 0	SNA File Transfer Facility User's Guide
GR11	SNA Application Programmer's Guide
CZ74	GCOS 6 Data Base Augmented Real-Time Tracing
	System User's Guide
GB88	SNA Host System Programmer's Guide

SOFTWARE RELEASE BULLETIN

The SNA product is described in a Software Release Bulletin. Consult the Software Release Bulletin before using the software. The DPS 6 SNA Software Release Bulletin is:

Order Number SRB Title

GR12 GCOS 6 SNA Software Release Bulletin

MOD 400 MANUALS

The MOD 400 manual set provides information prerequisite to using the SNA manual set. Honeywell software reference manuals are periodically updated to support enhancements and improvements to the software. Before ordering any manuals, refer to the Manual Directory of the <u>MOD 400 Guide to Software Documentation</u> to obtain information concerning the specific edition of the manual that supports the software currently in use at your installation. If you use the four-character base publication number to order a document, you will receive the latest edition of the manual. If you wish to order a specific edition of document, you must use the seven- or eight-character publication number listed in the <u>MOD 400 Guide to Software Documentation</u>.

IBM MANUALS

Refer to these IBM documents for host programming, operating, application, and configuration information:

<u>Order Number</u>

<u>Manual Title</u>

SC27-0164	ACF/VTAM Messages and Codes
SC27-0449	ACF/VTAM Programming
SC27-0611	ACF/VTAM Planning and Installation Reference
SC30-3167	ACF/NCP Installation and Resource Definition
SC30-3168	ACF/NCP System Support Programs: Utilities
SC30-3169	ACF/NCP and Emulation Program: Messages and
	Codes
SC33-0149	CICS Resource Definition Guide
SC23-0046	JES2 Initialization and Tuning

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Section 1 INTRODUCTION

The SNA File Transmission Facility (SFT) allows host users in an IBM Systems Network Architecture (SNA) network to transfer files to and from a DPS 6 system. In addition to file transfer, SFT includes file management and control functions.

SFT has two components:

- The host-resident component, SNA File Transmission-Host (SFT-H)
- The DPS 6-resident component, SNA File Transmission Facility-6 (SFT-6).

Figure 1-1 illustrates SFT's components and the file transfer path.

SFT-H is implemented as a primary Logical Unit (LU) on an IBM host executing the IBM Multiple Virtual Storage (MVS) Operating System with Advanced Communications Function/Virtual Telecommunication Access Method (ACF/VTAM) as the host access method.

SFT-6 is implemented as a secondary LU Type 1 on a Physical Unit (PU) Type 2. SFT-6 requires the SNA Transport Facility.



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Figure 1-1. DPS 6 to Host SFT Connection

SFT supports these transfer functions and options:

- Transfer a DPS 6 file to the host
- Transfer a host file and create a new DPS 6 file
- Transfer a host file and append to an existing DPS 6 file
- Transfer a host file and overwrite an existing DPS 6 file
- Delete a DPS 6 file
- Rename a DPS 6 file
- Execute an EC file (a command file) at a DPS 6.

Files can be transmitted from the host either using intermediate files (staging files) or they can be dynamically allocated and transmitted. VSAM files and sequential files with fixed or variable record formats can be dynamically allocated. SFT supports the following MOD 400 file organizations:

- UFAS sequential
- UFAS indexed
- UFAS relative
- Fixed-relative (bound unit).

SFT does not support host tape or SYSIN files. SFT supports all MOD 400 file types except tape-resident files, save files, and alternate-index files.

SFT collects status and history information at the host, and optionally displays it there. In SNA sessions, SFT-H acts as the primary LU; SFT-6 is the secondary LU. SFT supports session limit groups to provide a way to limit the number of concurrent sessions between SFT-H and a specific set of DPS 6-based LUS.

SFT-H is an application that initiates and terminates all sessions. SFT-H has primary responsibility for error recovery. SFT-H includes a checkpoint interval feature that helps ensure data transfer integrity by forcing periodic buffer purges. SFT-H supports a console operator interface to control file transfer. SFT-H also supports an online operator interface that permits you to:

- Sign on to SFT-H
- Sign off of SFT-H
- Display job or session history
- Display queue counters
- Display session summaries for each queue
- Move sessions globally from queue to queue
- Modify session status, destination, and recovery options
- Change the status of trace and session startup
- Terminate execution of the transmission control program.

The online operator interface also includes a help facility that provides online information about using the interface. The online operator interface requires an IBM 3270 (LU Type 2) terminal with a screen size of 1920 characters.

SFT-6 is a MOD 400 application program that uses and supports all the communications capabilities of the SNA Transport Facility. One copy of SFT-6 can transmit to many hosts; one host can transmit to many copies of SFT-6. Once MOD 400 is initialized and SFT-6 has been started, SNA sessions for file transfer are initiated from the host. SFT-6 does not require an operator's presence; it can operate in unattended mode. SFT supports data compression. Recovery from communications errors can either be performed immediately (via retries) or deferred. SFT-6 uses the standard DPS 6 SNA operator interface to stop or view status.

SFT-H OVERVIEW

SFT-H is an application that executes at the host and communicates with SFT-6 to transfer files. SFT-H controls the file transfer process. It specifies which files are used and how they are used, and it determines how error recovery is performed. SFT-H can be used to transfer data from one DPS 6 to another DPS 6, using the SFT-H as an intermediate store and forward station. SFT-H also includes utilities to aid in the transfer of files.

Figure 1-2 illustrates the structure of SFT-H.

SFT-H configuration is discussed in Section 3 of this manual and in the <u>SNA Host System Programmer's Guide</u>.

File Transfer Functions on the Host

SFT-H communicates with a copy of SFT-6 through the mechanism of a session of actions. From the host system, you can specify these actions:

- Transfer a DPS 6 file to the host. Data from the file is transferred to the host along with file attributes.
- Transfer a host file to a newly created DPS 6 file. The file is first created using file attribute information specified by the host. Data sent from the host is then written to the new file.
- Transfer a host file and append to an existing DPS 6 file. Data sent from the host is written to the end of an existing file.



Figure 1-2. Structure of SFT-H

- Transfer a host file and overwrite an existing DPS 6 file. Data sent from the host is written from the beginning of an existing file.
- Delete a DPS 6 file.
- Rename a DPS 6 file.
- Execute an EC file (command file) at a DPS 6.

SFT-H attempts to establish a session with SFT-6 at the designated DPS 6 at or after a user-specified time based on the relative priority of the file transfer operation.

If you wish to retrieve a file from one DPS 6 system and send it to one or more other DPS 6 systems, it is your responsibility to schedule the sessions so that the file is retrieved before the session to send it is started.

<u>SFT-H Modules</u>

SFT-H consists of two parts:

- The File Maintenance Utility (SFTBATCH), used to prepare SFT-H files and print reports
- *
- 2. The Transmission Control Program (SFTTCP), used to communicate with SFT-6.

The SFT-H modules are invoked and controlled with standard Job Control Language (JCL) statements. Section 3 describes the JCL to execute SFTBATCH and the utility control language for SFTBATCH; Section 4 describes the JCL to execute SFTTCP. Appendix F contains examples of SFTBATCH and SFTTCP execution.

Both modules use standard IBM access methods (VSAM or QSAM) to manipulate SFT-H control files, generate reports, and access user data files. In addition, the Transmission Control Program uses ACF/VTAM for communications.

When multiple copies of SFT-H control files are used, up to four copies of SFT-H can safely be executed concurrently. The mechanism for this support is the JCL following normal IBM procedures.

*

Figure 1-2 illustrates the relationships among files and programs in SFT-H.

FILE MAINTENANCE UTILITY (SFTBATCH)

SFTBATCH updates and displays the contents of SFT-H files (based on user-supplied utility control language statements). SFTBATCH is also used after data transmission to move data received from staging files to sequential files. The syntax of the utility control language statements is similar to the syntax used for OS/VS utilities.

SFTBATCH allows you to:

- Maintain the resource master file and the transmission control file. Entries in the resource master file (LUs or groups) can be added or deleted. Additionally, LUs can be added to or removed from existing group records. Entries in the transmission control file (sessions or actions) can also be added or deleted. In addition, reports listing the contents of these files can be generated.
- Maintain staging files. During the copy process, data can be translated and/or compressed. In addition, a report of the staging file's contents can be generated, and logical staging files within the physical staging file can be deleted.
- Generate reports based on the contents of the history file.

Appendix D contains a list of the condition codes generated by SFTBATCH.

TRANSMISSION CONTROL PROGRAM (SFTTCP)

SFTTCP establishes sessions to communicate with SFT-6 to transfer data, perform control functions, and to generate history file information as communications take place. Appendix C contains a list of the condition codes generated by SFTTCP.

Tables Used by SFT-H

SFT-H uses two tables: a default values table and a security table. The default values table contains installation-dependent information such as file passwords. The default values table is usually assembled at the host site during SFT-H installation. SFT-H includes macroinstructions that simplify the creation of the default values table.

The security table is used by the online operator interface; it contains installation-dependent information such as operator identification and passwords. The security table is usually assembled at the host site during SFT-H installation. SFT-H includes macroinstructions that simplify the creation of the security table. *

SFT-H Files

SFT-H uses these classes of files, roughly in this order:

*

1. Initialization file and message file

2. SFT-H control files

3. User data files.

Multiple files of each type can exist. For the execution of any program, JCL indicates which files to use.

*

INITIALIZATION FILE AND MESSAGE FILE

*

The initialization file is used as a source of dummy records when clearing files (see "Clearing SFT-H Files," later in this section).

The message file contains the text for all messages generated by SFT-H. You should not modify this file. Appendix B contains a list of the messages generated by SFT-H.

SFT-H CONTROL FILES

SFT-H uses these control files:

*

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- 2. Resource master file
- 3. Transmission control file
- 4. Transmission status file
- 5. History file.

The SFT-H control files are created using the Virtual Storage Access Method (VSAM) access method (except for the Queued Sequential Access Method (QSAM) created history file). Control files are maintained using the SFT-H File Maintenance Utility (SFTBATCH). Utility command language statements direct SFTBATCH to modify the control files (add entries, delete entries, etc.) and to print reports of the contents of the control files.

Staging Files

SFT-H can use staging files to hold transmitted or received files. At any given time, staging files can contain copies of more than one user file and files to be both received and transmitted. The staging files are VSAM key-sequenced data sets; descriptive information and data for a file are stored as the data portion of the keyed records.

Physical staging files consist of one or more logical staging files. Each logical staging file contains one user file that is to be transmitted to SFT-6 or that was received from SFT-6. (See Section 3 for a description of the utility control language.)

Resource Master File

The resource master file contains the name and attributes of each SFT-6 and online operator interface LU or group of LUs that can be used by SFT-H. Optional information, such as the logmode name and starting time for sessions, can also be included.

Transmission Control File

The transmission control file contains information for controlling sessions between SFT-H and SFT-6. Each session specifies an LU destination (a DPS 6), actions to be performed (for example, send, receive, or delete files), file names, and optionally, when the session is to be run. These sessions are activated by the Transmission Control Program.

Transmission Status File

The transmission status file contains information about the status of each session. It uses information from the resource master file and the transmission control file to schedule sessions. The information maintained in the transmission status file is used for restart or recovery. The File Maintenance Utility can print brief session summary reports from the transmission status file.

History File

The history file contains the history of the session activity between SFT-H and SFT-6. This file is updated while the Transmission Control Program executes. All information in the history file is time stamped. A report on session statistics from this file can be printed out using the File Maintenance Utility. The online interface permits the display of the history file.

There can be two history files, a VSAM history file and a QSAM history file. The VSAM history file can be cleared after each session, and the statistical information appended to the QSAM history file for archival purposes.

USER DATA FILES

User data files contain information to be sent to or received from SFT-6. Files to be sent to SFT-6 must be either copied into staging files or dynamically allocated. Files received from SFT-6 must be moved from the staging files into which they are received to host disk files before any further processing is done. SFT-H provides a module (SUBXLATE) to translate character strings to and from ASCII and EBCDIC.

SFT-6 OVERVIEW

SFT-6 is an application that executes at the DPS 6 and communicates with SFT-H to transfer files. SFT-6 does not initiate file transfer operations but simply does what it is told by SFT-H.

You can start SFT-6 either with an explicit command or with a command file (EC file). Since sessions are initiated from the host, no operator intervention is required after SFT-6 is started.

<u>SFT-6 Capabilities</u>

SFT-6 provides the following capabilities:

- Communication with a host system, using the SNA Transport Facility
- Support for multiple LUs per invocation of SFT
- File management
- Support of data compression and decompression.

SFT-6 Configuration and Invocation

SFT-6 uses a configuration file created by the SNA Configurator. For more information on SFT-6 configuration, see the <u>DPS 6/SNA Administrator's Guide</u>.

SFT-6 must be invoked in an appropriate task group; see Section 5 for details.

Administration and Control Services

You can use the SNA operator interface to:

- Stop or allow a controlled termination of SFT-6
- Display the status of SNA (including SFT-6).

TRANSFERRING FILES

To transfer files, you need to do five things:

- 1. Clear SFT control files
- 2. Define destinations (LUS)
- 3. Define sessions, actions, and data files
- 4. Transfer the files
- 5. Generate reports and user data files at host.

These five steps are described in the following paragraphs. Appendix F contains a complete example of SFT file transfer.

Step 1: Clearing SFT Control Files

First, clear or delete files to empty them of previous records and insert a dummy record in each file. SFT files should be cleared at the following times:

- 1. At file creation, clear all SFT-H control files. This ensures that the files are ready to be used by SFTBATCH.
- 2. At the beginning of each communications cycle, clear the history file or move it to the QSAM history file and clear the transmission status file consistent with site specifications. These files contain statistical information that should be replaced at each communications cycle rather than be updated.
- 3. At the end of each communications cycle, clear the staging files. This is described in Section 4.

Step 2: Defining Destinations

You must then define the destination(s) (LUs) for your file transfers. SFTBATCH processes the input for this step. Newly defined SFT LUs and groups are added to the resource master file.

Utility control language statements define the name(s) of the SFT-6 LUs to be supported. Multiple DPS 6s can be associated with one another to form an SFT-6 group or session limit group. Utility control language statements can also delete existing SFT-6 LUs or groups, and request a listing of already defined SFT-6 LUs and groups.

Once you define destinations, you need not repeat this step. However, if destinations change, you can easily update the resource master file.

Section 3 provides information on defining destinations.

Step 3: Defining Sessions and Actions

Next, define the communications activity to take place between SFT-H and SFT-6, and prepare data to be transmitted. Utility control language statements define each SFT-H/SFT-6 session and the actions to be performed during that session. The session information provided includes the SFT-6 LU name (or group name if the session is for all SFT-6 LUs in a group), the time of day for communications, and the priority. Possible actions include Send, Receive, Delete, Rename, and Execute. SFTBATCH updates the transmission control file, and generates a report based on the transmission control file. Data to be transmitted can be moved to a staging file, or the data file can be dynamically allocated. Command language statements can specify that the data be compressed and/or translated. You can obtain a directory listing of the files contained in a staging file and the files' attributes.

Section 3 provides information on defining sessions and actions.

Step 4: Transferring Files

When the first two steps are complete, start up SFTTCP to communicate with SFT-6. SFTTCP uses the information in the resource master file and the transmission control file to send data contained in staging files, receive data from SFT-6, or send dynamically allocated files. This is the only step during which data transmission actually takes place.

Executing SFTTCP is described in Section 4.

Step 5: Generate Reports and User Data Files on Host

Use SFTBATCH to move the data received from SFT-6 from staging files to user files and generate reports of transmission activity. When SFTBATCH moves data from staging files to user files, the data records can be decompressed and/or translated. Utility control language statements describe the user files and staging file data to be moved. A summary report indicates the data copied and the disposition (kept or deleted) of staging file data.

Section 3 provides information needed for this step.

Section 2 HOST OPERATOR INTERFACES

SFT-H supports two optional host operator interfaces:

- The console operator interface (for the host operator)
- The online operator interface (for SFT-H operators).

Both interfaces must be configured and invoked.

CONSOLE OPERATOR INTERFACE

The SFT-H console operator interface allows the operator at the host console to:

- Display information about sessions
- Reply to error option messages from SFT-H
- Request information about commands and command formats
- Terminate the Transmission Control Program
- Change the trace or new session status.

The console operator interface is implemented using "Write to Operator and Reply" (WTOR) macros.

The console operator interface issues this notification to the host operator (in high-intensity characters):

NVITE- PLEASE ENTER ANY COMMANDS FOR FT-L6 FILE TRANSFER PROGRAM

The console operator uses commands to control SFT-H. Table 2-1 lists the available console operator commands. The rest of this subsection consists of detailed descriptions of these operator commands.

NOTE

To enter a command, always give the reply number, then the command.

Table 2-1. Console Operator Commands

Command	Function
DISPLAY	Display session information on system console.
HALT	Inhibit new sessions and terminate SFTTCP when existing sessions are completed, or terminate all sessions and end execution of SFTTCP.
HELP	Display command syntax and parameters.
MODIFY	Stop or start external trace activity, or inhibit or allow new sessions.
REPLY	Respond to operating system request for error handling.

Display

Display information about sessions on the system console. FORMAT:

```
{DISPLAY
                       \begin{bmatrix} \left\{ \begin{array}{c} QUEUE \\ Q \end{array} \right\} \end{bmatrix} \begin{bmatrix} \left\{ \begin{array}{c} ACTIVE \\ A \end{array} \right\} \end{bmatrix} \begin{bmatrix} \left\{ \begin{array}{c} LU \\ L \end{array} \right\} & u_name \end{bmatrix} \begin{bmatrix} \left\{ \begin{array}{c} REPLY \\ R \end{array} \right\} \end{bmatrix}
 ARGUMENTS:
(QUEUE)
)0
      Display the number of sessions in the queue and the
       status of each.
(ACTIVE)
)A
      Displ'ay group, LU, new LU, session, sequence, type,
       status, and count information for all active sessions on
       a session-by-session basis.
(LU lu_name)
)L
       Display group, new LU, session, sequence, type, status,
       and count information for the specified LU currently in
       session.
(REPLY)
)R
       Display group, LU, new LU, session, sequence, type,
       status, and count information for all active sessions
       that are awaiting a reply.
 DESCRIPTION:
 DISPLAY displays the following information:
         GROUP--Resource master file group name
           NEW LU--LU for session (original or current)
       SESSION--Session identifier
```

DISPLAY

- SEQ--Sequence number of the current action within the session
- TYPE--Action record type:

SEND -- SEND RECV -- RECEIVE DELT -- DELETE RENM -- RENAME EXEC -- EXECUTE

• STATUS--Status of the current action:

UNTRIED -- Action just starting ACTIVE -- Action in progress FAIL-RTR -- Action failed; retry in progress FAIL-NRT -- Action failed; no retry COMPLETE -- Action complete FAIL-SKIP -- Action failed; skip to next action

• COUNT--Record number in file for an active SEND or RECEIVE

HALT

<u>Halt</u>

Inhibit new sessions and terminate the Transmission Control Program (SFTTCP) when all existing sessions have completed, or terminate all sessions and end execution of SFTTCP.

FORMAT:

ARGUMENT:

QUICK

Terminate all sessions and end execution of SFTTCP.

DESCRIPTION:

The Halt command inhibits new sessions. When all existing sessions have completed, it terminates SFTTCP.

If you specify the QUICK argument, all sessions are terminated and SFTTCP ends.

HELP

<u>Help</u>

Display command syntax and parameters.

FORMAT:

HELP

DESCRIPTION:

The HELP command gives syntax and parameter information for all console operator commands.

Modify

Stop or start the external trace activity, or inhibit or allow new sessions.

FORMAT:

{MODIFY F {TRACE ON OFF OFF

ARGUMENTS:

TRACE

Start or stop the general trace facility. If the next parameter is ON, start the trace; if it is OFF, stop the TRACE.

SESSIONS

Inhibit or allow new sessions. If the next parameter is ON, allow new sessions; if it is OFF, inhibit new sessions.

DESCRIPTION:

The MODIFY command serves two functions. MODIFY TRACE permits or inhibits the interface to the external General Trace Facility (GTF). MODIFY SESSIONS controls whether or not new sessions are allowed.

NOTE

The host operator must start GTF before SFT-H can use it.

REPLY

<u>Reply</u>

Respond to operating system requests for error handling.

FORMAT:

REPLY lu_name ABORT RETRY SKIP

ARGUMENTS:

lu_name

Name of the Logical Unit (LU) in which the error occurred.

ABORT

Terminate processing.

RETRY

Retry the statement in error.

SKIP

Continue processing, ignoring the control statement in error.

DESCRIPTION:

The REPLY command contains your response to the operating system's request for a decision on error handling. After specifying the LU name in which the error occurred, you can instruct the communications program to continue processing (SKIP), terminate the session (ABORT), or retry the statement in error (RETRY).

ONLINE OPERATOR INTERFACE

The online operator interface is a screen-driven interface that allows any authorized user at a host 3270-type terminal (or a DPS 6 SNA Interactive Terminal Facility terminal) to display current information about sessions, groups, and destinations (LUS); send messages to the system operator; and control some aspects of SFTTCP execution (such as starting and stopping sessions). The online operator interface lets you look at session queues. You can also move sessions from one queue to another. Finally, you can display all or part of the transmission status file and history file.

NOTE

In this discussion, the term "panels" corresponds to the MOD 400 terms "menu" and "form."

Online Operator Interface Functions

The online interface permits you to:

- Sign on
- Display a session, a queue of sessions, history file records, or resource master file group records
- Modify session status or destination
- Provide error recovery options
- Change the external trace status (ON or OFF) and the status of new sessions (ENABLE or DISABLE)
- Terminate execution of the Transmission Control Program, either immediately or when current sessions finish
- Sign off.

The online interface also includes a help facility that provides online information about using the interface.

Initializing the Online Operator Interface

Before you can use the online operator interface, it must be configured. To configure the online operator interface, refer to Section 3.

When it is activated, SFTTCP attempts to establish a session with any preconfigured operator terminals. Once the session is established, you can log on. To invoke the interface from any terminal, log on to VTAM session as follows:

LOGON APPLID (application_name)

where application_name is the installation-dependent name of the SNA File Transfer (SFT) application. (A LOGMODE parameter may also be required.) Consult a system programmer for the exact format of the command for your installation.

Sign-On Panel

The sign-on panel is shown in Figure 2-1.

====> (PF1=HELP	** PF3=END CLEA	* SFT-HOST: R=SIGNOFF)	ON-LINE INT	ERFACI	***			
* PLEASE TYI (OR PRESS	PE OPERATOR I "CLEAR" TO S	D AND PASSWOR IGNOFF)	D, THEN ENTE					
OPERATOR	ID:	••••						
PASSWORD	•							
								-
NEXT: nnn HOLD: nnn	REPLY: nnn RETRY: nnn	ACTIVE: nnn READY: nnn	NOT READY: INCOMPLETE:	nnn nnn	COMPLETE: NO-TRANS:	nnn nnn	NEW SES: TRACE:	XXX XXX

Figure 2-1. Sign-On Panel

Enter your operator ID and password as defined in the security table. Your password is not displayed.

If you press CLEAR or PF3, you are returned to the system panel.

Main Panel

The main panel is shown in Figure 2-2.

*** SFT-HOST: ON-LINE INTERFACE *** SIGNON SUCCESSFUL FOR OPERATOR ID: MATT APPLICATION ID: FTF4 ====>	*
PLEASE INDICATE CHOICE: TYPE NUMBER OR POSITION CURSOR, THEN PRESS ENTER	
 DISPLAY SESSION BY QUEUE DISPLAY SESSION BY SESSION ID AND LU NAME DISPLAY HISTORY FILE DISPLAY HALT OPTIONS SIGNOFF ENABLE/DISABLE NEW SESSION STARTUP ENABLE/DISABLE EXTERNAL TRACE DISPLAY GROUP RECORD CHANGE DESTINATION - GLOBAL LIST OF "HELP" PANELS AVAILABLE SEND MESSAGE TO CONSOLE OPERATOR 	
NEXT: nnn REPLY: nnn ACTIVE: nnn NOT READY: nnn COMPLETE: nnn NEW SES: HOLD: nnn RETRY: nnn READY: nnn INCOMPLETE: nnn NO-TRANS: nnn TRACE:	xxx xxx

Figure 2-2. Main Panel

Note the message indicating that signon was successful, and indicating what application you signed on to (in this example, FTF4).

This panel (and most others) has three distinct areas:

- The command area, containing a heading, a command line entry area, error messages from a previous command, and PF key instructions.
- 2. The variable area, containing a menu of choices and/or the information requested by a previous selection.
- 3. The counter area, containing counters that specify the number of sessions in the queues and other summary information.
<u>Oueues</u>

The counter area, which appears at the bottom of all panels, lists the number of sessions in various queues. A session can appear in multiple queues. The queues are:

- NEXT--Sessions that execute as soon as possible. Move a session to the NEXT queue using an EXPEDITE request (described later in this section).
- REPLY--Active sessions that are awaiting an operator's decision on error recovery. Either you or the host console operator can supply the answer. Sessions in the REPLY queue are also in the ACTIVE queue and either the INCOMPLETE queue or the NO-TRANS queue.
- ACTIVE--Sessions that are currently executing. The current online interface session is a member of the ACTIV. queue. Sessions in the ACTIVE queue are also in either the INCOMPLETE queue or the NO-TRANS queue.
- NOT READY--Sessions that are deferred until a later date or time.
- COMPLETE--Sessions that have successfully completed all their actions.
- HOLD--Sessions that will not execute until you request them using the online interface. All OPERATOR sessions start out in the HOLD queue. All other sessions start out in either the NOT READY queue or the READY queue.
- RETRY--Sessions that have been attempted but failed in such a way that another attempt should be made. To retry the session, move it to the NEXT queue. Sessions in the RETRY queue are also in either the INCOMPLETE queue or the NO-TRANS queue.
- READY--Sessions that have never been attempted but are eligible for execution (that is, not deferred). Sessions in the READY queue are also in either the INCOMPLETE queue or the NO-TRANS queue.
- INCOMPLETE--All sessions that are not complete. The INCOMPLETE queue contains all members of the NEXT, HOLD, RETRY, READY, ACTIVE, and NOT READY queues.
- NO-TRANS--Sessions for which no transmissions were recorded (for instance, because the LU was not active, or because of protocol errors). Sessions in the NO-TRANS queue are also in the COMPLETE, RETRY, or INCOMPLETE queue.

All sessions appear in either the COMPLETE queue or the INCOMPLETE queue (but not in both at once). The normal flow of a session through the queues is:

READY (start) ----> NEXT ----> ACTIVE ---> COMPLETE (finish)

<u>Maneuvering Through the Panels</u>

You can use the terminal keys to manipulate panels, and move from panel to panel, as follows:

- The cursor-control keys (the four arrow keys and the Home function) work as expected
- The CLEAR key always means "go to the sign-off panel"
- The ERASE key always means "clear the (unentered) field"
- The ENTER key always mean "execute or update this panel"
- The PFl key displays a "help" panel
- The PF3 key returns you to the last panel you displayed
- On some panels, the PF7 key means "screen backward" (for multiscreen displays)
- On some panels, the PF8 key means "screen forward" (for multiscreen displays)
- On one panel only, the PF10 key means "view text currently offscreen to the left" (use the PA1 key if your terminal has no PF10 key)
- On one panel only, the PFll key means "view text currently offscreen to the right" (use the PA2 key if your terminal has no PFll key).

Note that on-screen instructions remind you what keys you can use to maneuver through the panels.

There are four ways to select an option:

- 1. Enter the option number on the command line and press ENTER.
- 2. Move the cursor to the desired option line and press ENTER.
- 3. Move the cursor to the bottom (the list of queues); position the cursor anywhere within the desired queue; and press ENTER. This is the same as selecting option 1 from the main panel and then the appropriate option from the next panel.

4. If you know what selection you want on a subordinate panel, you can enter it directly on the command line. For example, to get to option 2 of selection 1 from the main panel, enter

1.2

to get there directly.

Often, you can escape from a panel without executing any function. For instance, from the sign-off panel, there are two selections: one to sign off SFT-H, and one to return to the main panel without signing off.

Description of Panels

The following subsections describe the various functions available from the main panel.

DISPLAY SESSION BY QUEUE

If you make selection 1 from the main panel, the panel shown in Figure 2-3 is displayed:

(PF1=HELP PF3=END	CLEAR=SIGNOFF)
PLEASE INDICATE C	HOICE: TYPE NUMBER OR POSITION CURSOR, THEN PRESS ENTER
1. ACTIVE	(SESSIONS CURRENTLY RUNNING)
2. ALL 3. REPLY	(ALL SESSIONS) (SESSIONS CURRENTLY AWAITING REPLY FROM OPERATOR)
4. NEXT	(SESSIONS TO RUN AT FIRST OPPORTUNITY)
5. RETRI 6. READY	(ELIGIBLE SESSIONS, NOT YET ATTEMPTED)
7. NOT READY	(INELIGIBLE SESSIONS DUE TO DATE/TIME)
9. INCOMPLETE	(PART-TRANSMISSIONACTIVE, RETRY, HOLD OR PART-COMP-NO-RETRY
10. HOLD	(SESSIONS IN HOLD STATUS)
II. NUTIRANSIER	(NO TRANSMISSION AND THEREFORE NO CHANGED AT DED 0 ON MODIT

Figure 2-3. Display Session By Queue

2-14

This is the "list queue" function; it will probably be your most common selection. This function lets you display all or part of the transmission status file. You can list a queue summary, or detailed information about each session.

NOTE

The OOI is always an active session (therefore, if the OOI is activated, the ACTIVE queue always has at least one session).

The selections on this panel correspond to the 10 counters at the bottom of every panel, except that selection 2 (ALL) displays all sessions (in all queues).

When you view a queue, a queue summary panel is displayed. A sample queue summary panel is shown in Figure 2-4.

PK 128	LU-NAME/ *= ISUB-LU CHEMSEND	SESS-ID A661	SESSION STATUS NEXT	RECORDS(#) TRANSMITTED 0000000	LAST-ACTION TYPE:REC(#)	SESSION <-SESS ATTEMPTS FIRST	DD@HHMM : END
	PF3=EI	ND		PF7	=SBKW PF8=S	FW D	

Figure 2-4. Layout of Queue Summary Panel

The information presented on each summary varies, depending on what queue you are viewing. Figure 2-4 shows the information presented for the NEXT queue:

- 1. Session priority
- 2. Session ID
- 3. LU ID
- 4. Session status
- 5. Number of records sent and received during session
- 6. Last action (REND or RECEIVE) and records transmitted
- 7. Number of session attempts
- 8. Date and time of first session attempt
- 9. Date and time of last session attempt.

While you are viewing a queue summary panel, you can display a detailed session listing (the next panel discussed in this section) by maneuvering the cursor down to any session summary line and pressing ENTER.

From the queue summary panel, you can enter commands that affect all sessions in a queue. These commands can affect sessions in the NEXT, REPLY, ACTIVE, NOT READY, HOLD, RETRY, or READY queues. You can also enter commands that manipulate the summary list. These commands are:

(E) END (Return to the previous panel. (EALL))EXPD(Expedite all sessions (that is, move all valid sessions in the queue to the NEXT queue. (HALL)) HOLD (Hold all sessions (that is, move all sessions in the queue to the HOLD queue). (N) NEXT (Display the next page of information in the summary. **∫**P) PREV Display the previous page of information in the summary. ۶Q OUIT

Return to the previous panel.

```
{RALL
RLSE
Release all sessions (that is, move all sessions in the
HOLD queue to the RETRY queue).
{RTR
RTRA
From the REPLY queue only, retry all sessions (that is,
move all sessions in the REPLY queue to the NEXT
queue).
{T
TOP}
Go to the top of the queue summary list (that is,
redisplay summary records from the beginning of the
file).
```

A message tells you how many sessions were changed in the queue, and how many failed to change. Summaries of any unchanged sessions are redisplayed.

The layout of all session display panels is shown in Figure 2-5:

1. NEXT 2. HISTORY 6. SAME 7. STATUS	3. PRIOR 4. LIMI 8. REPLY 9. DEST	GROUP 5. INATION	GROUP
SESSION ID: LOGICAL UNIT: DESTINATION: GROUP NAME: LIMIT GROUP:	ACTION TYPE: SESSION STATUS: ACTION STATUS: REC# IN FILE: I REC# IN ATTEMPT: I	 nnnnnnn nnnnnnn	PRIORITY nnr ACTION NUMBER: nnr ACTIONS COMPLETE: nnr SESSION ATTEMPTS: nnr ACTION ATTEMPTS: nnr
FILES RECORDS SENT: nnn nnnnnnn RECEIVED: nnn nnnnnnn DELETED: nnn RENAMED: nnn EXECUTED: nnn	IST ATTEMPT: LAST ATTEMPT: LAST ENDED:	SESSION DATE TIME	ACTION DATE TIME

Figure 2-5. Layout of Session Display Panel

The panel is divided into six areas, as described in the following paragraphs.

The first area lists the queue you are viewing: ACTIVE, ALL, REPLY, NEXT, RETRY, READY, NOT READY, COMPLETE, INCOMPLETE, HOLD, or NO-TRANS.

The second area lists the session ID, LU, new destination (if a substitute LU is specified), group name (if any), and limit group (if any).

The third area lists:

- 1. Action type, corresponding to the actions available under SFT (OPERATOR, SEND, RECEIVE, RENAME, DELETE, or EXECUTE)
- 2. Session status (ACTIVE, COMPLETED, HOLD, NEXT, RETRY, READY, or NOT READY)
- 3. Action status (ACTIVE, FAIL-SKIP, FAIL/RETRY, NOT COMPLETE, FAIL-NORETRY, or COMPLETED-OK)
- Record number in file currently being transferred (if any)
- 5. Record number in attempt (if any).

The fourth area records:

- 1. Session priority (if any)
- 2. Action number (the current action sequence number)
- 3. Number of actions complete
- 4. Number of session attempts
- 5. Number of action attempts.

The fifth area records the number of files sent to the DPS 6, received from the DPS 6, deleted at the DPS 6, renamed at the DPS 6, and executed at the DPS 6 during the session. It also lists the number of records sent or received during the session.

The sixth area records the date and time of:

- First attempt to execute session
- Last (or current) attempt to execute session
- Session completion
- Last (or current) attempt to execute session action
- Last session action completion.

Session Display Panel Options

On a session display panel, you can specify nine options. To specify an option, type the number (1 through 9) in the command line and press ENTER. Three of the options control display of the sessions in the queue you are displaying:

- Option 1 (NEXT) displays the next session in the queue.
- Option 3 (PRIOR) displays the previous session in the queue.
- Option 6 (SAME) redisplays the current session. (You could also press ENTER for the same result.)

Options 2 (HISTORY), 4 (LIMIT GROUP), 5 (GROUP), 7 (STATUS), 8 (REPLY), and 9 (DESTINATION) are described later in this section.

Figure 2-6 is a sample display of an active session.

1. NEXT 2. HISTORY	3. PRIOR 4. LIMIT GR	ROUP 5. GROUP	
6. SAME 7. STATUS	8. REPLY 9. DESTINAT	FION	
SESSION ID: CHEMSEND	ACTION TYPE: SEND	D PRIORITY	128
LOGICAL UNIT: A661	SESSION STATUS: ACTI	IVE ACTION NUMBER:	010
DESTINATION:	ACTION STATUS: ACTI	IVE ACTIONS COMPLE	TE: 001
GROUP NAME:	REC# IN FILE: 00000	00099 SESSION ATTEMP	TS: 001
LIMIT GROUP:	REC# IN ATTEMPT: 0000	00098 ACTION ATTEMPT	S: 001
FILES RECORDS SENT: 000 00000000 RECEIVED: 000 00000000 DELETED: 001 RENAMED: 000 EXECUTED: 000	DA 1ST ATTEMPT: 11/1 LAST ATTEMPT: 11/1 LAST ENDED:	SESSION ACTION ATE TIME DATE 12/84 12:39 11/12/84 1 12/84 12:39 11/12/84 1	TIME 2:40

Figure 2-6. Example of Displaying an Active Session (1)

The ACTIVE queue is being viewed.

The session ID is CHEMSEND, and the LU is A661.

The action being performed is a Send (a file is being transferred to a DPS 6). Both the session and the action are active. Record 99 is being transferred.

The session priority is 128, and the action number is 10. (Note that these counters have user-definable intervals, so there are not necessarily 128 priority levels at this installation, and the session has not necessarily contained nine prior actions.) This is the first time the session and this action have been attempted.

So far, no files have been fully sent, received, renamed, or executed; one file has been deleted.

The session started on November 12, 1984, at 12:39 AM; the current action started at 12:40.

By pressing ENTER (or selection option 6), you can "refresh" the display. An updated view of the same session is shown in Figure 2-7:

1. NEXT 2. HISTORY 6. SAME 7. STATUS	3. PRIOR 4. LIMI 8. REPLY 9. DEST	T GROUP 5	. GROUP
SESSION ID: CHEMSEND LOGICAL UNIT: A661 DESTINATION: GROUP NAME: LIMIT GROUP:	ACTION TYPE: SESSION STATUS: ACTION STATUS: REC# IN FILE: REC# IN ATTEMPT:	EXECUTE COMPLETED COMPLETED OK	PRIORITY ACTION NUMBER: ACTIONS COMPLETE: SESSION ATTEMPTS: ACTION ATTEMPTS:
FILES RECORDS SENT: 001 00000100 RECEIVED: 000 00000000 DELETED: 001 RENAMED: 000 EXECUTED: 001 001 000	IST ATTEMPT: LAST ATTEMPT: LAST ENDED:	SESSION DATE TIM 11/12/84 12:3 11/12/84 12:3 11/12/84 12:4	ACTION E DATE TIME 9 9 11/12/84 12:40 0 11/12/84 12:40

Figure 2-7. Example of Displaying an Active Session (2)

Note that the session is now complete. The session consisted of one Delete action, one Execute action, and one Send action (of a 100-record file). The session status is now COMPLETED, and the (last) action status is now COMPLETED-OK. There was only one attempt to execute the session and its actions (that is, there were no failures). The last action, as well as the session itself, finished at 12:40.

Note also that the queue counters at the bottom of the panel have been updated to reflect the completion of this session: The ACTIVE and INCOMPLETE queues have decremented by one, and the COMPLETE queue has incremented by one.

Since this session is no longer active, SFT-H momentarily removes it from the ACTIVE queue and moves it to the COMPLETE queue.

Displaying the History File

Option 2 (HISTORY) lets you display all or part of the history file for the displayed session. The history file display is described later in this section.

Displaying the Limit Group

Option 4 (LIMIT GROUP) lets you display the limit group of the displayed session. If you make this selection, the Display Limit Group panel is displayed (Figure 2-8).

A214 A411 A413 A414 A611 A613 A913 A914 D4L461 D4L464 A111 A112	GROUP	NAME:	OPERATOR	T IANDOL -	RANSMISSIC	N TIME :	00000	SLG COUNT :	000
	A211 A614 A114	A213 A911	A214 A913	A411 A914	A413 D4L461	A414 D4L464	A611 A111	A613 A112	

Figure 2-8. Display Limit Group

One hundred LUs can be displayed per page; if there are more than 100 to be viewed, use the PF8 key to view subsequent pages.

Displaying the Group Record

Option 5 (GROUP) lets you display the group record for the displayed session. This display is described later in this section.

Changing the Session Status

Option 7 (STATUS) lets you change the status of a session (that is, move the session from one queue to another). If you make this selection, the Change Session Status panel is displayed (Figure 2-9).

NEW STATUS:	1. NO CH 2. EXPED	ANGE ITE	3. REI 4. HOI	JEASE JD			
SESSION ID: (LOGICAL UNIT: A DESTINATION: . ROUP NAME: .IMIT GROUP: .	OVERTIME A011	ACTION SESSION ACTION S REC# IN REC# IN	TYPE: STATUS: STATUS: FILE: ATTEMPT:	REA DY	•••	PRIORITY ACTION NUMBER: ACTIONS COMPLETE: SESSION ATTEMPTS: ACTION ATTEMPTS:	00 000 000 000
FILES SENT: 000 RECEIVED: 000 DELETED: 000 RENAMED: 000 EXECUTED: 000	RECORDS 00000000 00000000	lst Last Last	ATTEMPT: ATTEMPT: ENDED:	SESS DATE 	ION TIME 	ACTION DATE TIM	E •

Figure 2-9. Change Session Status

To select an option, enter 1, 2, 3, or 4 in the command line (or position the cursor to the appropriate line) and press ENTER. You have four options:

1. (NO CHANGE) Escape from this panel to the previous panel you viewed.

- 2. (EXPEDITE) Move this session to the NEXT queue (start the session).
- 3. (RELEASE) For the HOLD or NEXT queues only, move this session to the NOT-READY, READY, or RETRY queue, as appropriate. For example, a previously running session currently in the HOLD queue will be added to the RETRY queue; a session previously not ready will be added to the READY or NOT-READY queue, depending on its date/time specification.
- 4. (HOLD) Move this session to the HOLD queue (interrupt the session).

When you change the status of a session, the SESSION STATUS indicator changes as appropriate.

Responding to Session Errors

Option 8 (REPLY) lets you provide error-recovery instructions to a session that has halted. If you make this selection, the Reply panel is displayed (Figure 2-10).

1. TERMINATE 3. TERMINATE	/ NO RETRY / RETRY LA	2. TER 4.	SKIP TO I USE DEFAU	NEXT ACTIO	N		
SESSION ID: LOGICAL UNIT: DESTINATION: GROUP NAME: LIMIT GROUP:	CHEMRECV A661	ACTION ' SESSION ACTION ' REC# IN REC# IN	TYPE: STATUS: STATUS: FILE: ATTEMPT:	RECEIVE ACTIVE ACTIVE 00000000 00000000	1 7 1 5 1	PRIORITY ACTION NUMBE ACTIONS COME SESSION ATTEN ACTION ATTEN	12 R: 01 LETE: 00 MPTS: 00 IPTS: 00
FTLES	RECORDS			SESS	ION	ACTI	ON
SENT: 000 RECEIVED: 002	00000000	1 ST	ATTEMPT:	DATE 11/12/84	TIME 12:45	DATE	TIME
ELETED: 001		LAST	ATTEMPT:	11/12/84	12:56	11/12/84	12:58
RENAMED: 000		LAST	ENDED:	• • • • • • • • •			

Figure 2-10. Reply

You can instruct the session to abort the session (TERMINATE/ NO RETRY), ignore the error (SKIP TO NEXT ACTION), retry the action (TERMINATE/RETRY LATER), or use the default action.

Changing Destinations

Option 9 (DESTINATION) lets you change the destination (the logical unit) for the actions in a session. If you make this selection, the Change Destination panel is displayed (Figure 2-11).

	NEW I (OR	DESTINATION: * FOR CHANGE	*BACK TO	ORIGINAL	DESTINAT	EON)		
* SESSION I LOGICAL U DESTINATI GROUP NAM LIMIT GRO	D: NIT: ON: E: UP:	SDRS1 AlA1	ACTION ' SESSION ACTION ' REC# IN REC# IN	TYPE: STATUS: STATUS: FILE: ATTEMPT:	RETRY NEE 000000000 00000000	DED	PRIORITY ACTION NUMBER: ACTIONS COMPLETE: SESSION ATTEMPTS: ACTION ATTEMPTS:	199 000 000 009
SENT: RECEIVED: DELETED: RENAMED: EXECUTED:	FILE: 000 000 000 000 000	S RECORDS 00000000 000000000	lst Last Last	ATTEMPT: ATTEMPT: ENDED:	SESS DATE 02/15/85 02/15/85 02/15/85	SION TIME 14:25 15:07 15:07	ACTION DATE TIM	E •

Figure 2-11. Change Destination

Enter a new LU name to change destinations, or enter * (the default) to restore the original destination. The DESTINATION field changes to reflect your choice.

DISPLAY SESSION BY SESSION ID AND LU NAME

If you select 2 from the main panel, the Display Session by Session ID and LU Name Panel is displayed (Figure 2-12).

	***	SFT-HOST:	ON-LINE INT	ERFACE **	**	
====> (PF1=HELP PF3=	END CLEAR=	SIGNOFF)	••••			
PLEASE TYPE SE (OR "QUIT" ON	SSION ID A COMMAND LI	ND LU NAME, NE TO RETUR	THEN ENTER N TO MENU)			
SESSION ID: . LU NAME: .						
NEXT: nnn REF HOLD: nnn RET	PLY: nnn A 'RY: nnn R	CTIVE: nnn EADY: nnn	NOT READY: INCOMPLETE:	nnn COMPI nnn NO-TH	ETE: nnn ANS: nnn	NEW SES: XXX TRACE: XXX

Figure 2-12. Display Session By Session ID and LU Name

This panel lets you display a specific session, by specifying the session ID and LU name. This function displays any given session as stored in the transmission status file.

Once you specify the session, it is displayed as described in "Display Session By Queue," earlier in this section.

DISPLAY HISTORY FILE

If you select 3 from the main panel, the Display History File panel is displayed (Figure 2-13).



Figure 2-13. Display History File

This panel lets you display all or part of the history file. Using one or more of the optional parameters, you can limit the display to specific entries in the history file--for example, the history of a specific session, all sessions starting after a certain time, all sessions starting between two dates, or all sessions with a certain destination.

Once you specify the parameters, the history file is displayed as described in "Display History File," earlier in this section. Figure 2-14 is a sample display of a history file.

RUNID:	22222222	DATE	: 12/04	1/8	34									
SESS ID:	LU NAME	SEQ	MSGID	Ť	TIME	TEXT								
		000	S1111	Ι	084820	TRANSM	iis:	SION (CONT	ROL	PROG	ram s	STARTU	P RUI
		000	S1119	I	084820	THE TO	P I	DEFAU!	LT:	MODE		HAS	BEEN	OVER
		000	S1119	Ι	084820	THE TO	'P I	defaui	LT:	OPER	SES	HAS	BEEN	OVERI
		000	S1119	Ι	084820	THE TO	JP I	DEFAU!	LT:	MAXE	ILES	HAS	BEEN	OVER
		000	S1119	Ι	084820	THE TO	'P I	DEFAUI	LT:	OPER	ATOR	HAS	BEEN	OVER
CANRECV	A161	000	S0005	Ι	084822	STATUS	3 RI	ECORD	ADE	DED 1	O TR	ANSM:	ISSION	STA'
CANSEND	A161	000	S0005	Ι	084823	STATUS	s RI	ECORD	ADD	DED I	'O TR	ANSM:	ISSION	i sta'
CANSEND	A461	000	S0005	Ι	084823	STATUS	s RI	ECORD	ADE	DED 1	O TR	ANSM:	ISSION	STA
CANSEND	A961	000	S0005	Ι	084823	STATUS	\$ RI	ECORD	ADE)ED I	'O TR	ANSM:	ISSION	STA'
CANSND2	A461	000	S0005	Ι	084823	STATUS	3 RJ	ECORD	ADE)ED 1	'O TR	ANSM:	ISSION	Sta'
CANSND2	A961	000	S0005	Ι	084823	STATUS	s RF	ECORD	ADD)ED I	'O TR	ANSM:	ISSION	i sta'
CANSND3	A461	000	S0005	Ι	084823	STATUS	3 R)	ECORD	ADE	DED 1	O TR	ANSM:	ISSION	STA
CANSND3	A961	000	S0005	I	084824	STATUS	S RI	ECORD	ADE)ED I	O TR	ANSM:	ISSION	STA'
	PF3=END					PF7=8	звкі	W PF	8=SE	WD	PF10	=LEF'	r PFl]	=RGH

Figure 2-14. Example of Displaying a History File

For display of history files only, note that you can use the PF10 and PF11 keys to display the entire text of messages. The PF10 key (Shift Left) and PF11 keys (Shift Right) affect the display of message text (the darker area in Figure 2-14). You can also use the PF7 and PF8 keys to "page" through the display.

DISPLAY HALT OPTIONS

If you select 4 from the main panel, the Display Halt Option panel is displayed (Figure 2-15).



Figure 2-15. Display Halt Options

This panel lets you clear the ACTIVE queue and shut down the SFT-H. This function affects the transmission status file. To select an option, enter 1, 2, or 3 in the command line (or position the cursor to the appropriate line) and press ENTER. You have three options:

- 1. (RETURN TO MENU WITHOUT HALTING) Escape from this panel to the previous panel you viewed.
- (HALT NORMAL) "Graceful" halt. Inhibit new sessions (move contents of NEXT queue to HOLD queue), but allow active sessions to complete.
- 3. (HALT QUICK) Immediate halt. Inhibit new sessions (move contents of NEXT queue to HOLD queue), and stop active sessions (move contents of ACTIVE queue to RETRY queue).

SIGNOFF

If you select 5 from the main panel, the Signoff panel is displayed (Figure 2-16).

====> (PF1=HEL *	P PF3=END	CLEA	R=SIGNOF	 F)	•••							1
PLEASE I	NDICATE C	HOICE	TYPE N	UMBER	OR	POSITIC	ON CU	RSOR,	THEN	PRESS	ENTER	
1. DO 1 2. SIG	NOT SIGNC NOFF	FF: RI	ETURN TO	MAIN	MENU							
NEXT: nni	n REPLY:	nnn	ACTIVE:	nnn	NOT	READY:	nnn	COMPI	LETE:	nnn	NEW SES:	 xx:

Figure 2-16. Signoff

This panel lets you sign off from the online operator interface. To select an option, enter 1 or 2 in the command line (or position the cursor to the appropriate line) and press ENTER. You have two options:

- (DO NOT SIGNOFF) Escape from this panel to the previous panel you viewed.
- 2. (SIGNOFF) Sign off from the online operator interface.

ENABLE/DISABLE NEW SESSION STARTUP

If you select 6 from the main panel, you change a switch that allows new sessions to start. The initial state (as shown by the NEW SES: indicator on all panels) is ON; that is, new sessions can start. If you select this function, the state of the switch changes, from ON to OFF, or from OFF to ON. The indicator changes to show this change. You only have to select this option to affect the change.

ENABLE/DISABLE EXTERNAL TRACE

If you select 7 from the main panel, you change a switch that permits or inhibits the interface to the external general trace facility (GTF). The initial state (as shown by the TRACE: indicator on all panels) is OFF; that is, tracing is disabled. If you select this function, the state of the switch changes, from OFF to ON, or from ON to OFF. The indicator changes to show this change. You only have to select this option to affect the change.

Use of this feature requires that the GTF program trace facility be configured and enabled on the host.

DISPLAY GROUP RECORD

If you select 8 from the main panel, the Display Group Record panel is displayed (Figure 2-17).



Figure 2-17. Display Group Record

This panel lets you display a group record, as stored in the resource master file. The group record lists all LUs in the group.

Figure 2-18 is a sample display of a group record.

GROUP	NAME:	OPERATOR	. TOOTON	PRANSMISSI	ON TIME :	00000	SLG COUNT : (
A211 A614 D4L465	A213 A911	A214 A913	A411 A914	A413 D4L461	A414 D4L464	A611 A111	A613 A112

Figure 2-18. Example of Displaying a Group Record

Counters display the number of LUs you have viewed, how many you have left to view, the scheduled transmission time for this group, and the session limit group count. You can use the PF7 and PF8 keys to "page" through the display.

CHANGE DESTINATION - GLOBAL

If you select 9 from the main panel, the Change Destination - Global panel is displayed (Figure 2-19).



Figure 2-19. Change Destination - Global

This panel lets you change the destination of all incomplete sessions from one LU to another. When you enter this function, it lists the target destination, the number of sessions examined (EXAMINED), and the number of sessions whose destination changed (SUCCESS) or were not changed (FAIL). When the changed session starts, only Send actions will execute.

LIST OF HELP PANELS AVAILABLE

If you select 10 from the main panel, or press the PFl key from any panel, the list of help panels available is displayed (Figure 2-20).

	<pre>(PF1=HELP PF3=END * THE FOLLOWING TOPI 1. GENERAL INFO 2. SIGNON PROCE 3. SIGNOFF PROC 4. DISPLAY RESO 5. DISPLAY HIST 6. DISPLAY STAT 7. CHANGE STATU 8. PROVIDE ERRO 9. COMMUNICATIO 10. SESSIONS STA 11. TRACE ENABLE</pre>	CLEAR=SIGNOFF) HELP TUTORIAL ICS MAY BE VIEWED BY SELECTION FROM COMMAND LINE ORMATION 3DURE LEDURE DURCE MASTER FILE RECORDS FORY FILE RECORDS FUS FILE RECORDS JS FILE RECORDS JS FILE RECORDS JR RECOVERY INFORMATION DN WITH CONSOLE OPERATOR ARTUP ENABLE / DISABLE S / DISABLE	******
--	---	--	--------

Figure 2-20. List of Help Panels Available

This panel provides access to a set of online information panels. Each selection on this panel discusses a different task and how to perform it. One or more panels are devoted to each task.

SEND MESSAGE TO CONSOLE OPERATOR

If you select 11 from the main panel, the Send Message to Console Operator panel is displayed (Figure 2-21).



Figure 2-21. Send Message to Console Operator

This panel lets you send a message of up to 60 characters to the host console operator.

Using the Online Operator Interface

Here are some suggested procedures for using the online operator interface for common tasks.

SIGNING ON

Signon procedures vary according to the host configuration. In one common method, your terminal is configured directly as an SFT-H operator terminal, and an online operator interface sign-on panel is displayed when you power up your terminal. To sign on from another terminal:

- 1. Log on to the SFT application. The online operator interface signon panel is then displayed.
- 2. Sign on, using your operator ID and password (if any), and press ENTER. The main panel will be displayed.

If you are located at a DPS 6 system that includes the SNA Interactive Terminal Facility, you can sign on to ITF and then sign on to SFT-H.

STARTING A SESSION IN THE HOLD QUEUE

Sessions in the HOLD queue are deferred because of a date/time stamp. To start a session in the HOLD queue, you must move it to the NEXT queue.

- From the main panel, select option 2 and press ENTER. The Display Session By Session ID and LU Name panel will be displayed.
- 2. Enter the session ID and LU (destination) name and press ENTER. A display of that session will appear.
- 3. Select option 7 (STATUS) and press ENTER. The Status Panel will be displayed.
- 4. Select option 2 (EXPEDITE). This queues the session to start.

To monitor execution of the session, press ENTER every few moments. This "refreshes" the display to include status changes.

CHECKING QUEUES

To list the sessions in a queue, maneuver the cursor to the queue counter at the bottom of any panel and press ENTER.

DISPLAYING SESSIONS

To display any session, select option 2 from the main panel and press ENTER. The Display Session By Session ID and LU Name panel will be displayed. Enter the session ID and LU name, and press ENTER. The session will be displayed.

STOPPING A SESSION

To stop a session, you must move it from the ACTIVE queue to the HOLD queue.

 From the main panel, select option 2 and press ENTER. The Display Session By Session ID and LU Name panel will be displayed.

- 2. Enter the session ID and LU (destination) name and press ENTER. A display of that session will appear.
- 3. Select option 7 (STATUS) and press ENTER. The Status panel will be displayed.
- 4. Select option 4 (HOLD). This stops the session.

REPLYING TO AN ERROR CONDITION

You can specify that a session encountering error conditions will ask for operator intervention. If you notice a session in the REPLY queue, you can process it.

- Maneuver the cursor to the REPLY queue counter at the bottom of any panel and press ENTER. A queue summary will be displayed.
- Select the session by moving the cursor down to that line and pressing ENTER. A display of that session will appear.
- 2. Select option 8 (REPLY) and press ENTER. The Reply panel will appear.
- 3. Select the appropriate action: 1 (TERMINATE/NO RETRY), 2 (SKIP TO NEXT ACTION), 3 (TERMINATE/RETRY LATER), or 4 (USE DEFAULT). Press ENTER.

VIEWING THE HISTORY FILE

You can view all or part of the history file (that is, all completed sessions and the session currently executing, or only certain sessions).

- 1. From the main panel, select option 3 and press ENTER. The Display History File panel will be displayed.
- Press ENTER to view the entire history file, or enter parameters to specify which session(s) you wish to view. A display of the history file will appear.
- 3. Use the PF7 key (shift backward), the PF8 key (shift forward), the PF10 key (shift left), and the PF11 key (shift right) to view the file and its contents.

ENABLING OR DISABLING EXTERNAL TRACE

From the main panel, select option 7. This enables tracing if it was off, or disables it if it was on. The TRACE indicator changes.

HALTING SFTTCP

You can shut down file transfer in two ways: "gracefully," allowing executing sessions to complete but inhibiting new session startup, or immediately, halting active sessions and inhibiting new session startup.

- 1. From the main panel, select option 4 and press ENTER. The Display Halt Options panel will be displayed.
- Select option 2 or 3, as appropriate, and press ENTER. (If you select option 3, you do not have to sign off as described below.)

SIGNING OFF

To sign off the online operator interface, press the CLEAR key from any panel. The Signoff panel will appear. Select option 2 and press ENTER.

Section 3 DEFINING FILE TRANSFER JOBS

The SFT-H File Maintenance Utility (SFTBATCH) creates file transfer jobs. SFTBATCH can update these files:

- Resource master file
- Transmission control file
- Staging files.

Input to SFTBATCH consists of utility control language statements, which are described in detail in this section and summarized in Appendix A.

SFTBATCH produces as part of its output a number of reports.

This section also includes descriptions of the utility control language statements required for dynamic file allocation, session limit groups, and the online operator interface.

EXECUTING SFTBATCH

The sample JCL fragment in Figure 3-1 illustrates executing SFTBATCH. The utility control language statements are not included in this sample. Appendix F contains complete examples of SFTBATCH execution, including utility control language statements. Remember that file and library names are installation dependent.

//FILETRAN	EXEC PGM=SFTBATCH,TIME=(1,5),REGION=512K,PARM='params'
//STEPLIB	DD DSN=FTF.LOAD,DISP=SHR
//STEPCAT	DD DSN=VSAM.USERCAT,DISP=SHR
//OUTPUT	DD SYSOUT=A
//REPORT	DD SYSOUT=A
//PASSDATA	DD SYSOUT=A
//SNAPDUMP	DD SYSOUT=A
//SYSUDUMP	DD SYSOUT=A
//ACBHST	DD DSN=HST1.CLUSTER,DISP=OLD
//ACBMSG	DD DSN=MSG1.CLUSTER,DISP=SHR
//ACBTCF	DD DSN=RMF1.CLUSTER,DISP=SHR
//ACBTSF	DD DSN=TCF1.CLUSTER,DISP=SHR
//FTSFOUT	DD DSN=SF02.CLUSTER,DISP=SHR
//FTSFIN	DD DSN=SF01.CLUSTER,DISP=SHR
//FTSFIN1	DD DSN=SF09.CLUSTER,DISP=SHR
//FTSFIN1	DD *
Utility	Control Language statements
/* //	•

Figure 3-1. Executing the File Maintenance Utility

PARM Parameter

The only user-definable parameter on the LXEC card for SFTBATCH is PARM. It allows modification of values specified in the default values table. Remember that using symbolic parameters limits you to one JCL record, while using the PARM.STEPNAME JCL override format, you are limited to 100 characters between parentheses.

FORMAT:

PARM='[RMFPASS=password_1][,MSGPASS=password_2] [,HSTPASS=password_3][,TCFPASS=password_4] [,TSFPASS=password_5][,DEBUG={YES} NO }]'

PARAMETERS:

RMFPASS=password_1 MSGPASS=password_2 HSTPASS=password_3 TCFPASS=password_4 TSFPASS=password_5

> Override the password specified in the default values table for the specified file. The password can be from one to eight characters long.

 $DEBUG = \left\{ \begin{array}{c} YES \\ NO \end{array} \right\}$

Generate diagnostic SNAPDUMPs or suppress them; the default value is specified in the default values table.

DD Cards Required for SFTBATCH

SFTBATCH requires these DD statements:

//STEPCAT	DD	DSN=vsam_usercat,DISP=OLD
//OUTPUT	DD	SYSOUT=location1
//REPORT	DD	SYSOUT=location2
//PASSDATA	DD	SYSOUT=location3
//SYSUDUMP	DD	SYSOUT=location4
//ACBHST	DD	DSN=history_file,DISP=OLD
//ACBMSG	DD	DSN=message_file,DISP=SHR
//ACBRMF	DD	DSN=resource_master_file,DISP=OLD
//ACBTCF	DD	DSN=transmission_control_file,DISP=OLD
//ACBTSF	DD	DSN=transmission_status_file,DISP=OLD
//SNAPDUMP	DD	location5
//FTSFOUT	DD	DSN=default_indd_staging_file,DISP=OLD
//FTSFIN	DD	DSN=default_outdd_staging_file,DISP=OLD
//FTSFIN1	DD	DSN=default_sortlist_exception_file,DISP=OLD
//INPUT	DD	location6

The vsam_usercat parameter specifies the name of the VSAM user catalog. The location1, location2, location3, etc., parameters specify where the output is to be sent or where the information is located. The history_file parameter is the name of the SFT history file cluster; the message_file parameter is the name of the message file cluster, etc. FTSFIN is the default input staging file (for files coming in to the host); FTSFOUT is the default output staging file (for files going out to the DPS 6); and FTSFIN1 is a sort work file for the history file exception report. If you wish to define more than the default input and output staging files, include more DD statements for FTSFIN and FTSFOUT. In general, specify DISP=OLD for one or more DD statements to prevent deadlock. Appendix F contains examples of these declarations.

UTILITY CONTROL LANGUAGE STATEMENTS

The remainder of this section consists of detailed descriptions of the File Maintenance Utility control language statements used to update SFT-H files. The commands are arranged alphabetically within function groups. The groups are:

- Resource master file control statements
- Transmission control file control statements
- Staging file control statements
- History file control statements.

Appendix A summarizes File Maintenance Utility control language statements. Appendix B lists messages generated by SFT-H. SFTBATCH condition codes are summarized in Appendix D.

Format of Utility Control Language Statements

These considerations describe the format of utility control language statements:

- For alphanumeric parameters, valid characters are A through Z, 0 through 9, \$, #, @, and %. The first character must be alphabetic (A through Z).
- Labels must begin in column 1. When there is no label, the control statement verb can begin in column 2 or beyond. If there is a label, you must leave at least one space between the label and the verb.
- 3. An asterisk (*) in column l indicates a comment.
- Verbs are separated from parameters by a space; parameters are separated from each other by commas.
- 5. If a string contains a blank, an apostrophe ('), left or right parentheses ((or)), or a comma (,), it must be enclosed in apostrophes. An apostrophe within a quoted string is indicated by two apostrophes (''). Do not use an apostrophe in a SPACE parameter.
- 6. To continue a control statement on a second or subsequent line, enter any character in column 72 of the previous line and continue the statement in column 16 of the next line.
- 7. In utility control language examples, caret (^) is used in MOD 400 pathnames; on an IBM 3270 terminal, use a logical not (¬).

Appendix F and the individual statement descriptions contain examples of valid utility control language statements.

Updating the Resource Master File

The utility control language statements used to update the resource master file are:

- Add GroupAdd LU
- Delete Group

AND NOT METAL PROPERTY OF

- Delete LU
- List Group
 List LU.

ADDGRP

ADD GROUP (ADDGRP)

Adds a group to the resource master file and specifies the LUs that compose the group.

FORMAT:

PARAMETERS:

label

Optional standard label.

GROUP=group_name

One- through eight-character name of the group to be added.

ADDLU=lu_l, lu_2,...lu_n

A list of one- through eight-character LU names. These LUs are included in the group. The LUs that are members of the group must be added to the resource master file with ADDLU statements. You can specify a maximum of 500 LUs per group.

LIMITNO=number

The number of concurrent sessions for LUs in the session limit group group_name. The default is LIMITNO=0.

Example:

ADDGRP GROUP=GROUPA, ADDLU=(LUA, LUB, LUC)

Add a group named GROUPA containing LUs named LUA, LUB, and LUC, with a limit number of 0 (the default). The system response is:

GROUP GROUPA ADDED TO RESOURCE MASTER FILE SUCCESSFULLY.

If GROUPA already exists, the system responds:

DUPLICATE GROUP - GROUPA - ENCOUNTERED ON RESOURCE MASTER FILE

ADD LOGICAL UNIT (ADDLU)

Add an LU to the resource master file. Every LU must be defined with an ADDLU statement.

FORMAT:

```
[label] ADDLU LU=lu_name
    [,LOGMODE=vtam_logmode]
    [,TIME=hhmm]
    [,LIMITGR=group_name]
```

PARAMETERS:

label

Optional standard label.

LU=lu_name

One- through eight-character name of the LU being added.

LOGMODE=vtam_logmode

Optional VTAM logon mode that overrides the default VTAM logmode specified in the default values table. If this parameter is not specified, the value from the default values table is used.

TIME=hhmm

Optional default time of day after which transmission can be scheduled. This must be a valid 24-hour clock time in hours and minutes or zero. If this parameter is not specified the default is 0000.

LIMITGR=group_name

Optional one- through eight-character name of the session limit group to which the LU belongs. The specified group can be either an ordinary group or a group defined only as a session limit group; if the group does not exist, the effect is the same as if the group were defined with LIMITNO=1.

ADDLU

DESCRIPTION:

The only required parameter is the name of the LU. Optional parameters are a default time of day for transmission and a VTAM logmode. If the time is not specified, the default time is 0000. If the VTAM logmode is not specified, the value in the default values table is used.

Example:

ADDLU LU=LUF

Add an LU named LUF to the resource master file. The system response is:

LU LUF ADDED TO RESOURCE MASTER FILE SUCCESSFULLY

If LUF already exists, the system responds with:

DUPLICATE LU - LUF - ENCOUNTERED ON RESOURCE MASTER FILE

DELGRP

DELETE GROUP (DELGRP)

Delete a group from the resource master file.

FORMAT:

[label] DELGRP GROUP=group_name

PARAMETERS:

label

Optional standard label.

GROUP=group_name

Name of defined group to be deleted.

DESCRIPTION:

The specified group is deleted. However, the LUs in that group are not deleted. To delete the LUS, use individual DELLU control statements.

Example:

DELGRP GROUP=GROUPA

Delete a previously defined group named GROUPA from the resource master file. The system response is:

42600-GROUP - GROUPA - DELETED FROM RESOURCE MASTER FILE
DELLU

DELETE LOGICAL UNIT (DELLU)

Remove an LU record from the resource master file.

FORMAT:

[label] DELLU LU=lu_name

PARAMETERS:

label

Optional standard label.

LU=lu_name

One- through eight-character name of the LU to be deleted.

Example:

DELLU LU=LUF

Delete an LU named LUF from the resource master file. The system response is:

LU - LUF - DELETED FROM RESOURCE MASTER FILE

LIST GROUP (LISTGRP)

Print the name of the group and the LUs that compose this group.

FORMAT:

[label] LISTGRP [GROUP=group_name]

PARAMETERS:

label

Optional standard label.

GROUP=group_name

Optional name of the group to be listed. If this parameter is not specified, all groups are listed.

DESCRIPTION:

For each group, this command prints the group name, the number of LUs, the session limit group limit (for a session limit group only), and lists the LUs that compose the group.

Example:

LISTGRP

List all groups in the resource master file.

LISTLU

LIST LOGICAL UNIT (LISTLU)

List information about the specified LU or all LUs defined in the resource master file.

FORMAT:

[label] LISTLU [LU=lu_name]

PARAMETERS:

label

Optional standard label.

LU=lu_name

Optional name of the LU to be listed.

DESCRIPTION:

This command prints the name of the LU, default time for execution, VTAM logmode if defined, and all groups of which this LU is a member. If LU is omitted, all LUs are listed.

Example:

LISTLU LU=AAll

List the entry in the resource master file for the LU AAll.

Updating the Transmission Control File

The utility control language statements used to update the transmission control file are:

- Add Action
- Add Session
- Delete Action
- Delete Session
- List Session.

ADDACT

ADD ACTION (ADDACT)

Add an action to the transmission control file specifying that a data file be sent, received, deleted, or renamed; that a MOD 400 command file (EC file) be executed; or that the online interactive operator interface be invoked.

FORMAT:

[label] ADDACT (GROUP=group_name)
 (LU=lu_name)
 , SESSID=session_id
 [,SEQ=seq_#]
 ,ACTION=action
 [,ERROPT=option]
 action_parameters

PARAMETERS:

label

Optional standard label.

GROUP=group_name

One- to eight-character name of the group for the specified session. This parameter must not be specified if LU is specified.

LU=lu_name

One- to eight-character name of the LU for the specified session. This parameter must not be specified if GROUP is specified.

SESSID=session_id

One- to eight-character name of the previously defined session on which the action is to be performed.

SEQ=seq_#

Optional user-assigned, one- to three-character sequence number. If this parameter is not specified, the action is placed at the end of the current session and given a system-defined sequence number which is 5 higher than the highest sequence number currently assigned. Systemdefined sequence numbers begin with 5 and are incremented by 5. ACTION=action

Type of action to be performed. Valid arguments are SEND, RECEIVE, DELETE, RENAME, EXECUTE, and OPER.

- SEND -- Send a file to the DPS 6.
- RECEIVE -- Receive a file from the DPS 6.
- DELETE -- Delete a DPS 6 file.
- RENAME -- Rename a DPS 6 file.
- EXECUTE -- Execute an Enter Batch Request command for the specified MOD 400 command (EC) file. if you do not specify otherwise within the EC, the default working directory is >NFT>BA.
- OPER -- Invoke the online operator interface.

ERROPT=option

Error option for this action. Valid arguments are ABORT, IGNORE, OPER, and DEFAULT. If this parameter is not specified, the ERROPT parameter from the ADDSES control statement is used. If the parameter is specified, it overrides the ERROPT parameter for the session.

- ABORT -- Abort the action.
- IGNORE -- Document the error, skip the current action, and try the next action.
- OPER -- Notify the operator and wait for a response. The operator can specify ABORT, RETRY, SKIP, or DEFAULT.
- DEFAULT -- Use the ERROPT parameter specified on the ADDSES control statement.

If this parameter is not specified or is DEFAULT on the ADDSES control statement, the default values table entry is used.

action_parameters

These parameters vary depending on the action specified in the ACTION parameter.

SEND parameters (ACTION=SEND)

The SEND parameters are FILEID, NAME, SOURCE, INDD, INDDPASS, DISP, DSORG, KEYLEN, KEYOFF, CISIZE, SPACE, RECL, RECFM, FREESP, OVFLFREQ, DELATTR, COMPRESS, CONVERT, DSNAME, MEMBER, DSNPASS, and CKPINTVL. Required parameters are listed first.

SEND can be used either to transmit data from a staging file or from a dynamically allocated file. To transmit data from a staging file, you must specify NAME; you may specify INDD, INDDPASS, and SOURCE. To transmit a dynamically allocated file, you must specify DSNAME; you may specify MEMBER, COMPRESS, CONVERT, and DSNPASS. Do not specify both NAME and DSNAME for the same SEND action.

FILEID=native_pathname

A 1- to 52-character MOD 400 full pathname (where file will reside on the DPS 6).

NAME=input_logical_file_name

Optional 1- through 16-character name of the logical staging file. This subparameter is required if a staging file is being used. Do not use this subparameter with dynamic file allocation.

SOURCE=input_logical_file_source_name

Optional one- through eight-character logical staging file source. The default source is IBM. Do not use this subparameter with dynamic file allocation. When staging a file to be sent to a DPS 6 using the default source, the logical staging file will have the default source, concatenated with the NAME value (the default source is IBM).

INDD=input_staging_file_dd_name

Optional one- through eight-character input DD name for staging file. If this parameter is not specified, the default staging file DD name from the default values table (FTSFIN) is used. Do not use this subparameter with dynamic file allocation. INDDPASS=staging_file_vsam_password

Optional one- through eight-character VSAM staging file password. This parameter is required only if the input staging file is password-protected. INDDPASS can only be specified if INDD is specified.

DISP=([dps_6_file_disposition][,ibm_file_disposition])

Optional disposition of the file on the DPS 6 and the host. The first optional subparameter defines the disposition of the file of the DPS 6. Possible values are NEW, OLD, and MOD.

NEW -- File does not exist on the DPS 6.

OLD -- File exists on the DPS 6 and is replaced.

MOD -- File exists on the DPS 6 and is appended to. If the file does not exist, it is created.

The default is NEW.

The second optional subparameter defines the disposition on the host. Possible values are KEEP and DELETE.

- KEEP -- Do not remove the logical staging file.
- DELETE -- Remove the logical staging file after normal completion.

The default is KEEP.

DSORG=organization

For new DPS 6 files, the optional file organization. Possible values are PS, IS, DA, and FR.

PS -- Physical sequential (UFAS sequential).
IS -- Indexed (UFAS indexed).
DA -- Relative (UFAS relative).
FR -- Fixed relative (non-UFAS fixed-relative).

If this parameter is not specified, the default is PS.

*

CISIZE=control_interval_size

For new DPS 6 files, the optional three- to five-digit control interval size in characters. (This is a DPS 6 value.) The size must be a multiple of 256 with a maximum of 32K characters. Specify this value only for files that do not have DSORG=FR. If DSORG=FR, this argument is ignored by the DPS 6 file system.

SPACE=([initial][,maximum])

For new DPS 6 files, the optional space allocation.

initial

Optional one- through five-digit initial space allocation in control intervals or, if DSORG=FR, in sectors. The maximum initial size is 32K characters.

maximum

Optional one- through five-digit maximum space allocation in control intervals (for fixed-relative files, in sectors). The maximum size is 32K characters.

RECL=record_length

For new DPS 6 files, the optional one- through five digit record length. For variable files, this specifies the maximum record length. The maximum length is 32,740 characters. The default is 500 characters.

KEYLEN=key_length

For new DPS 6 indexed files, the one- or two-digit key length in characters. The maximum key length is 99 characters. Specify this parameter only if DSORG=IS is specified.

KEYOFF=offset

For new DPS 6 indexed files, the one- through five-digit offset in the record to the key. The maximum offset is 32,739 characters. Specify this parameter only if DSORG=IS and KEYLEN are specified. The key offset follows the IBM convention. The initial value is 1.

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RECFM=format

Optional record format of the DPS 6 file to be created. Possible record formats are F, V, and U.

```
F--Fixed (the default)
V--Variable
U--Undefined
```

FREESP=free_space_size

For new DPS 6 indexed files only, the one- through five-digit free space per control interval in characters. The maximum size is 32K characters.

OVFLFREQ=overflow_frequency

For new DPS 6 indexed files only, the one- through five-digit overflow frequency. The maximum frequency is every 32K characters.

DELATTR=delete_attribute

For new DPS 6 relative files only, the delete attribute. Valid choices are YES and NO; the default is YES.

These subparameters (DSNAME, DSNPASS, MEMBER, COMPRESS, and CONVERT) are used only with dynamic file allocation:

DSNAME=file_name

The fully qualified name of the cataloged file that is to be transmitted dynamically.

DSNPASS=password

The password for the file to be transmitted dynamically.

MEMBER=member_name

The member of the partitioned file to be transmitted. Specify MEMBER only if DSNAME is a PDS.

COMPRESS= {YES}

Specifies if the data from the dynamically allocated file is to be compressed; the default is COMPRESS=YES.

ADDACT

CONVERT=ASCII

Specifies that the data from the dynamically allocated file is to be converted to ASCII. The default is not to convert the data.

CKPINTVL=checkpoint_interval

The optional checkpoint interval, from 0 to 32767. This specifies the number of records to be transferred between checkpoint mark requests. When a checkpoint interval is reached, all received data is moved from memory to disk. A checkpoint interval of zero means no checkpoints are sent. If checkpoint intervals are used, you should specify a value larger than the outbound pacing count. The default is zero.

RECEIVE parameters (ACTION=RECEIVE)

The RECEIVE parameters are FILEID, NAME, OUTDD, OUTDDPAS, SOURCE, COMPRESS, and CKPINTVL.

FILEID=native_pathname

DPS 6 full pathname of 1 through 52 characters of the file to be sent to the host.

NAME=output_logical_file_name

Name of logical staging file.

SOURCE=output_logical_file_source_name

optional one- through eight-character logical staging file source. The source is the name of the LU unless you override it here. This parameter is used to implement DPS 6 to DPS 6 file transfers.

OUTDD=output_staging_file_dd_name

Optional one- through eight-character output DD name for the staging file to be used. If this parameter is not specified, the default staging file DD name from the default values table (FTSFOUT) is used.

OUTDDPAS=staging_file_vsam_password

Optional one- through eight-character VSAM staging file password. This parameter is required only if the output staging file is password-protected. OUTDDPAS can only be used if OUTDD is specified.

ADDACT

COMPRESS= {YES NO }

> Optional record compression by the SFT-6 before sending the file. Valid choices are YES and NO. The default is YES.

CKPINTVL=checkpoint_interval

The optional checkpoint interval, from 0 to 32767. This specifies the number of records to be transferred between checkpoint mark requests. When a checkpoint interval is reached, all received data is moved from memory to disk. A checkpoint interval of zero means no checkpoints are sent. Small values can significantly affect the speed of file transfer. If checkpoint intervals are used, you should specify a value larger than the outbound pacing count. The default is zero.

NOTE

For SFT-6 to SFT-H file transfers, the checkpoint interval can be modified by the system to conform to internal file boundaries.

DELETE parameter (ACTION=DELETE)

The only DELETE parameter is FILEID.

FILEID=native_pathname

MOD 400 full pathname of 1 through 52 characters of file on the DPS 6.

RENAME parameters (ACTION=RENAME)

The RENAME parameters are FILEID and NEWNAME.

FILEID=native_pathname

MOD 400 full pathname of 1 through 52 characters of the file on the DPS 6.

NEWNAME=new_pathname

New MOD 400 simple pathname of 1 through 12 characters of the file on the DPS 6.

EXECUTE parameters (ACTION=EXECUTE)

The EXECUTE parameters are FILEID, ARG, and ERROUT.

FILEID=native_pathname_of_ec

MOD 400 full pathname of the EC file on the DPS 6; 1 through 52 characters, including the .EC suffix.

ARG='dps_6_argument_list'

Optional 1- through 99-character MOD 400 argument list (with the arguments separated by blanks) enclosed in apostrophes.

ERROUT=dps_6_pathname

Optional 1- through 52-character MOD 400 full pathname for user-out and error-out files.

The combined lengths of the FILEID and ERROUT parameters cannot exceed 59 characters. Therefore, you may wish to use the ERROUT default of the FILEID pathname with the .EC suffix replaced with .AO.

NOTES

- To process Execute actions, the DPS 6 must be properly configured with a batch pool and a directory for such actions.
- 2. Execute must not be the last action within a session, since the session could end before the DPS 6 accepts the Execute action. Execute spawns a separate asynchronous task on the DPS 6, which enters a job on the batch request queue and terminates. Execute errors are not returned to the host, but are reported directly through the DPS 6 operator's display.
- 3. To submit multiple Execute actions, separate each by other actions.
- 4. You can monitor the Execute action from the host by examining the DPS 6 absentee output file (located by default at >NFT>BA). However, the elapsed time between issuing an Execute action and the availability of the output depends on the DPS 6 load, as well as the nature of the action. The batch group typically runs at a low priority.

ADDACT

OPER parameters (ACTION=OPER)

There are no parameters for this action. ACTION=OPER can only be specified if SESSID=OPERATOR and GROUP=OPERATOR are specified. See "Preparing to Use the Online Operator Interface," later in this section, for a discussion of the use of this action.

DESCRIPTION:

The processing of an ADDACT statement by the File Maintenance Utility does not immediately or directly cause the specified action to occur. The action occurs during the next execution of the Transmission Control Program.

The SFT does not support the transfer of spanned records in relative or indexed files.

If you want to receive a file from a DPS 6 and then unstage it to a host sequential file, you should not specify both actions (Receive and Unstage) in the same utility control language file. Instead:

- Execute SFTBATCH to process a utility control language file containing an Add action statement with ACTION=RECEIVE.
- 2. Execute SFTTCP to receive the file.
- 3. Execute SFTBATCH a second time to process a utility control language file containing the UNSTAGE statement to copy the file to a sequential file.

Be aware of the following before appending to indexed files resident on the DPS 6:

- Records to be appended must follow the specifications given when the file was created.
- The record sequence must logically follow or continue what has already been built. Records must be presented in ascending order, and the first key must be greater than the last one in the existing file.
- The additions must not increase the file's size past its specified maximum.
- If the file contains fixed-length records, you cannot append variable-length records, or fixed-length records of a different length.

ADDACT

You can transfer DM6, I-D-S/II, DEF-II, or OAS files by unloading or "exporting" them to a sequential file, effecting the transfer, and then rebuilding them using user-developed procedures.

Example 1:

```
ADDACT SESSID=SESSIONA,

LU=LUD,

ACTION=SEND,

ERROPT=IGNORE,

SOURCE=IBM,

NAME=FIRST,

FILEID=^VOL1>TESTA,

CISIZE=256,

SPACE=(500,2000),

RECL=72,

RECFM=F
```

Add a Send action to the transmission control file specifying that the data file in logical staging file FIRST be sent to logical unit LUD on session SESSIONA as a DPS 6 file with full pathname ^VOLI>TESTA. The file is in fixed record length format with a record length of 72 characters. The control interval is 256 characters. The initial space allocation is 500 characters with a maximum of 2000 allowed. In case of error, this action is skipped, but the session continues with the next action. The source name would be IBM (if the file was staged using the system default); therefore, the logical staging file name would be IBMFIRST, a concatenation of SOURCE and NAME.

Example 2:

ADDACT SESSID=SESSIONA,LU=LUD,ACTION=RECEIVE,ERROPT=ABORT, NAME=HERE,FILEID=^VOL1>THERE

Add a Receive action to the transmission control file specifying that the DPS 6 file with full pathname ^VOLI>THERE be transmitted from logical unit LUD on session SESSIONA and be placed in logical staging file HERE. In case of error, the session is to be aborted. The source name would be LUD, because the default is LUD; therefore, the logical staging file name would be LUDHERE. Example 3:

ADDACT SESSID=SESSIONA,LU=LUD,ACTION=DELETE,ERROPT=IGNORE, FILEID=^VOL1>THERE

Add a Delete action to the transmission control file specifying that the DPS 6 file with full pathname ^VOLI>THER_ be deleted. Use session SESSIONA and logical unit LUD to transmit the Delete action. In case of error, this action is skipped, but the session continues with the next action.

Example 4:

ADDACT SESSID=SESSIONA,LU=LUD,ACTION=RENAME,ERROPT=IGNORE, FILEID=^VOL1>TESTA,NEWNAME=NEWTEST

Add a Rename action to the transmission control file specifying that the DPS 6 file with full pathname ^VOLI>TESTA be renamed ^VOLI>NEWTEST. Use session SESSIONA and logical unit LUD to transmit the Rename action. In case of error, this action is skipped, but the session continues with the next action.

Example 5:

ADDACT SESSID=SESSIONA,LU=LUD,ACTION=EXECUTE,ERROPT=ABORT, FILEID=^VOL1>TESTEC.EC

Add an Execute action to the transmission control file specifying that the EC file named ^VOL1>TESTEC.EC be executed. Use session SESSIONA and logical unit LUD to transmit the Execute action. In case of error, the session aborts.

Example 6:

ADDACT SESSID=OPERATOR, GROUP=OPERATOR, ACTION=OPER

Add an action to invoke the online operator interface.

ADDSES

ADD SESSION (ADDSES)

Add a session to the transmission control file. This statement must precede the ADDACT statements for the session.

FORMAT:

[label] ADDSES SESSID=session_id
, (GROUP=group_name)
 (LU=lu_name
 [, DATE=mmddyy]
 [, TIME=hhmm]
 [, PRIORITY=priority]
 [, ERROPT=option]
 [, DISP=disposition]

PARAMETERS:

label

Optional standard label.

SESSID=session_id

Unique one- through eight-character name to identify the session.

GROUP=group_name

One- through eight-character name of the group for the specified session. This parameter must not be specified if LU is specified.

LU=lu_name

One- through eight-character name of the LU for the specified session. This parameter must not be specified if GROUP is specified.

NOTE

Either LU or GROUP must be specified. Specifying neither or both results in an error.

DATE=mmddyy

Optional date for the session. The default is 000000, which implies that the date is not considered during session selection. mm=month, dd=day, yy=year.

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TIME=hhmm

Optional time for the session to be run. If this parameter is not specified, a value from the resource master file is used. A time of 0 implies that time is not considered during session selection and the session is run each time the Transmission Control Program is invoked.

PRIORITY=priority

Optional one- through three-digit priority of the session with DATE and TIME limits. Priority is an integer between 0 and 255; the highest priority is 0. The default is 128.

ERROPT=option

Error option for this session. This error option is the default for each action in this session. Only one option can be specified. Possible options are ABORT, IGNORE, OPER, and DEFAULT.

- ABORT -- Abort the session.
- IGNORE -- Document the failure and try the next action.
- OPER -- Notify the operator and wait for a response. The operator can specify ABORT, RETRY, SKIP, or DEFAULT.
- DEFAULT -- Use the user-defined default from the default values table (the default).

DISP=disposition

Optional disposition for this session. Possible dispositions are KEEP and DELETE.

- DELETE -- Remove the session after it has been performed

ADDSES

DESCRIPTION:

This control statement adds a session to the transmission control file.

NOTE

Do not specify ADDSES control statements with the same session ID for an LU and a group containing that LU. Although the File Maintenance Utility accepts both ADDSES control statements, the Transmission Control Program returns an error condition code 340, indicating an error adding a record to the transmission status file. Since this happens during initialization, the Transmission Control Program does not execute.

Example 1:

ADDSES SESSID=SESSIONA, LU=LUD

Add a session named SESSIONA and associate it with previously defined logical unit LUD.

Example 2:

ADDSES SESSID=SESSIONB, GROUP=GUG

Add a session named SESSIONB and associate it with previously defined group GUG.

DELETE ACTION (DELACT)

Erase an action record and update the session header record to indicate fewer actions in the session.

FORMAT:

[label] DELACT SESSID=session_id
, (GROUP=group_name)
 (LU=lu_name)
, SEQ=action_sequence_number

PARAMETERS:

label

Optional standard label.

SESSID=session_id

One- through eight-character name of the previously defined session on which the action is to be performed.

GROUP=group_name

One- through eight-character name of the group for the specified session. This parameter must not be specified if LU is specified.

LU=lu_name

One- through eight-character name of the LU for the specified session. This parameter must not be specified if GROUP is specified.

NOTE

You must specify either LU or GROUP. Specifying neither or both results in an error.

SEQ=action_sequence_number

One- through three-character sequence number of the action record to be deleted.

Example:

DELACT SESSID=SESSIONA, LU=LUD, SEQ=3

Delete the action that has sequence number 3 on session SESSIONA associated with logical unit LUD.

DELSES

DELETE SESSION (DELSES)

Delete the specified session in the transmission control file.

FORMAT:

PARAMETERS:

label

Optional standard label.

SESSID=session_id

Name of the session to be deleted. All actions for the session are also deleted.

GROUP=group_name

Name of the group for the session. This parameter must not be specified if LU is specified.

LU=lu_name

Name of the LU for the session. This parameter must not be specified if GROUP is specified.

NOTE

You must specify either LU or GROUP. Specifying neither or both results in an error.

Example:

DELSES SESSID=SESSIONB, LU=LUG

Delete session SESSIONB associated with logical unit LUG.

LIST SESSIONS (LISTSES)

List the requested sessions.

FORMAT:

PARAMETERS:

label

Optional standard label.

SESSID=session_id

Optional name of the session to be listed.

GROUP=group_name

Optional name of the group for the session. This parameter must not be specified if LU is specified.

LU=lu_name

Optional name of the LU for the session. This parameter must not be specified if GROUP is specified.

DESCRIPTION:

For the specified session(s), this command prints the session_id, the LU or group name, the sequence number (always zero), the number of actions, the disposition, the error option, the date and time, the password, and the priority.

For each action in the session(s), LISTSES prints the type of action (for example, ACTION=SEND), the sequence number, the error option, and the file name. Depending on the action, LISTSES also prints other appropriate information (SOURCE, DSNAME, MEMBER, etc.).

If SESSID was specified, all groups and LUs for that session are listed.

LISTSES

Example:

LISTSES

List all sessions in the transmission control file with their associated LUs and actions.

Figure 3-2 lists a sample report.

LIST TRANSMISSION CONTROL FILE												
06/21/84 FTCSC.01												
******** SESSION ID	KEY INFO LU/GROUP NAME	SEQ NUMBER	***** # OF ACTNS	GRP/ LU	****** DISP	******* SESSIO ERROR OPTION	N HEADER D SESSION DATE	FORMAT *** SESSION TIME	********* SESSION PASSWORD	SESSION PRIOR	**** N	
ECEXEC	A661	00	02	LÜ	KEEP	IGNORE	12/31/99	23:59		128	8	
ACTION	=EXEC	10 E	R OPT=	DEFAUL	T FILE CMND	NAME=>>HIS>SFT CODE= 5	COMP.EC					
ACTION	=RENAME	15 E	R OPT=	DEFAUL	DEST T FILE NEW	PATH= EC NAME=>>HIS>CLM NAME =1BMCLM_US	UIBM SER					
LUA261	A261	00	05	LU	' KEEP	IGNORE	12/31/99	23:59		128	8	
ACTION	=RECEIVE	05 E	R OPT=	IGNORE	FILE STG	NAME=>SID>CLM_ NAME=FTSFOUT	USER		SOURCE=I	UA261	:	LNAME=DEMOFIL1
ACTION	=RECEIVE	10 E	R OPT=	IGNORE	CHKP FILE STG	HKPNT IN= 0 COMPRESS=YES ILE NAME=>DEBUGDB TG NAME=FTSFOUT SOURCE=LUA261						LNAME=DEMOFIL2
ACTION	=RECEIVE	15 E	R OPT=	IGNORE	CHKP FILE STG	HKPNT IN= 0 COMPRESS=YES 'ILE NAME=>ML>VIDEO.ML 'TG NAME=FTSFOUT SOURCE=LUA261					LNAME=DEMOFIL3	
ACTION ACTION	=DELETE =SEND	20 E 25 E	R OPT= R OPT=	IGNORE DEFAUL	CHKP FILE T FILE	NT IN= 0 NAME=>HIS>TEST NAME=>HIS>TEST	COMPRESS TIBM TIBM	-YES	SOURCE=	FII	LE DISP	LNAME= =NES SUB DISP=KEEP
					DSNA	ME =HONEY.IBM	UCL.FILE	E DADAMETE	CONVERT=	ASCII		->
					FILE ****	ID ->HIS>TESTI	BM ********	*****	*****	******	******	**
LUA2618	A261	00	17	LU	KEEP	IGNORE	12/31/99	23:59		128	8	
ACTION ACTION ACTION ACTION ACTION ACTION ACTION ACTION	= DEL ETE = SEND	05 E 10 E 20 E 25 E 30 E 35 E 40 E 45 E	R OPT= R OPT=	DEFAUL DEFAUL DEFAUL DEFAUL DEFAUL DEFAUL DEFAUL DEFAUL	T FILE T FILE T FILE T FILE T FILE T FILE T FILE STG CHKP	NAME=>>HIS>CLM NAME=>>HIS>DBU NAME=>>HIS>IBS NAME=>>HIS>IBM NAME=>>HIS>IBM NAME=>>HIS>IBM NAME=>>HIS>SFT NAME=>>HIS>SFT NAME=>>HIS>SCLM NAME=FTSFOUT NT IN= 0	UIBM JGIBM JGIBM ICLM_USER JDEBUGDB IVIDEO.ML 'COMP.AO 'COMP.EC IVIBM	6 DARAMETE	SOURCE=I	LUA261	FILE D	LNAME=DEMOFIL1 ISP=NEW SUB DISP=DEL
ACTION	=SEND	50 E	R OPT=	DEFAUL	FILE **** T FILE STG CHKP <	ID ->>HIS>CLMU ************************************	JIBM *********** JGIBM LEVEL	6 PARAMETE	SOURCE=1	******** LUA261	******* FILE D	** LNAME=DEMOFIL2 ISP=NEW SUB DISP=DEL ->
					FILE	ID ->>HIS>DBUG	SIBM					

Figure 3-2. Session List

LISTSES

Updating the Staging Files

To update the staging files, use these utility control language statements:

- Erase Logical File from Staging File
 List Staging File Directory

- Stage User File for Transmission
 Unstage Received File for Processing.

ERASE LOGICAL FILE FROM STAGING FILE (ERASE)

Erase the specified logical staging file from the physical staging file.

FORMAT:

PARAMETERS:

label

Optional standard label.

SOURCE=source

One- through eight-character name of the source of the file to be deleted. If the file came from a remote DPS 6, the source is the LU name unless you overrode it on an ADDACT control statement. If the file was staged from the host, the source is the default from the default values table (IBM), unless it is overridden on the STAGE control statement.

NAME=logical_staging_file

One- through sixteen-character name of the logical staging file to be deleted. This is the name found in the NAME parameter from either the STAGE or ADDACT control statement (depending on whether you are erasing a file that was sent or received).

INDD=dd_name_of_staging_file

Optional one- through eight-character DD name of the staging file on which the file to be deleted resides. If not specified, the default from the default values table is used.

INDDPASS=staging_file_vsam_password

Optional one- through eight-character staging file VSAM password. This parameter is required if the staging file is protected by a password. This parameter can be used only if the staging file DD name is specified. ERASE

Example:

ERASE SOURCE=IBM, NAME=DEBUT

Erases the logical staging file named IBMDEBUT from the default staging file.

LIST STAGING FILE DIRECTORY (LISTSF)

List the specified staging file directory.

FORMAT:

[label] LISTSF [INDD=dd_name_of_input_staging_file]
 [,INDDPASS=staging_file_vsam_password]

PARAMETERS:

label

Optional standard label.

INDD=dd_name_of_input_staging_file

Optional one- through eight-character DD name of the staging file to list. If this parameter is not specified, the INDD default from the default values table is used.

INDDPASS=staging_file_vsam_password

Optional one- to eight-character staging file VSAM password. This parameter is required if the staging file is protected by a password. You can use this parameter only if the staging file DD name is specified.

DESCRIPTION:

LISTSF prints these items for each logical staging file: logical file source, logical file name, creation date and time, actual source, whether the file is local or remote, record count, convert to EBCDIC (YES or NO), convert to ASCII (YES or NO), transfer complete (YES or NO), data compression (YES or NO), delete in progress (YES or NO), and the maximum record length. LISTSF also prints file attributes such as file ID, record format, and organization.

The maximum record length printed in the LISTSF output is for debugging purposes only. It does not accurately translate to the maximum record length in the staged file (it includes header lengths, etc.).

Example:

LISTSF INDD=FTSFOUT

Lists the staging file named FTSFOUT.

STAGE USER FILE FOR TRANSMISSION (STAGE)

Prepares the staging file for file transmission.

FORMAT:

```
[label] STAGE DDNAME=input_file_dd_name,
               NAME=output_file_name
                [,SOURCE=source]
                [,OUTDD=output_staging_file_dd_name]
                [,OUTDDPAS=staging_file_vsam_password]
                [,DSORG=org]
                [,KEYLEN=is_key_length]
                [,KEYOFF=is_offset]
                [,CISIZE=control_interval_size]
                [,SPACE=([initial][,maximum])]
                [,RECL=record_length]
                [,RECFM=is_record_format]
                [,FREESP=is_free_space_size]
                [,OVFLFREQ=is_overflow_frequency]
                [, DELATTR = (YES)]
                           NO (
                [,CONVERT=ASCII]
                 , COMPRESS= \left\{ \begin{array}{c} YES \\ NO \end{array} \right\}
```

PARAMETERS:

label

Optional standard label.

DDNAME=input_file_dd_name

One- through eight-character DD name of the host input file.

NAME=output_file_name

One- through sixteen-character name of the logical staging file (to be transferred).

SOURCE=source

Optional one- through eight-character logical staging file source. The source is the default from the default values table (usually IBM) unless it is overridden on this control statement. This parameter can be used to implement DPS 6 to DPS 6 file transfers. If the ADDACT SEND statement used the default source, then the value here should be the file's destination (LU).

OUTDD=output_staging_file_dd_name

Optional one- through eight-character output DD name for the staging file. If this parameter is not specified, the default staging file DD name in the default values table is used.

OUTDDPAS=staging_file_vsam_password

Optional one- through eight-character output staging file VSAM password. This parameter is required if the staging file is protected by a password. This parameter can only be used if the output staging file DD name is specified.

DSORG=org

Optional file organization. Possible organizations are PS, IS, DA, and FR.

PS -- Physical sequential (UFAS sequential)
IS -- Indexed (UFAS indexed)
DA -- Relative (UFAS relative)
FR -- Fixed-relative (non-UFAS fixed-relative).

KEYLEN=key_length

Optional one- or two-digit key length in characters. A maximum length of 99 characters is accepted. Specify this parameter only if DSORG=IS is specified.

KEYOFF=offset

Optional one- through five-digit offset in the record to the key. A maximum offset of 32,739 characters is accepted. Specify this parameter only if DSORG=IS and KEYLEN are specified. The key offset follows the IBM convention. The initial value is 1.

CISIZE=control_interval_size

Optional three- to five-digit control interval size in characters. The size must be a multiple of 256 with a maximum of 32K characters. Do not specify a control interval size if DSORG=FR.

SPACE=(initial, maximum)

A pair of optional one- through five-digit values, for the initial and maximum space allocation. The maximum for both values is 32K characters.

STAGE

*

RECL=record_length

Optional one- through five digit record length. For variable files, this specifies the maximum record length. The maximum length is 32,740 characters.

RECFM=format

Optional record format of the DPS 6 file to be created. Possible record formats are F, V, and U.

F -- Fixed (the default)
V -- Variable
U -- Undefined

FREESP=free_space_size

For indexed files only, the optional one- through fivedigit free space per control interval. The maximum size is 32K characters.

OVLFREQ=overflow_frequency

For indexed files only, the optional one- through fivedigit overflow frequency. The maximum is 32K characters.

DELATTR= {YES NO

> For relative files only, the optional delete attribute. Valid choices are YES and NO. The default is YES.

CONVERT=ASCII

Optional conversion to ASCII. If this parameter is not specified, the default is no conversion. Do not convert binary files or bound units.

COMPRESS= {YES}

Optional record compression. Valid choices are YES and NO. The default is YES.

Example:

STAGE DDNAME=TESTIN, OUTDD=TESTOUT, NAME=DEBUT

Stages the file named TESTIN to the staging file TESTOUT. Place it in logical staging file DEBUT. The logical staging file name is IBMDEBUT. The SOURCE value for ADDACT SEND would be the system default, which is IBM. UNSTAGE RECEIVED FILE FOR PROCESSING (UNSTAGE)

Convert the received file from a staging file to an IBM QSAM file.

FORMAT:

[label]	UNSTAGE	DDNAME=output_qsam_dd_name,
		NAME=input_file_name
		[,SOURCE=source]
		[,DISP=disposition]
		[,INDD=input_staging_file_dd_name]
		[, INDDPASS=staging_file_vsam_password]
		[, DECOMPR=)YES]
		[, CONVERT=EBCDIC]
		[, TRUNMSG= (ALL)]
		[(ONE)]
		[, PADCHAR=char]

PARAMETERS:

label

Optional standard label.

DDNAME=output_gsam_dd_name

One- through eight-character DD name of the output (host) QSAM file. If the default is not pre-allocated, you must supply a DD statement with the appropriate allocation and file creation information.

NAME = input_file_name

One- through sixteen-character logical staging file name.

SOURCE=source

Optional one- through eight-character logical staging file source. The source is the LU name unless you overrode it on an ADDACT RECEIVE control statement. However, you must specify the source to unstage the file, or else it defaults to IBM.

INDD=input_staging_file_dd_name

Optional one- through eight-character input DD name for the staging file. If this parameter is not specified, a user-defined default staging file DD name from the default values table is used.

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UNSTAGE

INDDPASS=staging_file_vsam_password

Optional one- through eight-character staging file VSAM password. This parameter is required if the staging file is protected by a password. This parameter can only be used if the input staging file DD name is specified.

DISP=disposition

Optional disposition for the file on the staging file. Possible dispositions are KEEP and DELETE.

KEEP -- File is not removed after UNSTAGE (the default)
DELETE -- File is removed after UNSTAGE

DECOMPR= {YES}

Optionally specifies whether record should be decompressed. Valid choices are YES and NO. The default is YES.

CONVERT=EBCDIC

Optionally specifies conversion to EBCDIC. If this parameter is not specified, the default is no conversion.

TRUNMSG= \left\{ ALL \\ ONE \right\}

Optional message indicating the record number of records truncated during UNSTAGE. Valid choices are ALL and ONE.

ALL -- Print a message for each record truncated

ONE -- Print a message for the first truncated record only (the default)

PADCHAR=char

Optional two-character EBCDIC hexadecimal equivalent of the character used to pad short records in a fixed-length file. The default is EBCDIC hexadecimal 40 (blank).

DESCRIPTION:

The IBM and DPS 6 file systems handle relative file record sizes differently. The logical record size on a DPS 6 does not include the four-character record number header. To unstage a relative file at the host, you must include the four characters when defining the host file record size.

Example:

UNSTAGE DDNAME=STAGOUT, INDD=FTSFOUT, NAME=DEBUT, SOURCE=LUD

Converts the file in logical staging file LUDDEBUT in staging file FTSFOUT to a QSAM file named STAGOUT. LUD is the LU name where this file originated. The LU name is the resulting default value when SOURCE is not specified in the ADDACT statement.

The JCL statement required could be:

//STAGOUT DD DSN=ANYNAME.FILE,DISP=OLD

Printing Information from the History File

To print information from the history file, use these utility control language statements:

- List History FileList Summary Statistics.

LIST HISTORY FILE (LISTHST)

List the contents of the history file. The listings can be of type detail, exception, or summary. The records to be listed can be selected by date and time, LU, or all.

FORMAT:

[label]	LISTHST	TYPE=report_type
		[,SDATE=(mmddyy)]
		[,EDATE=(mmddyy)]
		[,STIME=(hhmm)]
		[,ETIME=(hhmm)]
		[,RUNID=run_id]
		[,LU=lu_name]
		[,GROUP=group_name]
		[,SESSID=session_id]
		[, INPUT=dd_name]

PARAMETERS:

label

Optional standard label.

TYPE=report_type

History report type. Possible types are SUMMARY, DETAIL, and EXCEPTION.

SUMMARY -- Generate summary statistics

DETAIL -- List contents of the history file within selected options

EXCEPTION -- List detail contents of the history file for failed sessions

SDATE=mmddyy

Optional starting date of listing. mm=month, dd=date, yy=year. The default is no starting date (that is, list all entries).

EDATE=mmddyy

Optional ending date of listing. mm=month, dd=date, yy=year. The default is no ending date (that is, list all entries).
LISTHST

STIME=hhmm

Optional starting time for listing. The default is no starting time (that is, list all entries).

ETIME=hhmm

Optional ending time for listing. The default is no ending time (that is, list all entries).

RUNID=run_id

Optional user-defined run ID for selection. The default is all run IDs.

LU=lu_name

Optional selection by LU. The default is all LUs.

GROUP=group_name

Optional selection by group. The default is all groups.

SESSID=session_id

Optional selection by session ID. The default is all session IDs.

_NPUT=dd_name

Optional DD name of the QSAM history file. The VSAM history file can be copied to the QSAM history file; the QSAM history file thus contains a cumulative history. If this parameter is not specified, the VSAM history file is used as input.

DESCRIPTION:

All selection parameters can be specified. When selecting a starting and ending time, a starting and ending date should also be specified. If a time range is specified without a date range, the time range is assumed to be within one day.

If TYPE=EXCEPTION is specified, you must specify a staging file named FTSFIN1. FTSFIN1 is used as a temporary sort file for the sessions with exception status. The records in this sort file are 28 characters longer than records in the history file. The number of records required (and thus the space required) depends on the number of sessions with exception conditions and the number of history file records for each session.

CR60-01

The summary report lists selected Transmission Control Program results recorded in the history file. The listing is in time sequence order. Each item printed contains: run ID, run date, time, origin, LU name, group name, session ID, sequence number, task ID, message ID, and message type. Message text is also printed, along with other appropriate information depending on the message.

The detail report lists the history file within selected options. The listing is in time sequence order. All records are listed: run ID, date of this record, time added to file, originating CSECT, LU name, group name, session ID, sequence number, task ID, message ID, message type, and text of the message. In addition, messages can have hexadecimal data embedded in the message text. These messages are converted to displayable decimal characters, displayable hexadecimal characters, or both.

The exception report lists only sessions that failed during startup/shutdown or sessions that had action records that failed. The listing is in session/LU/group/runtime order. Print lines are in the same format as the detail report.

The history file can be cleared at the beginning of each communications cycle. Information in the (VSAM) history file can be appended to the QSAM history file for later printing. If the history file is not cleared, SFT-H appends to it, recording a cumulative history.

If you want some actions to occur and then want to list the history file to determine the results of the actions, you cannot put the LISTHST statement in the same utility control language file as the Add Action statements. If the LISTHST and the ADDACT statements are in the same file, the LISTHST will be executed immediately (before the actions take place).

Example 1:

LISTHST TYPE=EXCEPTION

Lists the contents of the history file for failed sessions.

Example 2:

LISTHST TYPE=DETAIL

Lists a detailed contents of the history file.

LISTHST

Example 3:

LISTHST TYPE=SUMMARY

Lists summary statistics.

LIST SUMMARY STATISTICS (SUMSTAT)

List summary statistics from the transmission status file.

FORMAT:

[label] SUMSTAT [TYPE=report_type]

PARAMETERS:

label

Optional standard label.

TYPE=report type

Optional 'summary report type'. Possible types are NOTRANSFER, NOTSTARTED or NOSTART, COMPLETE or COMP, and INCOMPLETE or INCOMP. If no type is specified, all summary statistics are printed.

(NOTRANSFER)

List sessions that were attempted, but did not affect any change, either at the DPS 6 or at the host. This mostly includes sessions for which LUs were not active.

```
{NOTSTARTED
NOSTART
```

List sessions that have not yet been scheduled.

{COMPLETE COMP

List sessions for which all actions completed successfully.

(INCOMPLETE) (INCOMP

> List sessions for which partial transmissions took place. The transfer of even one record in one action constitutes an incomplete session.

SUMSTAT

DESCRIPTION:

This statement prints a summary report, one session per line, sorted by LU name, in four categories. If you do not specify a report type, all four are printed.

Example:

SUMSTAT TYPE=COMPLETE

List completed sessions. Figure 3-3 is a sample of such a report.

11/ H1S	06/84 SF 112	7		HONEY	(WELL)	SNA FI	LE-T ULLY	R AN S COM	FER	TR A E D	SESSIONS	UMMARY RI -	EPOR	T .				PAGE	46 17.29
PR	SESS-	ID LU-NAME/ SUBS-LU	ACTIONS(#) COMP:SKIP	<-RECORDS (RECV:	(#)> SENT	< DEL:R	FILE EN:E	S(#) XC:R	cv: 5	-> ND	LAST-ACTION Type:rec(#)	SESS(#) ATTEMPT	< 1 ST	SESSION STR:LS	IS I ST	DDƏHHMM> Str:LST End	ERRID	IOERR	
19	9 SDRS	1 AIAI	3:	0:	394	0:	0:	0:	0:	3		2	06.0	1703:06	5 3 1	708:0601715			
19	9 SDRS	2 A1 A 2	3:	0:	394	0:	0:	0:	0:	3		2	060	1703:06	591	708:0621715	i		
- 19	9 SDF S	3 4143	3:	0:	394	0:	0:	0:	0:	3		2	06 a	1703:06	591	708:0601715	i		
19	9 SDRS	4 A1A4	3:	0:	394	0:	0:	0:	0:	3		2	06a	1703:06	501	708:0621715	i		
19	9 SDR S	5 A1A5	3:	0:	394	0:	0:	0:	0:	3		2	06a	1703:06	591.	708:0621715			
19	9 SURS	6 A1A6	3:	0:	394	0:	0:	0:	0:	3		2	06a	1703:06	5 9 1'	708:06a1716	,		
19	9 SORS	7 A1B1	3:	0:	394	0:	0:	0:	0:	3		2	06a	1703:06	5 a 1'	708:0621717	,		
- 19	9 S.D.R.S.	8 Al 82	3:	0:	394	0:	0:	0:	0:	3		2	06a	1703:06	91.	708:06@1717			
19	9 SDK S	9 A1B3	3:	0:	394	0:	0:	0:	0:	3		2	06a	1703:06	91	708:0601717	,		
19	9 SDR S	10 A1B4	3:	0:	394	0:	0:	0:	0:	3		2	06a	1703:06	a L	708:0621717	,		
19	9 SDRS	11 A185	3:	0:	394	0:	0:	0:	0:	3		2	06a	1703:06	91.	708:0621716	•		
19	9 SDRS	12 A186	3:	0:	394	0:	0:	0:	0:	3		2	069	1703:06	291	708:06a1716)		
- 15	9 SDRS	13 4101	3:	0:	394	0:	0:	0:	0:	3		2	06a	1703:06	21	708:06a1719	1		
19	9 SDR S	14 A1C2	3:	0:	394	0:	0:	0:	0:	3		2	069	1703:06	5 9 1	708:0621719)		
19	9 SURS	15 A1C3	3:	J:	394	0:	0:	0:	0:	3		2	06a	1703:06	ear.	708:06@1719			
19	9 SDRS	16 A1C4	3:	0:	394	0:	0:	0:	0:	3		2	06a	1703:06	91	708:0621719)		
19	9 SDR S	17 A1C5	3:	0:	394	0:	0:	0:	0:	3		2	06a	1703:06	91.	708:0621719	1		
19	9 SDR S	13 A1C6	3:	0:	394	0:	0:	0:	0:	3		2	063	1703:06	91.	708:0601719	1		
19	9 SDP.S	19 A101	3:	0:	394	0:	0:	0:	0:	3		2	069	1703:06	291.	708:0621719)		
19	9 SDR S	20 A1D2	3:	0:	394	0:	0:	0:	0:	3		2	069	1703:06	91.	708:06@1720)		
19	9 SDR S	21 A103	3:	0:	394	0:	0:	0:	0:	3		2	06a	1703:06	91.	708:0621720			
19	9 SDR S	22 A1D4	3:	0:	394	0:	0:	0:	0:	3		2	069	1703:06	91.	708:0601720)		
19	9 SDRS	23 A1D5	3:	0:	394	0:	0:	0:	0:	3		2	069	1703:06	91	708:0631720	ł		
19	9 SEP S	24 A1D6	3:	0:	394	0:	0:	0:	0:	3		2	069	1703:06	91.	708:0601720)		

Figure 3-3. Summary Statistics Report

USING DYNAMIC FILE ALLOCATION

Dynamic file allocation permits sending host files to SFT-6 systems without first staging them. Cataloged, mounted disk files can be dynamically allocated and sent to SFT-6. These file types and organizations can be sent:

- VSAM files: Entry Sequence, Key Sequence, Relative Record
- QSAM files: Fixed and Non-Spanned Variable Length.

To use dynamic file allocation, you must specify an appropriate Send action in an ADDACT statement, and you must specify two parameters on the EXEC card for the communications program.

In the ADDACT statement, specify ACTION=SEND. Specify these parameters:

- DSNAME=filename, where filename is the fully qualified name of the cataloged file or cluster that is to be transmitted
- DSNPASS=password, where password is the password for DSNAME (required only if the data set is password protected)
- MEMBER=name, where name is the name of a member of a partitioned file (use this subparameter only if DSNAME is the name of a PDS)
- COMPRESS= (YES) ; the default is COMPRESS=YES
- CONVERT=ASCII; the default is no conversion.

Do <u>not</u> specify any of these subparameters:

- INDD=
- INDDPASS=
- SOURCE=
- NAME=

In the EXEC card for the Transmission Control Program, specify these parameters:

- MAXFILES=number, where number is an integer between 1 and 500. This parameter provides the limit on the number of concurrent files allocated. The default is 1.
- DEALLOC=YES or NO, to specify whether or not to deallocate the file when it is closed. The default is NO.

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DEFINING SESSION LIMIT GROUPS

This SFT feature provides a way to limit the number of concurrent sessions between SFT-H and a specific set of SFT-6 programs.

There are two steps to creating a session limit group:

- 1. Add the LUS belonging to the session limit group to the resource master file using the LIMITGR parameter of the ADDLU verb. An LU can be in no limit groups (the default) or in the group specified. The group name specified in the LIMITGR parameter can be an ordinary group, or can be defined only as a limit group, or can be not defined at all (same as LIMITNO=1).
- 2. Add the session limit group to the resource master file using the ADDGRP verb. The LIMITNO parameter specifies the number of sessions within the limit group that can execute concurrently. The default value is LIMITNO=1.

PREPARING TO USE THE ONLINE OPERATOR INTERFACE

Before you can use the online operator interface, you must take these steps:

- Using ADDLU, add an LU (as defined to ACF/VTAM) to the resource master file for each possible 3270 terminal that can be used as an operator terminal.
- 2. Using ADDGRP with the keyword GROUP=OPERATOR, add an operator group to the resource master file. Using the ADDLU keyword, include all terminals that can be used as operator terminals. For example, to add three possible online operator interface terminals, use these statements:

ADDLU=D4L461 ADDLU=D4L462 ADDLU=D4L463 ADDGRP GROUP=OPERATOR, ADDLU=(D4L461, D4L462, D4L463)

- Using ADDSES with the keywords SESSID=OPERATOR and GROUP=OPERATOR, add a session to the transmission control file.
- 4. Using ADDACT with the keyword ACTION=OPER, add an action to the operator session.

See Appendix F for an example of these steps.

For operator ID and password protection, a previously assembled security table must also have been created (see the <u>Host System Programmer's Guide</u>).

See Section 3 for a discussion of coding the EXEC statement for the Transmission Control Program.

You must invoke the online operator interface before it can be used; see Section 2 for a discussion of how to invoke and use the interface.

Section 4 TRANSFERRING FILES

The Transmission Control Program (SFTTCP) selects an SFT-6 for communication based on the session definitions contained in the transmission control file. Once a session with an SFT-6 is initiated, the functions you defined are performed. A record of the progress within the session is maintained within the transmission status file for restart purposes. In addition, statistical information is maintained in the history file. Sessions with multiple SFT-6s are supported.

As long as the user-defined session limit has not been reached, the transmission control file is searched for a session to initiate. If one is found, the session initiation is attempted. If the session initiation is successful, a subtask is initiated to perform the requested functions. SFTTCP then performs the Send or Receive action requested. If the session initiation is not successful, or when the subtask completes processing, the transmission status file is also updated.

If you requested that the logical staging file be deleted after sending, SFTTCP sends the logical file, generates an SFTBATCH utility control language statement to delete the logical staging file, and finally attempts to delete the logical staging file. If the deletion fails, you can delete the file during a subsequent execution of SFTBATCH. The utility control language statement is written to the file PASSDATA. If you requested that the session be deleted after completion, SFTTCP generates an SFTBATCH utility control language statement to delete the session, after the session completes. You can delete the session during a subsequent execution of SFTBATCH. The utility control language statement is written to the file PASSDATA.

The transmission status file is updated to reflect session activity. Statistical information is generated for later reports. Data received from SFT-6 is stored, as received, in staging files.

*

This section includes sample JCL that executes the Transmission Control Program. Also included are a discussion of the PARM parameter of the Transmission Control Program EXEC statement and a discussion of restarting the Transmission Control Program.

Appendix C contains a list of the Transmission Control Program condition codes and their meanings.

EXECUTING THE TRANSMISSION CONTROL PROGRAM

The sample JCL in Figure 4-1 illustrates execution of SFTTCP using one staging file. (Remember that file and library names are installation-dependent.) Appendix F contains a complete example of SFT use, including several executions of SFTTCP.

/	//COMMUNIC	EXEC	PGM=S1000, REGION=512K, TIME=(,45), PARM='MODE=START'
/	//STEPLIB	DD	DISP=SHR, DSN=FTF.LOAD
/	//STEPCAT	DD	DSN=VSAM.USERCAT,DISP=SHR
/	//ACBMSG	DD	DISP=SHR, DSN=MSGV. CLUSTER
/	//ACBHST	DD	DISP=SHR, DSN=HSTV.CLUSTER
/	//ACBRMF	DD	DISP=SHR, DSN=RMFV. CLUSTER
/	//ACBTCF	DD	DISP=SHR, DSN=TCFV.CLUSTER
/	//ACBTSF	DD	DISP=SHR, DSN=TSFV. CLUSTER
/	//SNAPDUMP	DD	SYSOUT=*
/	//SYSUDUMP	DD	SYSOUT=*,DCB=(RECFM=FB,LRECL=121,BLKSIZE=1210)
/	//FTSFIN	DD	DSN=DFL1.CLUSTER,DISP=SHR
/	//FTSFOUT	DD	DSN=DFL2.CLUSTER,DISP=SHR
/	//PASSDATA	DD	SYSOUT=B

Figure 4-1. Executing the Transmission Control Program

DD Statements Required for SFTTCP

SFTTCP requires these DD statements:

//STEPLIB	DD	DSN=FTF.LOAD,DISP=OLD
//STEPCAT	DD	DSN=vsam_usercat,DISP=OLD
//OUTPUT	DD	SYSOUT=locationl
//REPORT	DD	SYSOUT=location2
//PASSDATA	DD	SYSOUT=location3
//SNAPDUMP	DD	SYSOUT=A
//SYSUDUMP	DD	SYSOUT=A
//ACBHST	DD	DSN=history_file,DISP=OLD
//ACBMSG	DD	DSN=message_file,DISP=SHR
//ACBRMF	DD	DSN=resource_master_file,DISP=OLD
//ACBTCF	DD	DSN=transmission_control_file,DISP=OLD
//ACBTSF	DD	DSN=transmission_status_file,DISP=OLD
//FTSFOUT	DD	DSN=default_indd_staging_file,DISP=OLD
//FTSFIN	DD	DSN=default_outdd_staging_file,DISP=OLD
//FTSFIN]	DD	DSN=default sortlist exception file_DISP=OLD

The vsam_usercat parameter specifies the name of the VSAM user catalog. The location1, location2, location3, etc., parameters specify where output is sent or where information is located. The history_file parameter names the SFT history file cluster; the message_file parameter names the message file cluster, etc. FTSFIN is the default input staging file (for files coming in to the host); FTSFOUT is the default output staging file (for files going out to the DPS 6); and FTSFIN1 is a sort work file for the history file exception report. If you wish to define more than the default input and output staging files, include more DD statements for FTSFIN and FTSFOUT. In general, specify DISP=OLD for one or more DD statements to prevent deadlock. Appendix F contains examples of these declarations.

The PASSDATA file contains Delete statements that are generated by SFTTCP when it processes Send actions with DISP=DELETE and ADDSES statements with DISP=DELETE. SFTTCP generates SFTBATCH utility control language statements to delete the file or session and then attempts to delete the file or session. If the deletion fails, you can use the generated statements to delete the files during an execution of SFTBATCH. You can either print the generated statements (by specifying SYSOUT=A for PASSDATA) or you can create PASSDATA (on disk or tape). If you do not specify any DISP=DELETE parameters, you need not include a DD statement for PASSDATA. If you do specify DISP=DELETE and do not include a PASSDATA DD statement, SFTTCP terminates abnormally.

PARM Parameter

The only user-definable parameter on the EXEC statement is PARM. It tells the Transmission Control Program where in the communications cycle this execution is, and it allows overriding values in the default values table. Remember that using symbolic parameters limits you to one JCL record, while using the PARM.STEPNAME JCL override format, you are limited to 100 characters between parentheses.

FORMAT:

completed

RUNID=run_id

One through eight alphanumeric characters used as an identifier in all history file records created by SFTTCP. The first three characters are also used as a prefix for all messages sent to the system console. The default is 22222222.

DEBUG= (YES)

INO I

Generate diagnostic SNAPDUMPs or suppress them. Valid values are YES or NO. The default is NO.

MAXSESS=max_ses

Default maximum number of SFT-H/SFT-6 sessions allowed. SFT-H/operator sessions are not included in this value. MAXSESS is an integer from 1 through 200. The default is 5.

NOMTIME=hhmm

Nominal starting time for SFTTCP. A session defined with a non-zero time but no date (for example, a job that is to be run daily after some specified time) is considered ready to execute when (1) the real wall clock time is later than the session time, and (2) NOMTIME is later than the session time. This parameter can be useful when a session is defined with a time near midnight and SFTTCP is executed (either in START or RESTART mode) just after midnight.

```
TRACE= (ON )
(OFF)
```

Trace SFTTCP activity via GTF or not. The valid values are ON (trace activity) or OFF (do not trace activity). The default is OFF.

TRTAB=size

Number of 32-character entries in the SFTTCP internal trace table. TRTAB is an integer from 0 through 32,767. The default is 1000.

OPERSES= (ENABLE) (DISABLE)

Enable or disable the online operator interface.

OPERATOR=lu_name

The name of the primary operator terminal.

EXTREQ=req_num Override the maximum number of external requests specified in the default values table EXREQS value. Enter an integer from 1 through 500. The default is 8. MAXFILES=max_files Specify the maximum number of files that can be dynamically allocated at one time; max_files is an integer from 1 through 500. The default is 1. DEALLOC= **YES** INO J Deallocate dynamically allocated files when done (YES) The default is NO. or not (NO). BLKOUT= (ENABLE) DISABLE Specify whether to block outbound (to DPS 6) transmissions to full request unit sizes. Possible values are ENABLE and DISABLE. ENABLE -- Block outbound transmissions DISABLE -- No blocking CONS= (YES) NO J Specify whether or not SFT messages are displayed on the operator's console.

Activating Online Operator Interface Terminals

To activate one or more online operator interface terminals, include these parameters on the EXEC statement:

- OPERSES=ENABLE, to enable the operator session
- EXTREQ=num, to specify the maximum number of concurrent operator logon requests
- OPERATOR=luname, to specify the LU addresses of each terminal.

When it is activated, SFTTCP attempts to establish a session with each operator terminal. Once the session is established, an operator can log on.

RESTARTING THE TRANSMISSION CONTROL PROGRAM

When the Transmission Control Program executes initially (that is, with PARM='START'), it checks that the transmission status file is empty. The session records are then entered, based on information in the transmission control file and resource master file. As the Transmission Control Program executes, these records are marked ACTIVE while executing, COMPLETED, when done, or RETRY if the session failed.

If the Transmission Control Program terminates without completing (for example, it aborts, the host crashes, or the operator issues the HALT command), it can be run again with or without the File Maintenance Utility being run first. In this case, it should be run with PARM='RESTART' in the EXEC The Transmission Control Program then checks the statement. transmission status file against the resource master file and the transmission control file for changes. Sessions that are no longer valid are marked IGNORE. If the transmission status file was modified before the restart, new sessions are added. Sessions that were marked ACTIVE when the Transmission Control Program terminated are marked RETRY. Then the Transmission Control Program begins running all sessions marked RETRY.

NOTE

No not add new actions to existing sessions. If you do, the results will be unspecified. You can, however, add new sessions before restarting SFTTCP.

CLEARING SFT CONTROL FILES

At the end of each communications cycle, you should clear the staging files. You can do this in two ways:

- Use the Erase Logical File from Staging File (ERASE) control statement. You must issue this statement separately for each logical file within the staging file you wish to erase.
- 2. Use IBM Access Method Services to clear the entire staging file. Figure 4-2 contains a JCL fragment that clears clusters defined with the REUSE option; Figure 4-3 contains a JCL fragment that clears clusters defined without the REUSE option. The Access Method Services uses the Initialization File that contains dummy records for the SFT-H control files as follows:

HST -- History file RMF -- Resource master file TCF -- Transmission control file TSF -- Transmission status file SF -- Staging file *

//* CLEAR CLUSTER DEFINED WITH THE REUSE OPTION //TSFCLEAR EXEC PGM=IDCAMS, REGION=512K //* //* EXECUTE ACCESS METHOD SERVICES UTILITY PROGRAM //* //SYSPRINT DD SYSOUT=* //* //* INCLUDE DD CARD POINTING TO TSF PROTOTYPE CONTENTS //* //TSFPROTO DD DISP=SHR, DSN=HISTS, REL11, PROTO(TSF) //* //* CONTROL CARDS FOLLOW //* //SYSIN DD * REPRO /* REPRODUCE OR COPY FILE */ /* INPUT FORM DD CARD ABOVE */ -INFILE (TSFPROTO) OUTDATASET(TSF.CLUSTER) /* OUTPUT CLUSTER */ /* DISCARD CONTENTS */ REUSE /* //

Figure 4-2. Clearing a Cluster Defined With the REUSE Option

//* CLEAR CLUSTER DEFINED WITHOUT THE REUSE OPTION //* //TSFCLEAR EXEC PGM=IDCAMS, REGION=512K //* //* EXECUTE ACCESS METHOD SERVICES UTILITY PROGRAM //* //SYSPRINT DD SYSOUT=* //* //* INCLUDE DD CARD POINTING TO TSF PROTOTYPE CONTENTS //TSFPROTO DD DISP=SHR, DSN=HISTS.REL11.PROTO(TSF) //* //* CONTROL CARDS FOLLOW //* //SYSIN DD * /* DELETE OLD CLUSTER, REDEFINE IT, AND THEN COPY /* PROTOTYPE RECORD(S)*/ DELETE (TSF.CLUSTER) DEFINE CLUSTER(NAME (TSF. CLUSTER) RECORDS (100 100) VOLUMES (IPOCAT) SHAREOPTIONS (2)) DATA (RECORDSIZE(342 342) KEYS (17,0)) REPRO INFILE (TSFPROTO) OUTDATASET (TSF. CLUSTER) /* //

Figure 4-3. Clearing a Cluster Defined Without the REUSE Option

CHARACTER STRING TRANSLATION SUBROUTINE (SUBXLATE)

SUBXLATE contains subroutines that convert character strings between ASCII and EBCDIC using the internal SFT translate tables.

SUBXLATE is a reentrant module with two entry points:

- SUBXE2A -- Translates character strings from EBCDIC to ASCII
- SUBXA2E -- Translates character strings from ASCII to EBCDIC.

A single call to this module translates from 0 to 32,767 bytes of data.

Use of these conversion routines with packed decimal data gives unspecified results.

Assembly Language Interface To SUBXLATE

When you invoke SUBXLATE, registers R1, R13, R14, and R15 must contain these addresses:

- Rl -- Parameter list
- Rl3 -- Save area for register storage
- Rl4 -- Return to caller
- R15 -- Appropriate entry point (SUBXE2A or SUBXA2E).

The parameter list format is: (1) the address of the string to be translated, followed by (2) the address of the aligned word containing the binary count of characters to be translated. The address must be on a full word boundary.

When SUBXLATE exits, R15 contains 00 to indicate successful completion.

SUBXLATE generates no error codes, no error messages, and should not end abnormally.

Entry to SUBXLATE is by the standard IBM calling sequence; the exit from SUBXLATE is by a branch on Rl4.

COBOL Interface to SUBXLATE

You can invoke SUBXLATE from a COBOL program with a CALL USING statement that passes the character string and its length to SUBXE2A or SUBXA2E. Figure 4-4 contains the COBOL statements required to translate a 40-character field (FIELD1) from EBCDIC to ASCII and a 20-character field (FIELD2) from ASCII to EBCDIC. NOTE

Figure 4-4 is not a complete COBOL program; it contains only those statements required for the translations.

```
WORKING-STORAGE SECTION.
01 USER-DATA.
05 FIELD1 PIC X(40).
05 FIELD2 PIC X(20).
01 LENGTH-40 COMP PIC S9(8) VALUE 40.
01 LENGTH-20 COMP PIC S9(8) VALUE 20.
PROCEDURE DIVISION.
CALL 'SUBXE2A' USING FIELD1, LENGTH-40.
CALL 'SUBXE2A' USING FIELD2, LENGTH-20.
```

Figure 4-4. Translating Character Strings in COBOL

Figure 4-5 is a sample of job control language to compile such a COBOL program.

000001 //* THE FOLLOWING IS SAMPLE JCL FOR COMPILING A HOST COBOL *
//* PROGRAM THAT CALLS THE SFT-H 'SUBXLATE' MODULE FOR DOING *
//* EBCDIC/ASCII OR ASCII/EBCDIC CONVERSIONS. * 000002 * 000003 000004 000005 000006 //COBOL EXEC PGM=IKFCBL00, REGION=192K, PARM= (NOTEST, SXREF, LIST, LET, SOURCE, DMAP, PMAP) 000007 //SYSPRINT DD SYSOUT=* //SYS1N DD * 000008 //SYS1N 000009 000010 //** THE PROGRAM SOURCE WOULD GO HERE **** 000011 000012 //SYSPUNCH DD DUMMY 000013 //STEPLIB DD DSN=SYS1.VSCOLIB, DISP=SHR 000014 //SYSUT1 DD UNIT=SYSDA, SPACE=(CYL, (2,2)) 000015 //SISUT2DDUNIT=SYSDA, SPACE=(CYL, (2,2))//SYSUT3DDUNIT=SYSDA, SPACE=(CYL, (2,2))//SYSUT4DDUNIT=SYSDA, SPACE=(CYL, (2,2)) 000016 000017 000018 000019 //** THE FOLLOWING 'SYSLIB DD' STATEMENT SHOULD CONTAIN * 000020 //** THE SFT-H DISTRIBUTION LOAD LIBRARY: 000021 //** 'SOMENAME'.SFTHLIB 000022 000023 //SYSLIBDDDSN='SOMENAME'.SFTHLIB, DISP=SHR//SYSLINDDDSN=& &OBJECT, DISP=(NEW, PASS), 000024 000025 SPACE=(TRK,(5,1)),UNIT=SYSDA 000026 000027 //LINK EXEC PGM=IEWL, REGION=192K, COND=(12, LE, COBOL), 000028 PARM=(LIST, LET, XREF) 000029 //SYSPRINT DD SYSOUT=* 000030 000031 //** THE FOLLOWING 'SYSLIB DD' STATEMENTS SHOULD CONTAIN * 000032 //** THE SFT-H DISTRIBUTION LOAD LIBRARY AND OBJECT LIBRARY * 000033 //** CONCATENATED WITH THE SYSTEM COBOL MACRO LIBRARY. * 000034 ′//** 'SOMENAME'.SFTHLIB * 000035 //** 'SOMENAME'.ASFTHMOD * 000036 000037

 //SYSLIB
 DD
 DSN='SOMENAME'.ASFTHMOD, DISP=SHR
 000038

 //
 DD
 DSN='SOMENAME'.SFTHLIB, DISP=SHR
 000039

 //
 DD
 DSN=SYS1.VSCLLIB, DISP=SHR
 SYSTEM COBOL LIBRARY
 000040

 //SYSLIN
 DD
 DSN=&&COBJECT, DISP=(OLD, DELETE)
 000041

 //
 DD
 DDNAME=SYSIN
 000042

 000043 //** THE FOLLOWING 'SYSLMOD DD' STATEMENT SHOULD CONTAIN * 000044 YOUR INSTALLATION LOAD LIBRARY. 000045 000046 //SYSLMOD DD DSN='INSTALLATION LOAD LIBRARY', DISP=SHR 000047 //SYSUT1 DD UNIT=SYSDA, SPACE=(CYL, (2,2)) 000048 000049 //** THE FOLLOWING 'INCLLIB DD' STATEMENT SHOULD CONTAIN * 000050 `//** THE SFT-H DISTRIBUTION OBJECT LIBRARY. 000051 //** 'SOMENAME'.ASFTHMOD * 000052 IT WILL BE REFERENCED IN THE INCLUDE STATEMENT FOLLOWING * //** 000053 000054 //INCLLIB DD DSN='SOMENAME'.ASFTHMOD,DISP=SHR 000055 000056 //** THE FOLLOWING 'SYSIN DD *' STATEMENT SHOULD BE FOLLOWED * 000057 //** BY THE INCLUDE STATEMENT TO INCLUDE THE SUBXLATE MODULE * 000058 //** IN THE LINKEDIT. * 000059 000060 //SYSIN DD * 000061 INCLUDE INCLLIB(SUBXLATE) 000062 /* 000063 11 000064

Figure 4-5. Sample JCL for COBOL Translation Program

Section 5 OPERATING SFT-6

This section gives operating procedures for SFT-6, the component of the SNA File Transfer Facility that resides at each DPS 6 node.

STARTING UP SFT-6 USING COMMANDS

SFT-6 runs within its own MOD 400 task group. Before using SFT in a command-line environment, you must either spawn or create and request the MOD 400 task group within which SFT-6 is to run. Use either the MOD 400 Spawn Group (SG) command or the Create Group (CG)/Enter Group Request (EGR) combination. Figure 5-1 contains a sample SG command for a task group for SFT-6 to run in.

SG FT SFT.L6.A 0 !CONSOLE -POOL AB -WD >UDD -LRN 50 -LFN 50

Figure 5-1. Sample Spawn Group Command for SFT-6 Task Group

To execute GCOS 6 command files (ADDACT statements with Execute actions), you must configure a batch task group and a batch memory pool. You must also create a batch task group. The default directory for execute actions is >NFT>BA; that directory should be created immediately under the root directory. Figure 5-2 contains a sample operator command to create a batch task group.

CB 0 -LRN 50 -LFN 50

Figure 5-2. Commands to Create Batch Task Group and Memory Pool for Execute Actions

For further information on creating task groups and memory pools, see the <u>Commands</u>, <u>System Building</u>, <u>System Concepts</u>, and <u>Operator's Guide</u> manuals.

INVOKING SFT-6 WITH THE SNA?SFT COMMAND

To connect to the host, invoke SFT with an appropriate configuration file. After the Activate PU and Activate LU commands are received from the host, the connection is established.

To invoke SFT in a command-line environment, use the SNA?SFT command.

FORMAT:

SNA?SFT pathname

ARGUMENT:

pathname

The pathname of a previously created configuration file for SFT.

SHUTTING DOWN SFT-6

The MOD 400 New Process command does not clear all internal SNA data structures. Using the New Process command and then reinvoking SFT-6 causes unspecified results. To ensure proper release of all buffers and structures, we recommend that you use either the SNA Stop or Abort commands or the MOD 400 Abort Group command.

Since the SNA Stop and Abort commands do not take effect until data transfer is complete, we recommend that you use the Abort Group command if you wish to terminate SFT-6 immediately.

Appendix A SUMMARY OF UTILITY CONTROL LANGUAGE STATEMENTS

Table A-1 lists the utility control language statements used by the File Maintenance Program to update SFT files and generate reports. The statements are arranged alphabetically by mnemonics. For each statement, the acronym, format, full statement name, and file affected are given. Complete descriptions of the statements are in Section 3.

Table A-1. Utility Control Language Statements

Mnemonic	Statement Name	Format	File Affected
ADDACT	Add Action	ADDACT SESSID=session_id, (GROUP=group_name) (LU=lu_name) [,SEQ=seg_#] ,ACTION=action [,ERROPT=option] action_parameters	Transmission Control File
		If ACTION=DELETE: ,FILEID=native_pathname	
		<pre>If ACTION=EXECUTE: ,FILEID=native_pathname_of_ec [,ARG='dps_6_argument_list'] [,ERROUT=dps_6_pathname]</pre>	
		If ACTION=OPER: no parameters	
		<pre>If ACTION=RECEIVE: ,FILEID=native_pathname ,NAME=output_logical_file_name [,SOURCE=output_logical_file_source_name] [,OUTDD=output_staging_file_name] [,OUTDDPAS=staging_file_vsam_password] [,COMPRESS={YES}</pre>	
		If ACTION=RENAME: ,FILEID=native_pathname ,NEWNAME=new_pathname	

Mnemonic	Statement Name	Format		File Affected
ADDACT (cont)		IF ACTION	<pre>#=SEND: ,FILEID='native pathname' [,NAME=input_logical_file_name] [,SOURCE=input_logical_file_source_name] [,INDD=input_staging_file_dd_name] [,INDDPASS=staging_file_vsam_password] [,DISP=([16_file_disp][,ibm_file_disp])] [,DSORG=organization] [,KEYLEN=key_length] [,KEYOFF=offset] [,CISIZE=control_interval_size] [,SPACE=([initial][,maximum])] [,RECL=record_length] [,RECFM=format] [,FREESP=free_space_size] [,OVFLFREQ=overflow_frequency] [,DELATTR=delete_attribute] [,DSNAME=file_name] [,DSNAME=file_name] [,COMPRESS={YES} [,CONVERT=ASCII] [,CKPINTVL=checkpoint_interval]</pre>	
ADDGRP	Adā Group	ADDGRP	GROUP=group_name ADDLU=(lu_l,lu_2[,lu_n]) [,LIMITNO=number]	Resource Master File
ADDLU	Add Logical Unit	ADDLU	LU=lu_name [,LOGMODE=vtam_log_mode] [,TIME=hhmm] [,LIMITGR=group_name]	Resource Master File
ADDSES	Add Session	ADDSES	<pre>SESSID=session_id, (GROUP=group_name) LU=lu_name [,DATE=mmddyy] [,TIME=hhmm] [,PRIORITY=priority] [,ERROPT=option] [,DISP=disposition]</pre>	Transmission Control File

Table A-1 (cont). Utility Control Language Statements

Mnemonic	Statement Name	Format		File Affected
DELACT	Delete Action	DELACT	SESSID=session_id, {GROUP=group_name} {LU=lu_name ,SEQ=action_sequence_number	Transmission Control File
DELGRP	Delete Group	DELGRP	GROUP=group_name	Resource Master File
DELLU	Delete Logical Unit	DELLU	LU=lu_name	Resource Master File
DELSES	Delete Session	DELSES	SESSID=session_id, {GROUP=group_name} LU=lu_name	Transmission Control File
ERASE	Erase Logical File From Staging File	ERASE	SOURCE=source, NAME=logical_staging_file [,INDD=dd_name_of_staging_file] [,INDDPASS=staging_file_vsam_password]	Staging File
LISTGRP	List Group	LISTGRP	[GROUP=group_name]	Resource Master File
LISTHST	List History File	LISTHST	TYPE=report_type [,SDATE=(mmddyy)] [,EDATE=(mmddyy)] [,STIME=(hhmm)] [,ETIME=(hhmm)] [,RUNID=run_id] [,LU=lu_name] [,GROUP=group_name] [,SESSID=session_id] [,INPUT=dd_name]	History File
LISTLU	List Logical Unit	LISTLU	[LU=lu_name]	Resource Master File
LISTSES	List Sessions	LISTSES	[SESSID=session_id] [,{GROUP=group_name} [LU=lu_name }]	Transmission Control File
LISTSF	List Staging File Directory	LISTSF	[INDD=dd_name_of_input_staging_file] [,INDDPASS=staging_file_vsam_password]	Staging File

Table A-1 (cont). Utility Control Language Statements

Mnemonic	Statement Name	Format	File Affected
STAGE	Stage User File for Transmission	<pre>STAGE DDNAME= input_file_dd_name, NAME= input_file_name [,SOURCE=source] [,OUTDD=output_staging_fil [,OUTDDPAS=staging_file_vs [,DSORG=org] [,KEYLEN=key_length] [,KEYOFF=offset] [,CISIZE=control_interval_ [,SPACE=([initial][,maximu [,RECL=record_length] [,RECFM=format] [,FREESP=free_space_size] [,OVLFREQ=overflow_frequen [,DELATTR={YES} NO } [,CONVERT=ASCII] [,COMPRESS={YES} NO }]</pre>	<pre>Staging File e_dd_name] am_password] size] m])] cy]</pre>
SUMSTAT	List Summary Statistics	SUMSTAT [TYPE=report_type]	History File
UNSTAGE	Unstage Received File for Processing	UNSTAGE DDNAME=output_qsam_dd_name NAME=input_file_name [,SOURCE=source] [,DISP=disposition] [,INDD=input_staging_file_ [,INDDPASS=staging_file_vs [,DECOMPR={YES} {NO } [,CONVERT=EBCDIC] [,TRUNMSG={ALL {NONE}] [,PADCHAR=char]	<pre>, Staging File name] am_password]</pre>

Table A-1 (cont). Utility Control Language Statements

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Appendix B SFT MESSAGES

The SFT notifies you of error conditions and attempts to continue doing useful work. Errors detected in utility control language statements are documented in the run report generated by SFTBATCH. Errors in keyword parameter values result in use of defaults (where defaults exist). Errors in syntax or required keywords result in the statement being ignored. Errors in file content result in the requested function not being performed.

Errors detected by the Transmission Control Program result in one of several actions, depending on the severity of the error. If the session is terminated, it is queued for retry later.

Errors detected by SFT-6 and reported to SFT-H are handled according to your specification. The action can be to terminate the session and not reschedule, to terminate the session and reschedule, or to skip the function in error and continue with the next function for the session.

The only SFT-related error messages appearing at the DPS 6 operator console are standard SNA error messages. For more information on SNA error messages, see the <u>DPS 6/SNA</u> <u>Administrator's Guide</u>.

The rest of this appendix consists of a list of messages generated by the File Maintenance Utility and the Transmission Control Program. The message descriptions indicate cause, effect, and corrective action for each message. In this appendix, messages generated by SFT-H are arranged according to which SFT-H program generates them:

- 1. SFTBATCH messages
- 2. SFTTCP messages

Messages are arranged according to message ID (MSGID). A message ID is a five-character string consisting of alphanumeric characters and question mark (?), percent sign (%), and dollar sign (\$). Message IDs are listed in EBCDIC collating sequence. SFTBATCH messages have message IDs 20001 through 47102; all other message IDs identify SFTTCP messages.

Strings of percent signs (%) or percent signs and capital Xs (%X) represent variable information that is supplied either by SFT or the system (e.g., messages from VTAM).

TRANSMISSION CONTROL PROGRAM (SFTTCP) MESSAGES

- C8001- FAILURE DURING VTAM INITIALIZATION: OPERATION: %X%X%X%X R15: %X%X%X%X R0: %X%X%X%X
 - Cause: Failure during initialization of VTAM resources.
 - Effect: The job step is terminated. No attempt to communicate with any SFT-6 system has been made.
 - Action: Using the operation codes in Table B-1, correct the condition causing the error, and resubmit the job.

Operation	Function Being Attempted
00000004	Acquire memory for VTAM control blocks failed
0000008	Modify ACB with application ID/password failed.
000000C	TESTCB ACB for error code failed
00000010	Open ACB failed for reason other that APPLID busy.
00000014	Open ACB failed for all four APPLID/ passwords; the reason in each case was APPLID busy.
0000018	SHOWCB for length of a VTAM control block failed.
000001C	GENCB for VTAM control block failed.
0000020	MODCB for VTAM EXIT LIST failed.
00000024	SETLOGON failed.

Table B-1. Operation Codes for C8001

- - Cause: The attempt to open the VTAM Access Method control block failed for the reason indicated in Table B-2.
 - Effect: The next APPLID in the default values table will be used in place of the current one. If all APPLID fields have been used (and failed), the program will terminate.
 - Action: Based on reason for OPEN failure.

Table B-2. Codes and Messages for C8002

Code	Message
52	APPLID ID NOT DEFINED TO ACF/VTAM
56	APPLID NOT DEFINED AS APPLICATION
58	APPLID IS ALREADY IN USE
5A	APPLID NOT DEFINED TO ACF/VTAM
5C	ACF/VTAM IS INACTIVE - PRIORITY TOO LOW
5E	ACB APPLID FIELD ADDRESS INVALID
60	CONSULT IBM PROGRAMMING SERVICES
62	APPLID LENGTH IS INCORRECT
64	ADDRESS OF PASSWORD IS INCORRECT
66	PASSWORD LENGTH IS INCORRECT
68	AUTH=PPO SPECIFIED/ALREADY ACTIVE
70	ACB IS IN PROCESS OF BEING CLOSED
88	SHORT OF STORAGE - VSE ONLY
F4	SRBEXIT REQUESTED/NOT AUTHORIZED
F6	CNM NIB ADDRESS INVALID
FA	INVALID CNM NIB OPTIONS
FE	DUPLICATE UNSOLICITED RU ROUTING
00	REASON NOT KNOWN

- C84DA- PLEASE DEACTIVATE LOGICAL UNIT(S) AND PHYSICAL UNIT SNA SIGNAL RECEIVED: %X%X%X%X
 - Cause: SIGNAL = 00010003 received from DPS 6. Pass the message to the operator.
 - Effect: SFT-6 is in shutdown mode. No new sessions will be accepted.
 - Action: None.

- - Cause: Session lost: Document network service RU type and data.
 - Effect: Determined by module calling C8400.
 - Action: None.

C84RS- RESPONSE EXIT ACTIVATED: %X%X%X%X

- Cause: Response received: Document response code.
- Effect: Determined by module calling C8400.
- Action: None.
- C8400- SNA SIGNAL RECEIVED: %X%X%X%X
 - Cause: SNA signal received: Document signal data.
 - Effect: Determined by module calling C8400.
 - Action: None.
- - Cause: The session is complete. Record statistical information in the history file.
 - Effect: None.
 - Action: None.

NVITE- PLEASE ENTER ANY COMMANDS FOR FT-L6 FILE TRANSFER PROGRAM

- Cause: Program is ready to accept (next) operator command. This message appears at the host operator console.
- Effect: In MVS systems, a new reply number becomes outstanding.
- Action: The operator should either enter a new command or ignore the request.

Cause: I/O error return from VSAM routine.

- Effect: See the message following this one for a description of the function being attempted and/or failure implications.
- Action: Examine message and dump file to determine reason for error.
- - Cause: Error return from VSAM routine -- description follows return code (%X%X value) - feedback; Table B-3 contains a list of codes and messages.
 - Effect: Depends on individual failure condition. See description within message.
 - Action: Depends on individual failure condition.

Table B-3. Return Codes and Messages for PRVOX

Code	Message
0 80 4 0 808 0 80C 0 810 0 814 0 818 0 81C 0 820 0 824 0 828 0 82C 0 840 0 844 0 848 0 84C 0 850 0 854 0 855 0 855 0 860 0 868 0 866 0 868 0 866 0 870 0 874 0 884 0 888 0 886 0 888 0 886 0 888 0 886 0	END OF DATA SET OR KEY GREATER THEN MAX KEY DUPLICATE KEY DETECTED ON INSERT OPERATION KEY SEQUENCE CHECK RESULTED IN ERROR RECORD REQUESTED NOT FOUND CONTROL INTERVAL HELD BY ANOTHER REQUESTOR RECORD RESIDES ON VOLUME THAT CANNOT BE MOUNTED DATA SET CANNOT BE EXTENDED: OUT OF SPACE OR SHROPT=4 SPECIFIED RELATIVE BYTE ADDRESS NOT START OF RECORD KEY NOT IN RANGE SPECIFIED WHEN DATA SET DEFINED NOT ENOUGH VIRTUAL STORAGE IN ADDRESS SPACE WORK AREA NOT LARGE ENOUGH FOR RECORD STRNO LIMIT REACHED - REQUEST REJECTED TYPE OF PROCESSING REQUESTED NOT SPECIFIED AT OPEN KEY REQUEST TO AN ENTRY SEQUENCE DATA SET PUT INVALID: ADDRESSED ADD TO KEY-SEQUENCE DATA SET LOCATE MODE SPECIFIED WITH PUT REQUEST POSITIONING ERROR OR ILLEGAL MODE SWITCH PUT/ERASE ISSUED WITHOUT PRECEDING GET FOR UPDATE KEY PORTION OF RECORD CANNOT BE CHANGED IN UPDATE RECORD LENGTH CHANGE NOT ALLOWED WITH ADDRESS UPDATE REQUEST TYPE NOT ALLOWED/INITIAL DATA SET LOADING REQUEST TYPE NOT ALLOWED/INITIAL DATA SET LOADING REQUEST OPERATING UNDER INCORRECT TCB LOCATE MODE ATTEMPT OF SPANNED RECORD ADDRESSED GET OF SPANNED RECORD IN KEY-SEQ DATA SET INVALID POINTER IN AN ALTERNATE INDEX
0894 0898 089C	MAX NUMBER OF POINTERS IN ALT INDEX EXCEEDED NOT ENOUGH BUFFERS - SHARED RESOURCES ONLY INVALID CONTROL INTERVAL OR GET UPD REQUEST FAILED
RPRFR- RESTART AFTER RECORD NUMBER: %%%%%%

- Cause: A send or receive operation is being retried and both SFT-6 and SFT-H have agreed to restart following the record number printed.
- Effect: None. Documentation only.
- Action: N/A.
- - Cause: DSA62 style error report received from SFT-6. The report consists of a code (%X%X%X%X) and a message. Table B-4 contains a list of the codes and messages reported by SFT-6.
 - Effect: See next message in history file (for this LU/session).
 - Action: Depends on meaning of code.

Table B-4. Cod	es and	Messages	for	SERRP
----------------	--------	----------	-----	-------

Code	Message
0002	CONTROL RECORD OUT OF SEQUENCE
0004	UNKNOWN CONTROL RECORD TYPE
0020	MISSING PARAMETER VALUE
0021	INVALID PARAMETER VALUE
0022	PARAMETER VALUE INCORRECT IN CONTEXT
0026	UNSUPPORTED PARAMETER VALUE
0030	INSUFFICIENT ACCESS PERMISSION
0031	FILE DOES NOT EXIST
0032	FILE BUSY
0034	INVALID FILE IDENTIFICATION SYNTAX
0040	SERIOUS I/O ERROR-CANNOT CONTINUE
1000	INSUFFICIENT CHARACTERISTICS
1002	SUFFICIENT MEMORY NOT CURRENTLY AVAILABLE
1201	FILE CANNOT BE OPENED
1440	FILE SPACE EXHAUSTED
1450	RECORD OR CI > MAX
1451	ILLEGAL FILE RECORD TYPE
1452	RECORD NUMBER SEQUENCE ERROR
1453	KEY SEQUENCE ERROR
1454	ILLEGAL DUPLICATE KEY VALUE
2600	ERROR POSITIONING REMOTE FILE
2801	FILE ALREADY EXISTED (REJECTION)
2802	INSUFFICIENT SPACE ON MEDIA
3800	UNACCEPTABLE NEW NAME
5 E9D	TURN ON ERROR DURING RECEIVE
5 E9 E	TURN ON ERROR DURING SEND
5 E9 F	SERVER TCC DOES NOT EQUAL REQUESTOR TCC
5 EA1	DATA TRANSFERRED IS FTP RECORD OUT OF SEQ
5 EC1	ILLEGAL TRANSFER BUFFER SIZE
5 EDF	ILLEGAL RENAME PATH SIZE
0 E07	UNKNOWN FILE TYPE
0 E0 8	NO PATH NAME FOR CREATE FILE
0 E0 9	APPEND MODE NOT LEGAL FOR NON-SEQ FILE

SF005- SERIOUS ERROR: READ TSF DUMMY RECORD

- Cause: When attempting to read the dummy record at the beginning of the transmission status file, an error was encountered.
- Effect: The Transmission Control Program terminates with a return code indicating the error condition.
- Action: If the problem persists, contact your Honeywell representative.
- SF006- SERIOUS ERROR: VERIFYING EMPTY TSF STATUS RECORD
 - Cause: In Startup mode, an error other than "End-of-File" was indicated when attempting to verify that the transmission status file was empty.
 - Effect: The Transmission Control Program terminates with a return code indicating the error condition.
 - Action: If the problem persists, contact your Honeywell representative.
- SF007- SERIOUS ERROR: STATUS RECORD IN TSF WHEN STARTUP MODE REQUESTED
 - Cause: In Startup mode, an error other than "End-of-File" was indicated when attempting to verify that the transmission status file was empty.
 - Effect: The Transmission Control Program terminates with a return code indicating the error condition.
 - Action: If the problem persists, contact your Honeywell representative.
- SF008- SERIOUS ERROR: ERROR UPDATING TSF DUMMY RECORD
 - Cause: In Startup mode, an error was indicated when attempting to update the transmission status file dummy record.
 - Effect: The Transmission Control Program terminates with a return code indicating the error condition.
 - Action: If the problem persists, contact your Honeywell representative.

- SF009- SERIOUS ERROR: READ-FOR-UPDATE: NEW STATUS SHOULD BE "NOT VERIFIED"
 - Cause: In Restart mode, an error was indicated when attempting to retrieve a transmission status file record to change its status to "NOT VERIFIED".
 - Effect: The Transmission Control Program terminates with a return code indicating the error condition.
 - Action: If the problem persists, contact your Honeywell representative.
- SF010- FATAL ERROR UPDATING STATUS RECORD: NEW STATUS SHOULD BE "NOT VERIFIED"
 - Cause: In Restart mode, an error was indicated when attempting to retrieve a transmission status file record to change its status to "NOT VERIFIED".
 - Effect: The Transmission Control Program terminates with a return code indicating the error condition.
 - Action: If the problem persists, contact your Honeywell representative.
- SF011- SERIOUS ERROR: POINT TO 1ST TCF SESSION HEADER RECORD NO SESSIONS DEFINED???
 - Cause: An error indicator was returned on the very first attempt to read a session record from the transmission control file.
 - Effect: The Transmission Control Program terminates with a return code indicating the error condition.
 - Action: If the problem persists, contact your Honeywell representative.
- SF012- SERIOUS ERROR: READING NEXT TCF SESSION HEADER: ERROR OTHER THAN "NOT FOUND/EOF"
 - Cause: An error indicator (other than End-of-File) was returned attempting to read the next record in the transmission control file.
 - Effect: The Transmission Control Program terminates with a return code indicating the error condition.
 - Action: If the problem persists, contact your Honeywell representative.

SF013- SERIOUS ERROR: READING RMF LU RECORD FOR SESSION = LU

- Cause: An error indicator (other than End-of-File) was returned attempting to read the LU record indicated by the session record.
- Effect: The Transmission Control Program terminates with a return code indicating the error condition.
- Action: If the problem persists, contact your Honeywell representative.
- SF014- SERIOUS ERROR: READING RMF GR RECORD FOR SESSION = GR
 - Cause: An error indicator (other than End-of-File) was returned attempting to read the group record indicated by the session record.
 - Effect: The Transmission Control Program terminates with a return code indicating the error condition.
 - Action: If the problem persists, contact your Honeywell representative.
- SF015- SERIOUS ERROR: NO LOGICAL UNITS IN GROUP RECORD
 - Cause: The group record contained no logical units.
 - Effect: The Transmission Control Program terminates with a return code indicating the error condition.
 - Action: If the problem persists, contact your Honeywell representative.
- SF016- SERIOUS ERROR: READING RMF LU RECORD FOR SESSION = GROUP
 - Cause: An error indicator (other than End-of-File) was returned attempting to read the LU record indicated by the group record associated with a session.
 - Effect: The Transmission Control Program terminates with a return code indicating the error condition.
 - Action: If the problem persists, contact your Honeywell representative.

SF017- SERIOUS ERROR: RELEASE TCF BUFFER FAILED

- Cause: An error indicator was returned when attempting to free the transmission control file buffer.
- Effect: The Transmission Control Program terminates with a return code indicating the error condition.
- Action: If the problem persists, contact your Honeywell representative.

SF018- SERIOUS ERROR: RELEASE TSF BUFFER FAILED

- Cause: An error indicator was returned when attempting to free the transmission status file buffer.
- Effect: The Transmission Control Program terminates with a return code indicating the error condition.
- Action: If the problem persists, contact your Honeywell representative.

SF019- SERIOUS ERROR: RELEASE RMF LU BUFFER

- Cause: An error indicator was returned when attempting to free the resource master file buffer used to read LU records.
- Effect: The Transmission Control Program terminates with a return code indicating the error condition.
- Action: If the problem persists, contact your Honeywell representative.

SF020- SERIOUS ERROR: RELEASE RMF GR BUFFER

- Cause: An error indicator was returned when attempting to free the resource master file buffer used to read group records or exclusion group records.
- Effect: The Transmission Control Program terminates with a return code indicating the error condition.
- Action: If the problem persists, contact your Honeywell representative.

SF021- SERIOUS ERROR: READ TSF STATUS RECORD IN "RESTART" MODE

- Cause: In Restart mode, an error other than "NOT FOUND" was returned when attempting to read the transmission status file record for the current logical unit or session.
- Effect: The Transmission Control Program terminates with a return code indicating the error condition.
- Action: If the problem persists, contact your Honeywell representative.
- SF022- SERIOUS ERROR: UPDATE TSF FAILED IN "RESTART" MODE
 - Cause: In Restart mode, an error was returned when attempting to update the transmission status file record for current logical unit or session.
 - Effect: The Transmission Control Program terminates with a return code indicating the error condition.
 - Action: If the problem persists, contact your Honeywell representative.
- SF023- ERROR ADDING NEW TSF RECORD IN START OR RESTART MODE
 - Cause: In Startup or Restart mode, an error was returned when attempting to add a transmission status file record for the current logical unit or session.
 - Effect: The Transmission Control Program terminates with a return code indicating the error condition.
 - Action: If the problem persists, contact your Honeywell representative.
- SF024- ERROR OTHER THAN NOT FOUND READING EXCLUSION GROUP RECORD
 - Cause: An error (other than "NOT FOUND") was returned when attempting to read an exclusion group record for the current LU.
 - Effect: The Transmission Control Program terminates with a return code indicating the error condition.
 - Action: If the problem persists, contact your Honeywell representative.

SPA00- S2000:04 - MVS ESTAE RETRY ROUTINE IN CONTROL

- Cause: Subtask responsible for the session has abnormally terminated.
- Effect: The session is marked as complete with no retry. A dump of the subtask work areas has been attempted.
- Action: Examine the history file and/or the subtask work areas dumped to determine the cause of the problem.
- SPA02- S2001:08 I-O ERROR READING FIRST ACTION RECORD IN SESSION. ERROR IS NOT "NOT FOUND/END OF FILE"
 - Cause: I/O error return from the VSAM access method.
 - Effect: The session is terminated with "No Retry" status.
 - Action: Correct the condition causing the I/O error and rerun.
- SPA03- S2001:12 LOGIC ERROR TCF FILE APPARENTLY INCONSISTENT/ AT LEAST SESSION RECORD SHOULD FOLLOW ACTIONS
 - Cause: The first action record in the session cannot be found.
 - Effect: The session is terminated with "No Retry" status.
 - Action: Use the File Maintenance Utility to add action records to the session.
- SPA04- S2001:16 NO ACTION RECORD FOR SESSION FOUND ACTION FOR SOME OTHER SESSION OR SESSION HDR
 - Cause: The first action record in the session cannot be found.
 - Effect: The session is terminated with "No Retry" status.
 - Action: Use the File Maintenance Utility to add action records to the session.

- SPA05- S2001:20 ACTION RECORD NOT FOUND WHEN ATTEMPTING TO RETRY FAILING ACTION - TCF MODIFIED???
 - Cause: During session Restart processing, the action record corresponding to the failure condition cannot be found in the transmission control file.
 - Effect: The session is terminated with "No Retry" status.
 - Action: Investigate the failure by dumping the Transmission Status File record for the session and by listing the transmission control file. The transmission control file has probably been modified since the original failure.
- SPA06- S2001:24 I-O ERROR (OTHER THAN "NOT FOUND") WHEN READING TCF ACTION RECORD FOR RETRY ACTION
 - Cause: During session Restart processing, the action record corresponding to the failure condition cannot now be retrieved due to an I/O error.
 - Effect: The session is terminated with "No Retry" status.
 - Action: Correct the condition causing the I/O error and rerun.
- SPA07- S2001:28 -I-O ERROR (OTHER THAN "NOT FOUND") READING ACTION RECORD OTHER THAN FIRST ACTION
 - Cause: I/O error return from the VSAM access method.
 - Effect: The session is terminated with "No Retry" status.
 - Action: Correct the condition causing the I/O error and rerun.
- SPB00- S2100:04 SESSION HEADER ACTION RECORD COUNT IS ZERO. NO ATTEMPT TO FIND ACTION RECORDS IS MADE
 - Cause: Session contains no actions.
 - Effect: The session is considered complete. No attempt is made to communicate with the DPS 6.

Action: None.

- SPB01- S2100:08 I-O ERROR WHEN ATTEMPTING TO READ SESSION HEADER RECORD. TERMINATE SESSION WITH NO RETRY
 - Cause: I/O error reported by VSAM when attempting to read the session header record.
 - Effect: The session is marked as complete with no retry.
 - Action: Investigate cause of I/O error (using information in the history file). Correct the problem and rerun the Transmission Control Program.
- SPB02- S2100:12 ATTEMPT TO ESTABLISH SESSION FAILED RETRY WILL OCCUR LATER
 - Cause: The attempt to establish the session failed.
 - Effect: The session is marked for retry later.
 - Action: None.
- SPB03- S2100:16 VTAM COMMUNICATIONS BUFFER NOT AVAILABLE RETRY WILL OCCUR LATER
 - Cause: No memory was available for work space when it was needed to establish the session.
 - Effect: The session is marked for retry later.
 - Action: Increase the region size on the EXEC statement to decrease the chances of this error happening.
- SPC00- S2200:08 SEND NEW FILE ATTEMPTED BUT FILE ALREADY EXISTS AT L6
 - Cause: The SEND action specified a disposition of NEW but the file already existed.
 - Effect: The SEND operation is terminated. Session disposition is determined by the error option(s) specified.
 - Action: None.

- SPC01- S2200:12 ANSWER TO ASSIGN REMOTE FILE INDICATED PROBLEM OTHER THAN "FILE NOT FOUND"
 - Cause: Some error was reported by the SFT-6 other than "FILE NOT FOUND" at the beginning of the SEND operation.
 - Effect: The SEND operation is terminated. Session disposition is determined by the error option(s) specified.
 - Action: See the associated "SERRP" error message for the condition reported, and correct the problem.
- SPC02- S2200:16 SEND OLD FILE TO L6 REQUESTED BUT FILE DOES NOT EXIST AT FT-L6
 - Cause: The SEND action specified a disposition of OLD but the file does not exist.
 - Effect: The SEND operation is terminated. Session disposition is determined by the error option(s) specified.
 - Action: None.
- SPC03- S2200:20 UPDATE TSF RECORD FOR SESSION FAILED SHOULD NEVER OCCUR
 - Cause: An I/O error occurred during a transmission status file update.
 - Effect: The session is terminated with no retry.
 - Action: Investigate the cause of the I/O error using history file information.
- SPC04- S2200:24 ERROR ASSOCIATED WITH "PHASE" BYTE TCF CORRUPTED OR LOGIC ERROR / SHOULD NEVER OCCUR
 - Cause: An invalid SEND "PHASE" was indicated in the transmission status file record for the session.
 - Effect: The session is terminated with no retry.
 - Action: Dump transmission file status record for this session. Print the history file(s) (TYPE=DETAIL) for this session. Save any SNAP Dumps associated with this problem. Rerun the Transmission Control Program.

SPC05- S2200:28 - WHEN RETRYING SEND, FT-L6 FILE HAS DISAPPEARED

- Cause: A file that was previously in use (created or assigned) is not now available.
- Effect: The session is terminated with no retry.
- Action: Examine the history file to determine the sequence of events. If necessary, check the DPS 6 system for any error information.
- SPC10- S2210:04 ALLOCATION OR OPEN OF INPUT FILE FOR SEND FAILED - PROBABLE DSNAME/PASSWORD/DDNAME ERROR
 - Cause: The staging file cannot be opened.
 - Effect: The session is terminated with no retry.
 - Action: Correct the DDNAME, password, or Job Control Language.
- SPC11- S2210:08 LOGICAL STAGING FILE HEADER RECORD NOT FOUND STAGE OR RECEIVE OPERATION NEEDED
 - Cause: The Logical staging file was not found in the physical staging file.
 - Effect: Follow the specified error option(s).
 - Action: Stage data or RECEIVE data before attempting to SEND.
- SPC12- S2210:12 ERROR OTHER THAN "NOT FOUND" REPORTED WHEN READING LOGICAL STAGING FILE HEADER
 - Cause: I/O error attempting to read the logical staging file header.
 - Effect: Terminate the session with no retry.
 - Action: Investigate and correct the problem using information in the history file.

- SPC13- S2210:16 LOGICAL STAGING FILE HEADER MARKED AS "NOT COMPLETE" - DATA NOT READY TO SEND
 - Cause: The logical staging file header is marked as "NOT COMPLETE".
 - Effect: Follow the specified error option(s).
 - Action: If data was received, examine the history records relating to the RECEIVE operation. If data was staged, examine the run report of the File Maintenance Utility for the error message on the stage operation.
- SPC14- S2210:20 DYNAMIC FILE ALLOCATION OPERATION FAILURE DESCRIBED IN PREVIOUS MESSAGES.

Cause: See messages S2211 and S2212 for information.

- SPC20- S2220:04 VTAM REPORTED ERROR ON SEND ARF
 - Cause: A communications error was detected while attempting to send a DSA 62 "ARF". The exact nature of the error should be reflected by some history file record that was already added to the history file and/or by the internal/external trace table.
 - Effect: Terminate the session and do not recommend retry.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC21- S2220:08 VTAM REPORTED ERROR ON RECEIVE ACK(ARF) WAS EXPECTED INPUT
 - Cause: A communications error was detected while attempting to receive a DSA 62 "ACK(ARF)". The exact nature of the error should be reflected by some history file record that was already added to the history file and/or by the internal/external trace table.
 - Effect: Terminate the session and do not recommend retry.
 - Action: If the problem persists, contact your Honeywell representative.

- SPC22- S2220:12 CHANGE DIRECTION INDICATOR MISSING FROM INPUT AFTER ARF SEND - PROTOCOL ERROR
 - Cause: A communications error was detected while attempting to receive a DSA 62 "ACK(ARF)". The Change Direction Indicator was not set as it should have been. This is a protocol error.
 - Effect: Terminate the session and do not recommend retry.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC23- S2220:16 WHEN ACK(ARF) EXPECTED, INPUT DATA LENGTH WAS LESS THAN THE MINIMUM VALUE OF 5
 - Cause: A communications error was detected while attempting to receive a DSA 62 "ACK(ARF)". The length field in the DSA header was less than three (minimum length for ACK(ARF)). This is a protocol error.
 - Effect: Terminate the session and do not recommend retry.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC24- S2220:20 WHEN ACK(ARF) EXPECTED, DSA RECORD TYPE WAS NOT ACK
 - Cause: A communications error was detected while attempting to receive a DSA 62 "ACK(ARF)". The Command Field in the DSA header was not ACK as expected. This is a protocol error.
 - Effect: Terminate the session and do not recommend retry.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC25- S2220:24 WHEN ACK(ARF) EXPECTED, ACK RECEIVED BUT NOT FOR ARF
 - Cause: A communications error was detected while attempting to receive a DSA 62 "ACK(ARF)". The Command Field in the DSA header was ACK as expected but was not followed by the expected information for ARF. This is a protocol error.
 - Effect: Terminate the session and do not recommend retry.
 - Action: If the problem persists, contact your Honeywell representative.

- SPC26- S2220:28 WHEN ACK(ARF) RECEIVED, PARAMETER TYPE OTHER THAN ERROR REPORT INCLUDED - PROTOCOL ERROR
 - Cause: A communications error was detected while attempting to receive a DSA 62 "ACK(ARF)". The ACK(ARF) portion was correct, but the reply also contained some type of data other than "ERROR REPORT". This is a protocol error.
 - Effect: Terminate the session and do not recommend retry.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC3A- S2230:44 INPUT LENGTH TOO SHORT TO POSSIBLY BE A VALID ACK (CREATE) OR ACK (DEFINE)
 - Cause: An error occurred while attempting to receive a DSA 62 ACK(DEFINE OR CREATE). The input DSA 62 Header length field value was less than 3.
 - Effect: Terminate the session and do not recommend retry.
 - Action: If the error persists, contact your Honeywell representative.
- SPC3B- S2230:48 INPUT NOT AN ACK WHEN ACK (DEFINE OR CREATE) EXPECTED
 - Cause: An error occurred while attempting to receive a DSA 62 ACK(DEFINE OR CREATE FILE). The input DSA 62 Header Command Field was not ACK as expected.
 - Effect: Terminate the session and do not recommend retry.
 - Action: If the error persists, contact your Honeywell representative.
- SPC3C- S2230:52 ACK(DEFINE) RECEIVED WITH ERROR REPORT SEVERITY HIGHER THAN ZERO
 - Cause: An error occurred while attempting to receive a DSA 62 ACK(DEFINE FILE). The input was an ACK(CREATE) but also contained Error Reports with severity higher than 0.
 - Effect: Terminate the session and do not recommend retry.
 - Action: If the error persists, contact your Honeywell representative.

- SPC3D- S2230:56 ACK(DEFINE) RECEIVED WITH PARAMETER TYPE OTHER THAN ERROR REPORT
 - Cause: An error occurred while attempting to receive a DSA 62 ACK(DEFINE FILE). The input was an ACK(DEFINE) but also contained something other than an error report.
 - Effect: Terminate the session and do not recommend retry.
 - Action: If the error persists, contact your Honeywell representative.
- SPC3E- S2230:60 ACK(DEFINE) DID CARRY CHANGE DIRECTION INDICATOR - PROTOCOL ERROR
 - Cause: An error occurred while attempting to receive a DSA 62 ACK(DEFINE FILE). The input RU did carry a CDI. This is a protocol error.
 - Effect: Terminate the session and do not recommend retry.
 - Action: If the error persists, contact your Honeywell representative.
- SPC3F- S2230:64 VTAM REPORTED ERROR ON RECEIVE ACK(CREATE FILE) WHEN ACK(DEFINE) WAS ALREADY RECEIVED
 - Cause: An error occurred while attempting to receive a DSA 62 ACK(CREATE FILE). This error message indicates that the ACK(DEFINE) has completed. Document the error and then follow the error option specification.
 - Effect: See the error option for this action.
 - Action: If the error persists, contact your Honeywell representative.
- SPC30- S2230:04 SFT-6 FILE NAME NOT SPECIFIED IN TCF OR IN STAGING FILE
 - Cause: A logic error in Create File. The SFT-6 file name was not specified on either the transmission control file SEND action record or within the staging file logical file header record. Since the file name is a required parameter, this condition is an error.
 - Effect: The session is terminated with no retry recommended.
 - Action: Specify the file name in either a transmission control file or staging file record.

SPC31- S2230:08 - VTAM REPORTED ERROR ON SEND CREATE FILE

- Cause: An error occurred while attempting to send DSA 62 "CREATE REMOTE FILE". Document the error and the follow the error option specified for this action.
- Effect: See the error option for this action.
- Action: If the error persists, contact your Honeywell representative.
- SPC32- S2230:12 VTAM REPORTED ERROR ON RECEIVE ACK(CREATE FILE)
 - Cause: An error occurred while attempting to receive a DSA 62 ACK(CREATE FILE). Document the error and then follow the error option specified for this action.
 - Effect: See the error option for this action.
 - Action: If the error persists, contact your Honeywell representative.
- SPC33- S2230:16 ACK(CREATE) DID NOT CARRY CHANGE DIRECTION INDICATOR - PROTOCOL ERROR
 - Cause: An error occurred while attempting to receive a DSA 62 ACK(CREATE FILE). The input RU did not carry a CDI. This is a protocol error.
 - Effect: Terminate the session and do not recommend retry.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC34- S2230:20 INPUT LENGTH TOO SHORT TO POSSIBLY BE A VALID ACK (CREATE)
 - Cause: An error occurred while attempting to receive a DSA 62 ACK(CREATE FILE). The input DSA 62 Header Length Field value was less than 3.
 - Effect: Terminate the session and do not recommend retry.
 - Action: If the error persists, contact your Honeywell representative.

SPC35- S2230:24 - INPUT NOT AN ACK WHEN ACK (CREATE) EXPECTED

- Cause: An error occurred while attempting to receive a DSA 62 ACK(CREATE FILE). The input DSA 62 Header Command Field was not ACK as expected.
- Effect: Terminate the session and do not recommend retry.
- Action: If the error persists, contact your Honeywell representative.
- SPC36- S2230:28 INPUT WAS ACK BUT NOT FOR CREATE AS EXPECTED
 - Cause: An error occurred while attempting to receive a DSA 62 ACK(CREATE FILE). The input was an ACK but not for CREATE as expected.
 - Effect: Terminate the session and do not recommend retry.
 - Action: If the error persists, contact your Honeywell representative.
- SPC37- S2230:32 ACK(CREATE) RECEIVED WITH PARAMETER TYPE OTHER THAN ERROR REPORT
 - Cause: An error occurred while attempting to receive a DSA 62 ACK(CREATE FILE). The input was an ACK(CREATE) but also contained something other than an error report.
 - Effect: Terminate the session and do not recommend retry.
 - Action: If the error persists, contact your Honeywell representative.
- SPC38- S2230:36 ACK(CREATE) RECEIVED WITH ERROR REPORT SEVERITY HIGHER THAN ZERO
 - Cause: An error occurred while attempting to receive a DSA 62 ACK(CREATE FILE). The input was an ACK(CREATE) but also contained error reports with severity higher than 0.
 - Effect: Terminate the session and do not recommend retry.
 - Action: If the error persists, contact your Honeywell representative.

SPC39- S2230:40 - VTAM REPORTED ERROR ON SEND DEFINE FILE

- Cause: An error occurred while attempting to send a DSA 62 "DEFINE REMOTE FILE". Document the error and then follow the error option specification.
- Effect: See the error option specification for this action.
- Action: If the error persists, contact your Honeywell representative.
- SPC4A- S2240:44 CHANGE DIRECTION INDICATOR MISSING FROM ACK (POSITION REMOTE FILE)
 - Cause: The Change Direction Indicator was missing when it should be set: ACK(PRF).
 - Effect: Terminate the session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC4B- S2240:48 INPUT TOO SHORT TO BE ACK (POSITION REMOTE FILE) AS EXPECTED
 - Cause: Too little data was received to be the valid DSA 62 data element: ACK(PRF).
 - Effect: Terminate the session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC4C- S2240:52 INPUT NOT ACK WHEN ACK(POSITION REMOTE FILE) AS EXPECTED
 - Cause: Input is not an ACK when the expected DSA 62 data element was: ACK(PRF).
 - Effect: Terminate the session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC4D- S2240:56 INPUT ACK BUT NOT FOR POSITION REMOTE FILE AS EXPECTED
 - Cause: The input is an ACK but not for the element expected: ACK(PRF).
 - Effect: Terminate the session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

- SPC4E- S2240:60 ACK(POSITION REMOTE FILE) RECEIVED WITH ERROR REPORT SEVERITY LEVEL GREATER THAN ZERO
 - Cause: The input contained an error with a nonzero severity or with a non-DSA 62 code.
 - Effect: Terminate the session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC4F- S2240:64 ACK(POSITION REMOTE FILE) RECEIVED WITH NO POSITIONING INDICATION
 - Cause: The input did not contain any parameters other than error report.
 - Effect: Terminate the session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC4G- S2240:68 RESTART RANK MISSING FROM ACK(POSITION REMOTE FILE)
 - Cause: The input did not contain the SFT-6 version of Restart Rank within the file.
 - Effect: Terminate the session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC4H- S2240:72 RESTART RANK IN ACK(POSITION REMOVE FILE) IS LARGER THAN LAST RECORD SENT - PROTOCOL ERROR
 - Cause: The SFT-6 version of Restart Rank is larger than that of SFT-H. Protocol error.
 - Effect: Terminate the session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC4I- S2240:76 VTAM REPORTED ERROR WHEN SENDING DSA 62 START DATA TRANSFER (NOT RELATED TO SNA SDT)
 - Cause: An error was reported while sending a DSA 62 protocol element: SDT.
 - Effect: Follow the error option specified.
 - Action: If the problem persists, contact your Honeywell representative.

SPC40- S2240:04 - VTAM REPORTED ERROR SENDING ORF

- Cause: An error was reported while sending a DSA 62 protocol element: ORF.
- Effect: Follow the error option specified.
- Action: If the problem persists, contact your Honeywell representative.
- SPC41- S2240:08 VTAM REPORTED ERROR RECEIVING ACK(ORF)
 - Cause: An error was reported while receiving a DSA 62 protocol element: ACK(ORF).
 - Effect: Follow the error option specified.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC42- S2240:12 CHANGE DIRECTION INDICATOR MISSING FROM ACK(ORF) - PROTOCOL ERROR
 - Cause: The Change Direction Indicator was missing when it should be set: ACK(ORF).
 - Effect: Terminate the session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC43- S2240:16 INPUT TOO SHORT TO BE ACK(ORF)
 - Cause: Too little data was received to be the valid DSA 62 data element: ACK(ORF).
 - Effect: Terminate the session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC44- S2240:20 DATA RECEIVED WAS NOT ACK WHEN ACK(ORF) WAS EXPECTED
 - Cause: Input is not an ACK when the expected DSA 62 data element was: ACK(ORF).
 - Effect: Terminate the session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

- SPC45- S2240:24 DATA RECEIVED WAS ACK BUT NOT FOR ORF AS EXPECTED
 - Cause: Input is an ACK but not for the data element expected: ACK(ORF).
 - Effect: Terminate the session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC46- S2240:28 RECEIVED ACK(ORF) WITH ERROR REPORT SEVERITY GREATER THAN ZERO
 - Cause: The input contained an error with a nonzero severity or with a non-DSA 62 code.
 - Effect: Terminate the session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC47- S2240:32 RECEIVED ACK(ORF) HAS INVALID PRESENTATION OR CHECKMARK RESPONSE
 - Cause: The input contained a Presentation or Checkmark option different from those requested.
 - Effect: Terminate the session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC48- S2240:36 VTAM REPORTED ERROR WHEN SENDING POSITION REMOTE FILE
 - Cause: An error was reported while sending a DSA 62 protocol element: PRF
 - Effect: Follow the error option specified.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC49- S2240:40 VTAM REPORTED ERROR WHEN RECEIVING REPLY TO POSITION REMOTE FILE
 - Cause: An error was reported while receiving a DSA 62 protocol element: ACK(PRF).
 - Effect: Follow the error option specified.
 - Action: If the problem persists, contact your Honeywell representative.

- SPC5A- S2250:44 I-O ERROR ON READ NEXT RECORD FROM STAGING FILE
 - Cause: An error has been reported by VSAM I/O routines. See the associated "PRVOP" error message for details.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC5B- S2250:48 VTAM ERROR RETURN WHEN SENDING DATA OR CHECKPOINT MARK RECORD
 - Cause: An error has been reported by VSAM I/O routines.
 - Effect: The session is terminated with retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC5C- S2250:52 VSAM ERROR RETURN WHEN UPDATING TSF RECORD WITH NEW NUMBER OF RECORDS SENT
 - Cause: An error has been reported by VSAM I/O routines while updating the session's transmission status file record.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC50- S2250:04 ERROR POSITIONING STAGING FILE TO AGREED STARTING RECORD NUMBER
 - Cause: An error occurred while positioning the staging file to the starting record number.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC51- S2250:08 TIMEOUT WAITING FOR CHECKPOINT MARK RESPONSE FROM L6
 - Cause: A timeout occurred while waiting for an SFT-6 response to a checkmark request.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

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- SPC52- S2250:12 IMMEDIATE TERMINATION REQUESTED BY MAINLINE TASK - SESSION TO BE TERMINATED
 - Cause: The Mainline Task requested immediate session termination.
 - Effect: The session is terminated with retry recommended.
 - Action: None.
- SPC53- S2250:16 VTAM REPORTED SESSION TERMINATED
 - Cause: The session has been terminated.
 - Effect: The session is marked with retry recommended.
 - Action: None.
- SPC54- S2250:20 NS EXIT SHOULD NOT OCCUR LOGIC OR PROTOCOL ERROR
 - Cause: The session has been terminated.
 - Effect: The session is marked with retry recommended.
 - Action: None.
- SPC55- S2250:24 RESPONSE RECEIVED LOGIC ERROR OR PROTOCOL ERROR
 - Cause: An SNA negative response has been received.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC56- S2250:28 L6 REQUESTED SHUTDOWN VIA "SIGNAL"
 - Cause: An SNA signal has been received containing the SFT-6 Shutdown Requested code.
 - Effect: The session is terminated with retry recommended.
 - Action: None.

- SPC57- S2250:32 SNA "SIGNAL" RECEIVED THAT WAS NOT A CHECKPOINT OR SHUTDOWN REQUEST - PROTOCOL ERROR
 - Cause: An SNA signal other than the supported types has been received .
 - Effect: The session is terminated with retry recommended.
 - Action: None.
- SPC58- S2250:36 CHECKPOINT MARK RECEIVED WHEN NO CHECKPOINT OUTSTANDING - PROTOCOL ERROR
 - Cause: An SNA signal has been received that indicates Checkpoint Response but no Checkpoints are outstanding.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC59- S2250:40 CHECKPOINT MARK RECEIVED WITH INCORRECT MARK NUMBER
 - Cause: An SNA signal has been received that indicates Checkpoint Response but contains the wrong Checkpoint number.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC6\$- S2260:152 ERROR IN READING STAGING FILE HEADER TO MARK AS DELETE IN PROGRESS
 - Cause: Error reported by VSAM I/O routines when reading the staging file header prior to an Update operation.
 - Effect: Terminate session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC6% S2260:156 ERROR UPDATING STAGING FILE HEADER
 - Cause: Error reported by VSAM I/O routines when updating the staging file header.
 - Effect: Terminate session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

- SPC6?- S2260:148 ACK(SDT) RECEIVED WITH PARAMETERS OTHER THAN ERROR REPORT - PROTOCOL ERROR
 - Cause: Input data is ACK(EDT) as expected, but with parameters other than just error report.
 - Effect: Terminate session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC6A- S2260:44 ACK(EDT) RECEIVED WITH PROPER LENGTH BUT TCC PARAMETER MISSING
 - Cause: The input data is ACK(EDT) as expected, but the TCC parameter ID is missing.
 - Effect: Terminate the session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC6B- S2260:48 ACK(EDT): TCC LESS THAN REQUESTOR PROTOCOL ERROR
 - Cause: The input data is ACK(EDT) as expected, but the SFT-6 version of the TCC is smaller that SFT-H. Protocol error.
 - Effect: Terminate the session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC6C- S2260:52 ACK(EDT): TCC GREATER THAN REQUESTOR
 - Cause: The input data is ACK(EDT) as expected, but the SFT-6 version of the TCC is larger than SFT-H. This is not an error. It does indicate that the SFT-6 reason for terminating the file transfer may be different from the SFT-H reason.
 - Effect: Terminate session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

SPC6E- S2260:60 - ERROR WHEN PHYSICALLY CLOSING STAGING FILE

Cause: Error reported by VSAM I/O routines.

- Effect: Terminate session with no retry recommended.
- Action: If the problem persists, contact your Honeywell representative.
- SPC6F- S2260:64 VTAM REPORTED ERROR SENDING CLOSE REMOTE FILE
 - Cause: Error reported on Send operation when CRF was being sent.
 - Effect: Follow the error option specified.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC6G- S2260:68 VTAM REPORTED ERROR RECEIVING ACK(CLOSE REMOTE FILE)
 - Cause: Error reported on Receive operation when ACK(CRF) was expected.
 - Effect: Follow the error option specified.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC6H- S2260:72 VTAM REPORTED ERROR SENDING RELEASE (REMOTE FILE)
 - Cause: Error reported on Send operation when an RRF was being sent.
 - Effect: Follow the error option specified.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC61- S2260:76 VTAM REPORTED ERROR RECEIVING ACK(RFF)
 - Cause: Error reported on Receive operation when ACK(RRF) was expected.
 - Effect: Follow the error option specified.
 - Action: If the problem persists, contact your Honeywell representative.

- SPC6J- S2260:80 INPUT LENGTH TOO SHORT FOR ACK(CRF) PROTOCOL ERROR
 - Cause: The input data was too short to be the expected ACK(CRF).
 - Effect: Terminate session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC6K- S2260:84 INPUT IS NOT ACK WHEN ACK(CRF) EXPECTED
 - Cause: The input data is not an ACK when the expected data is ACK(CRF).
 - Effect: Terminate session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC6L- S2260:88 INPUT IS ACK BUT NOT FOR CRF AS EXPECTED
 - Cause: The input data is an ACK but not for EDT as expected.
 - Effect: Terminate session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC6M- S2260:92 ACK(CLOSE REMOTE FILE) RECEIVED WITH ERROR REPORT SEVERITY OTHER THAN 0
 - Cause: The input data is ACK(CRF) as expected, but with a nonzero error severity or with a non-DSA 62 error code.
 - Effect: Terminate session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC6N- S2260:96 ACK(CLOSE REMOTE FILE) RECEIVED WITH PARAMETERS OTHER THAN ERROR REPORT
 - Cause: The input is ACK(CRF) as expected, but some parameter other than Error Report was also received. This is an error.
 - Effect: Terminate session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

SPC60- S2260:100 - INPUT TOO SHORT TO BE ACK(CRF) AS EXPECTED

- Cause: The input data was too short to be ACK(CRF) as expected.
- Effect: Terminate session with no retry recommended.
- Action: If the problem persists, contact your Honeywell representative.

SPC6P- S2260:104 - INPUT NOT ACK WHEN ACK(RRF) EXPECTED

- Cause: The input data is not an ACK when the expected data is ACK(RRF).
- Effect: Terminate session with no retry recommended.
- Action: If the problem persists, contact your Honeywell representative.

SPC6Q- S2260:108 - INPUT IS ACK BUT NOT FOR RRF AS EXPECTED

- Cause: The input data is an ACK but not for RRF as expected.
- Effect: Terminate session with no retry recommended.
- Action: If the problem persists, contact your Honeywell representative.
- SPC6R- S2260:112 ACK(RRF) RECEIVED WITH ERROR REPORT GREATER THAN ZERO
 - Cause: The input data is ACK(RRF) as expected, but with a nonzero error severity or with a non-DSA 62 error code.
 - Effect: Terminate session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC6S- S2260:116 ACK(RFF) RECEIVED WITH PARAMETERS OTHER THAN ERROR REPORT
 - Cause: The input was ACK(RRF) as expected, but some parameter other than error report and/or file state was also included.
 - Effect: Terminate session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

- SPC6T- S2260:120 ACK(RRF) RECEIVED WITH NON-ZERO FILE STATUS -SERIOUS ERROR AT FT-6
 - Cause: The input was ACK(RRF) as expected, but the File State parameter indicated a serious error at the SFT-6.
 - Effect: Terminate session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC6U- S2260:124 ERROR RETURN FROM VSAM WHEN READING A STAGING FILE RECORD BEFORE DELETE
 - Cause: An error was reported by VSAM I/O routines when reading a staging file record prior to a DELETE operation.
 - Effect: Terminate session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC6V- S2260:128 ERROR RETURN FROM VSAM WHEN DELETING A STAGING FILE RECORD
 - Cause: An error was reported by VSAM I/O routines when deleting a staging file record.
 - Effect: Terminate session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC6W- S2260:132 INPUT DATA TOO SHORT TO BE ACK(SDT) AS EXPECTED - PROTOCOL ERROR
 - Cause: The input data is too short to be the expected ACK(SDT).
 - Effect: Terminate session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

- SPC6X- S2260:136 INPUT DATA IS NOT ACK WHEN ACK(SDT) EXPECTED - PROTOCOL ERROR
 - Cause: The input data is not an ACK when the expected data is ACK(SDT).
 - Effect: Terminate session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC6Y- S2260:140 INPUT DATA IS ACK BUT NOT ACK(SDT) AS EXPECTED - PROTOCOL ERROR
 - Cause: The input data is an ACK but not for SDT as expected.
 - Effect: Terminate session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC6Z- S2260:144 ACK(SDT) RECEIVED BUT WITH A ERROR REPORT SEVERITY GREATER THAN ZERO
 - Cause: The input data is ACK(SDT) as expected but with a nonzero error severity or with a non-DSA 62 error code.
 - Effect: Terminate session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC61- S2260:08 VTAM REPORTED ERROR WHEN ACK(SDT) EXPECTED
 - Cause: Error was reported on a RECEIVE operation when ACK(SDT) was expected.
 - Effect: Follow the error option specified.
 - Action: If the problem persists, contact your Honeywell representative.
- SPC62- S2260:12 VTAM REPORTED ERROR WHEN SENDING EDT
 - Cause: An error was reported on a SEND operation when EDT was being sent.
 - Effect: Follow the error option specified.
 - Action: If the problem persists, contact your Honeywell representative.

SPC63- S2260:16 - VTAM REPORTED ERROR WHEN ACK(EDT) EXPECTED

- Cause: An error was reported on a RECEIVE operation when ACK(EDT) was expected.
- Effect: Follow the error option specified.
- Action: If the problem persists, contact your Honeywell representative.

SPC64- S2260:20 - DATA RECEIVED IS TOO SHORT TO BE ACK(EDT)

- Cause: The input data is too short to be the expected ACK(EDT).
- Effect: Terminate the session with no retry recommended.
- Action: If the problem persists, contact your Honeywell representative.
- SPC65- S2260:24 DATA RECEIVED IS NOT ACK WHEN ACK(EDT) EXPECTED
 - Cause: The input data is not an ACK when the expected data is ACK(EDT)
 - Effect: Terminate the session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

SPC66- S2260:28 - INPUT IS ACK NOT FOR EDT AS EXPECTED

- Cause: The input data is an ACK but not for EDT as expected.
- Effect: Terminate the session with no retry recommended.
- Action: If the problem persists, contact your Honeywell representative.
- SPC67- S2260:32 ACK(EDT) WITH ERROR REPORT SEVERITY GREATER THAN ZERO RECEIVED
 - Cause: The input data is ACK(EDT) as expected, but with a nonzero error severity or with a non-DSA 62 error code.
 - Effect: Terminate the session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

SPC68- S2260:36 - ACK(EDT): TCC MISSING - PROTOCOL ERROR

- Cause: The input data is ACK(EDT) as expected, but the Server's version of the TCC is missing.
- Effect: Terminate the session with no retry recommended.
- Action: If the problem persists, contact your Honeywell representative.
- SPC69- S2260:40 ACK(EDT) RECEIVED WITH INVALID LENGTH TOO LONG OR SHORT FOR JUST TCC
 - Cause: The input data is ACK(EDT) as expected, but the data length is too long or too shot to contain just the TCC.
 - Effect: Terminate the session with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPDCO- S2330:148 ACK(DRF) RECEIVED WITH CDI SET CDI SHOULD BE OFF
 - Cause: The ACK(DDF) Request Unit was received with the CDI set. The CDI should not be set because DRF or ACK(ARF) is expected next.
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPDC1- S2330:152 VTAM REPORTED ERROR ON RECEIVE OF RU AFTER ACK(DRF)
 - Cause: Error reported by VTAM I/O routines on a Receive operation following a DSA 62 ACK(DRF). Either DRF or ACK(ARF) should have followed.
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

SPDC3- S2330:156 - DRF RECEIVED WITH CDI SET - SHOULD NOT OCCUR - PROTOCOL ERROR

- Cause: The DRF Request Unit was received with CDI set. CDI should not be set because an ACK(ARF) is expected next.
- Effect: Receive operation terminated with no retry recommended.
- Action: If the problem persists, contact your Honeywell representative.
- SPDC4- S2330:160 VTAM REPORTED ERROR ON RECEIVE AFTER DRF RECEIVED
 - Cause: Error reported by VTAM I/O routines on a Receive operation following a DSA 62 DRF.
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPDC5- S2330:164 SFT-6 COULD NOT LOCATE REQUESTED FILE

Cause: SFT-6 cannot locate or use the requested file.

- Effect: Follow the error option specification.
- Action: Correct the User Command Language or create the file at SFT-6.
- SPD10- S2310:04 OPEN PHYSICAL STAGING FILE FAILED DDNAME/ PASSWORD FAILURE OR DD CARD MISSING
 - Cause: The OPEN of the staging file failed.
 - Effect: Receive operation is terminated and the error option is followed.
 - Action: Correct the JCL and/or the User Command Language statements.

- SPD20- S2320:04 LOGICAL STAGING FILE HEADER RECORD EXISTS WHEN IT SHOULD NOT - OLD DATA NOT UNSTAGED??
 - Cause: The staging file header record exists when it should not.
 - Effect: The Receive operation is terminated without retry.
 - Action: Erase the logical staging file before reusing NAME/SOURCE.
- SPD21- S2320:08 LOGICAL STAGING FILE HEADER RECORD EXISTS AND NOT MARKED IN PROGRESS - OLD DATA???
 - Cause: The staging file header record exists but is not marked "IN PROGRESS". This should not occur.
 - Effect: The Receive operation is terminated without retry.
 - Action: Erase the logical staging file before reusing NAME/SOURCE.
- SPD22- S2320:12 TRANSMISSION CONTROL FILE RECORD COUNT SMALLER THAN SF HEADER - FILE MISMATCH OF SOME KIND??
 - Cause: During a Receive Restart, the information in the transmission status file and the staging file appear to disagree. This should not occur. It indicates a probable mismatch between the transmission status file and the staging file currently in use and those previously in use.
 - Effect: The Receive operation is terminated without retry.
 - Action: Erase the logical staging file before reusing NAME/SOURCE.
- SPD23- S2320:16 DATA RECORDS EXIST IN LOGICAL STAGING FILE WHEN SF HEADER ONLY SHOULD EXIST
 - Cause: During a Receive Restart, the staging file contained data as well as a header. This should not occur. It indicates a probable mismatch between the transmission status file and the staging file currently in use and those previously in use.
 - Effect: The Receive operation is terminated without retry.
 - Action: Erase the logical staging file before reusing NAME/SOURCE.

- SPD24- S2320:20 LOGICAL STAGING FILE HEADER MISSING WHEN IT SHOULD EXIST FROM PREVIOUS ATTEMPT
 - Cause: During a Receive Restart, the staging file header is missing when it should exist. This indicates a probable mismatch between the transmission status file and the staging file currently in use and those previously in use.
 - Effect: The Receive operation is terminated without retry.
 - Action: Erase the logical staging file before reusing NAME/SOURCE.
- SPD25- S2320:24 VSAM I-O ERROR READING LOGICAL STAGING FILE HEADER RECORD
 - Cause: Error reported by VSAM I/O routines when attempting to read a staging file header. This is not a "NOT FOUND" error.
 - Effect: The Receive operation is terminated without retry.
 - Action: Erase the logical staging file before reusing NAME/SOURCE.
- SPD26- S2320:28 VSAM I-O ERROR OR RECORD NOT FOUND WHEN ATTEMPTING TO READ DATA RECORD IN SF POINTED TO BY TSF
 - Cause: Error reported by VSAM I/O routines when attempting to read the data record last sent by the SFT-6 system. Note that this record (pointed at by the transmission status file record) was successfully written earlier (otherwise, the transmission status file would not point to it).
 - Effect: The Receive operation is terminated without retry.
 - Action: Erase the logical staging file before reusing NAME/SOURCE.
- SPD27- S2320:32 VSAM I-O ERROR SCANNING FOR LAST DATA RECORD IN LOGICAL STAGING FILE
 - Cause: Error reported by VSAM I/O routines when attempting to find the last data record that was actually written to the disk. This is not an "END-OF-FILE" or "NOT FOUND" error.
 - Effect: The Receive operation is terminated without retry.
 - Action: Erase the logical staging file before reusing NAME/SOURCE.
- SPD28- S2320:36 VSAM I-O ERROR WHEN ADDING A NEW STAGING FILE HEADER
 - Cause: Error reported by VSAM I/O routines when attempting to add a new staging file header record to the disk. See the associated "PRVOP" error message for details.
 - Effect: The Receive operation is terminated without retry.
 - Action: Erase the logical staging file before reusing NAME/SOURCE.
- SPD3A- S2230:44 ERROR UPDATING STAGING FILE HEADER WITH DRF PARAMETERS JUST RECEIVED
 - Cause: An error was reported by VSAM I/O routines when a staging file header update was attempted.
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD3B- S2230:48 INPUT RECEIVED AFTER ACK(DRF)/DRF IS TOO SHORT FOR ACK(ARF)
 - Cause: The input is too short to be an ACK when ACK(ARF) is expected.
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD3C- S2230:52 INPUT RECEIVED AFTER ACK(ARF)/DRF IS NOT AN ACK, ACK(ARF) EXPECTED PROTOCOL ERROR
 - Cause: The input is not an ACK when ACK(ARF) is expected.
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

- SPD3D- S2330:56 INPUT RECEIVED AFTER ACK(DRF)/DRF IS AN ACK BUT NOT FOR ARF - PROTOCOL ERROR
 - Cause: ACK received as expected but not ACK(ARF) as required.
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD3E- S2330:60 ACK(ARF) RECEIVED WITH ERROR REPORT SEVERITY GREATER THAN ZERO
 - Cause: ACK received with error severity greater than zero or with a non-DSA 62 error code.
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD3F- S2330:64 ACK(ARF) RECEIVED WITH PARAMETERS OTHER THAN ERROR REPORT
 - Cause: ACK received contains unsupported parameter type(s).
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD3G- S2330:68 ACK(ARF) RECEIVED WITHOUT CHANGE DIRECTION INDICATOR - PROTOCOL ERROR
 - Cause: ACK(ARF) was received without the CDI set. This should not occur.
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

SPD3H- S2330:72 - VTAM ERROR REPORT ON SEND ORF

- Cause: Error reported by VTAM I/O routines on a Send operation: DSA 62 ORF.
- Effect: Receive operation terminated with retry recommended.
- Action: If the problem persists, contact your Honeywell representative.
- SPD3I- S2330:76 VTAM ERROR REPORT ON RECEIVE ACK(ORF)
 - Cause: Error reported by VTAM I/O routines on a Receive operation following a DSA 62 ORF sent.
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD3J- S2330:80 INPUT RECEIVED IS TOO SHORT TO BE ACK(ORF) PROTOCOL ERROR
 - Cause: The input is too short to be an ACK when ACK(ORF) is expected.
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD3K- S2330:84 INPUT RECEIVED IS NOT AN ACK WHEN ACK(ORF) EXPECTED - PROTOCOL ERROR
 - Cause: The input is not an ACK when ACK(ORF) is expected.
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD3L- S2330:88 INPUT RECEIVED IS AN ACK BUT NOT FOR ORF) AS EXPECTED - PROTOCOL ERROR
 - Cause: ACK was received but not for ORF as is required.
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

- SPD3M- S2330:92 ACK(ORF) RECEIVED WITH ERROR REPORT SEVERITY GREATER THAN ZERO
 - Cause: ACK received with error severity greater than zero or with a non-DSA 62 error code.
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD3N- S2330:96 ACK(ORF) RECEIVED WITH INVALID PRESENTATION/ CHECKPOINT MARK DATA - PROTOCOL ERROR
 - Cause: The ACK(ORF) contained invalid presentation or checkpoint mark data (anything different from what is sent in ORF is invalid).
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD30- S2330:100 ERROR POSITIONING STAGING FILE BEFORE SENDING POSITION REMOTE FILE
 - Cause: Error reported by VSAM I/O routines when positioning the staging file just prior to a Send operation.
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD3P- S2330:104 VTAM REPORTED ERROR SENDING POSITION REMOTE FILE
 - Cause: Error reported by VTAM I/O routines on a Send operation: DSA 62 PRF.
 - Effect: Receive operation terminated with retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

SPD3Q- S2330:108 - VTAM REPORTED ERROR RECEIVING ACK(PRF)

- Cause: Error reported by VTAM I/O routines on a Receive operation following a DSA 62 PRF sent.
- Effect: Receive operation terminated with no retry recommended.
- Action: If the problem persists, contact your Honeywell representative.
- SPD3R- S2330:112 DATA RECEIVED IS TOO SHORT TO BE ACK(PRF) AS EXPECTED
 - Cause: The input is too short to be an ACK when ACK(PRF) is expected.
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD3S- S2330:116 DATA RECEIVED IS NOT AN ACK ACK(PRF) EXPECTED
 - Cause: The input is not an ACK when ACK(PRF) is expected.
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD3T- S2330:120 DATA RECEIVED WAS ACK BUT NOT FOR POSITION REMOTE FILE AS EXPECTED - PROTOCOL ERROR
 - Cause: ACK received but not for PRF as expected.
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

- SPD3U- S2330:124 DATA RECEIVED WAS ACK(PRF) WITH ERROR REPORT SEVERITY GREATER THAN ZERO
 - Cause: ACK received with error severity greater than zero or with a non-DSA 62 error code.
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD3V- S2330:128 DATA RECEIVED WAS ACK(PRF) WITH RESTART RANK MISSING - PROTOCOL ERROR
 - Cause: ACK received does not contain Restart Rank as expected or anything other than Error Report.
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD3W- S2330:132 DATA RECEIVED WAS ACK(PRF) WITH PARAMETERS OTHER THAN RESTART RANK - PROTOCOL ERROR
 - Cause: ACK received contains unsupported parameter types but does not contain Restart Rank.
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD3X- S2330:136 DATA RECEIVED WAS ACK(PRF) WITH RESTART RANK HIGHER THAN SERVERS SUGGESTED VALUE - ERROR
 - Cause: ACK received contains Restart Rank higher than the suggested value -- an error.
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

SPD3Y- S2330:140 - VTAM REPORTED ERROR ON SEND SDT WITH CDI SET

- Cause: Error reported by VTAM I/O routines on a Send operation: DSA 62 SDT with CDI set.
- Effect: Receive operation terminated with retry recommended.
- Action: If the problem persists, contact your Honeywell representative.

SPD3Z- S2330:144 - VTAM REPORTED ERROR ON SEND DRF

- Cause: Error reported by VTAM I/O routines on a Send operation: DSA 62 DRF.
- Effect: Receive operation terminated with retry recommended.
- Action: If the problem persists, contact your Honeywell representative.
- SPD30- S2330:04 VTAM ERROR RETURN SENDING ASSIGN REMOTE FILE
 - Cause: Error reported by VTAM I/O routines on a Send operation: DSA 62 ARF.
 - Effect: Receive operation terminated with retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD31- S2330:08 VTAM ERROR RETURN RECEIVING ACK(ARF)
 - Cause: Error reported by VTAM I/O routines on a Receive operation following a DSA 62 ARF sent.
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD32- S2330:12 INPUT IS TOO SHORT TO BE EITHER ACK(ARF) OR ACK(DRF) - PROTOCOL ERROR
 - Cause: The input is too short to be an ACK when ACK(ARF) or ACK(DRF) is expected.
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

- SPD33- S2330:16 INPUT IS NOT ACK WHEN EITHER ACK(ARF) OR ACK(DRF) EXPECTED - PROTOCOL ERROR
 - Cause: The input is not an ACK when ACK(ARF) or ACK(DRF) is expected.
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD35- S2330:24 ACK(DRF) RECEIVED WITH ERROR REPORT SEVERITY GREATER THAN ZERO
 - Cause: ACK received with error severity greater than zero or with a non-DSA 62 error code.
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD36- S2330:28 ACK(DRF) RECEIVED WITH PARAMETERS OTHER THAN ERROR REPORT - PROTOCOL ERROR
 - Cause: The ACK received contains unsupported parameter type(s).
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD37- S2330:32 INPUT RECEIVED AFTER ACK(DRF) IS NOT A DRF OR AN ACK - PROTOCOL ERROR
 - Cause: The input is neither DRF nor ACK when DRF or ACK(ARF) is expected.
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

- SPD38- S2330:36 INPUT RECEIVED AFTER ACK(DRF) IS TOO SHORT FOR DRF OR AN ACK - PROTOCOL ERROR
 - Cause: The input is too short to be an ACK when ACK(ARF) or DRF is expected.
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD39- S2330:40 INPUT RECEIVED AFTER ACK(DRF) IS NOT A DRF OR AN ACK - PROTOCOL ERROR
 - Cause: The input is neither DRF or ACK when only DRF and ACK(ARF) are acceptable.
 - Effect: Receive operation terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD40- S2331:04 DRF DATA LENGTH IS LESS THAN 3 PROTOCOL ERROR
 - Cause: The DRF data length is less than three. This is a protocol error.
 - Effect: Receive operation is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD41- S2331:08 PARM LENGTH FIELD IS TWO BYTES LONG NOT CURRENTLY SUPPORTED
 - Cause: The Parameter Length field is two bytes long; this is not supported.
 - Effect: Receive operation is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

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- SPD42- S2331:12 PARM LENGTH TOO LONG FOR AMOUNT OF DATA RECEIVED
 - Cause: The Parameter Length is too long to fit in the rest of the data RU.
 - Effect: Receive operation is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD43- S2331:16 PARM TYPE NOT SUPPORTED PROTOCOL ERROR
 - Cause: The parameter type code was not found in the internal table; see message SPD40 -- S2331.
 - Effect: Receive operation is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD44- S2331:20 PARM LENGTH SHORTER THAN ALLOWED MINIMUM
 - Cause: The parameter length for the data type is shorter than the allowed minimum.
 - Effect: Receive operation is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD45- S2331:24 PARM LENGTH LONGER THAN ALLOWED MAXIMUM
 - Cause: The parameter length for the data type is longer than the allowed maximum.
 - Effect: Receive operation is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

- SPD5A S2340:44 BLOCKED DATA RECORD FROM SFT-6 CONTAINS INVALID INFORMATION
 - Cause: A blocked data record received from the DPS 6 was invalid. The length of the logical record was specified as zero.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD5B- S2340:48 BLOCKED DATA RECORD FROM SFT-6 CONTAINS INVALID INFORMATION
 - Cause: A blocked data record received from the DPS 6 was invalid. The length of the data portion of the record was too short (it should consist of at least a two-character length field and a one-character data field).
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD5C- S2340:52 BLOCKED DATA RECORD FROM SFT-6 CONTAINS INVALID INFORMATION
 - Cause: A blocked data record received from the DPS 6 was invalid. The length of the data portion of the record was too long to be contained in the current request unit.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD50- S2340:04 FT-L6 REQUESTED SHUTDOWN
 - Cause: The DPS 6 requested a Shutdown while sending a file.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

- SPD51- S2340:08 INPUT DATA TYPE IS NOT RECOGNIZED PROTOCOL ERROR
 - Cause: The input data type is not a recognizable type.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD52- S2340:12 VTAM ERROR REPORT DATA OR EDT EXPECTED
 - Cause: This is an error return from the FTVRECV macro; data or EDT was expected.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD53- S2340:16 VTAM ERROR REPORT SEND SIGNAL REQUESTING SHUTDOWN AFTER ERROR FAILED
 - Cause: An error occurred sending a Signal requesting shutdown.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD54- S2340:20 VSAM ERROR RETURN WRITING DATA INTO STAGING FILE
 - Cause: An error occurred writing a data record to the staging file.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD55- S2340:24 VSAM ERROR RETURN CHECKPOINTING DATA IN STAGING FILE
 - Cause: VSAM I/O returned an error on the "FTVFORCE" macro (VSAM "ENDREQ" macro).
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

- SPD56- S2340:28 VSAM ERROR RETURN UPDATING TSF STATUS RECORD FOR THIS SESSION
 - Cause: VSAM I/O error updating the transmission status file.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD57- S2340:32 VTAM ERROR RETURN SENDING CHECKPOINT MARK RESPONSE
 - Cause: The FTVSEND macro failed when attempting to send a Checkpoint Mark response.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD58- S2340:36 CHANGE DIRECTION INDICATOR ON DATA RECORD RECEIVED - PROTOCOL ERROR
 - Cause: An SNA CDI was received on an RU other than EDT; this is a protocol error.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD59- SFT-6 WILL BE NOTIFIED/TERMINATE FROM MAINLINE
 - Cause: Operator requested that the session or job terminate immediately.
 - Effect: The SFT-6 system will be requested to stop sending data. When data transfer terminates, the session will be terminated (with retry recommended).
 - Action: None. If job termination is not in progress, the session will be retried later.
- SPD6A- S2350:44 ERROR RETURN ON CLOSE PHYSICAL STAGING FILE
 - Cause: An error occurred on the (physical) close of the staging file.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

SPD6B- S2350:48 - VTAM ERROR REPORT SENDING CRF

- Cause: An error was returned from the FTVSEND macro Send CRF.
- Effect: The session is terminated and the error option is followed.
- Action: If the problem persists, contact your Honeywell representative.

SPD6C- S2350:52 - VTAM ERROR REPORT RECEIVING ACK(CRF)

- Cause: An error was returned from the FTVRECV macro: ACK(CRF) is expected.
- Effect: The session is terminated and the error option is followed.
- Action: If the problem persists, contact your Honeywell representative.

SPD6D- S2350:56 - VTAM ERROR REPORT SENDING RRF

- Cause: An error was returned from the FTVRECV macro Send RRF.
- Effect: The session is terminated and the error option is followed.
- Action: If the problem persists, contact your Honeywell representative.

SPD6E- S2350:60 - VTAM ERROR REPORT RECEIVING ACK(RRF)

- Cause: An error was returned from the FTVRECV macro: ACK(RRF) is expected.
- Effect: The session is terminated and the error option is followed.
- Action: If the problem persists, contact your Honeywell representative.

SPD6F- S2350:64 - INPUT TOO SHORT TO BE ACK(CRF) AS EXPECTED

- Cause: A DSA 62 HDR error occurred on input; ACK(CRF) is expected.
- Effect: The session is terminated with no retry recommended.
- Action: If the problem persists, contact your Honeywell representative.

SPD6G- S2350:68 - INPUT IS NOT ACK WHEN ACK(CRF) EXPECTED

Cause: The input is not an ACK when ACK(CRF) is expected.

Effect: The session is terminated with no retry recommended.

Action: If the problem persists, contact your Honeywell representative.

SPD6H- S2350:72 - INPUT IS ACK BUT NOT FOR CRF AS EXPECTED

Cause: The input is an ACK but not ACK(CRF) as expected.

- Effect: The session is terminated with no retry recommended.
- Action: If the problem persists, contact your Honeywell representative.
- SPD6I- S2350:76 INPUT IS ACK(CRF) WITH ERROR REPORT SEVERITY GREATER THAN ZERO
 - Cause: The input is ACK(CRF) as expected but the error report severity is greater than 0.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD6J- S2350:80 INPUT IS ACK(CRF) WITH PARAMETER OTHER THAN ERROR REPORT
 - Cause: The input is ACK(CRF) as expected but parameters other than error report are present.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD6K- S2350:84 INPUT IS TOO SHORT TO BE ACK(RRF) AS EXPECTED
 - Cause: DSA 62 HDR error occurred on input; ACK(RRF) is expected.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

SPD6L- S2350:88 - INPUT IS NOT ACK WHEN ACK(RRF) EXPECTED

- Cause: The input is not an ACK when ACK(RRF) is expected.
- Effect: The session is terminated with no retry recommended.
- Action: If the problem persists, contact your Honeywell representative.

SPD6M- S2350:92 - INPUT IS ACK BUT NOT FOR RRF AS EXPECTED

- Cause: The input is an ACK but not ACK(RRF) as expected.
- Effect: The session is terminated with no retry recommended.
- Action: If the problem persists, contact your Honeywell representative.
- SPD6N- S2350:96 INPUT IS ACK(RRF) BUT CONTAINS ERROR REPORT SEVERITY GREATER THAN ZERO
 - Cause: The input is ACK(RRF) as expected but the error report severity is greater than 0.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD60- S2350:100- INPUT IS ACK(RRF) BUT CONTAINS PARAMETERS OTHER THAN ERROR REPORT
 - Cause: The input is ACK(RRF) as expected but parameters other than error report are present.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD6P- 52350:104- INPUT IS ACK(RRF) BUT CONTAINS NON-ZERO FILE STATUS
 - Cause: The input is ACK(RRF) as expected but it contains a nonzero file status.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

- SPD60- S2350:04 ERROR READING STAGING FILE HEADER FOR UPDATE
 - Cause: An error occurred reading the staging file header.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD61- S2350:08 ERROR UPDATING STAGING FILE HEADER AT END OF RECEIVE OPERATION
 - Cause: An error occurred updating the staging file header.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD62- S2350:12 VTAM ERROR RETURN SENDING ACK(EDT)/NO CDI
 - Cause: An error was returned from the FTVSEND macro sending an ACK(EDT) with no CDI.
 - Effect: The session is terminated and the error option is followed.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD63- S2350:16 VTAM ERROR RETURN SENDING ACK(EDT) WITH CDI
 - Cause: An error was returned from the FTVSEND macro sending an ACK(EDT) with CDI.
 - Effect: The session is terminated and the error option is followed.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD64- S2350:20 VTAM ERROR RETURN RECEIVING ACK(SDT)
 - Cause: An error was returned from the FTVRECV macro; ACK(SDT) was expected.
 - Effect: The session is terminated and the error option is followed.
 - Action: If the problem persists, contact your Honeywell representative.

- SPD65- S2350:24 INPUT TOO SHORT TO BE ACK(CRF) AS EXPECTED PROTOCOL ERROR
 - Cause: DSA 62 HDR error occurred on input; ACK(CRF) was expected.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD66- S2350:28 INPUT NOT ACK WHEN ACK(CRF) EXPECTED PROTOCOL ERROR
 - Cause: The input is not an ACK when ACK(CRF) is expected.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD67- S2350:32 INPUT IS ACK BUT NOT FOR CLOSE REMOTE FILE PROTOCOL ERROR
 - Cause: The input is an ACK but not ACK(CRF) as expected.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD68- S2350:36 INPUT IS ACK(CRF) AS EXPECTED BUT ERROR REPORT SEVERITY IS GREATER THAN ZERO
 - Cause: The input is ACK(CRF) as expected, but the error report severity is greater than 0.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPD69- S2350:40 INPUT IS ACK(CRF) AS EXPECTED BUT CONTAINS PARAMETERS OTHER THAN ERROR REPORT
 - Cause: The input is ACK(CRF) as expected, but it contains parameters other than error report.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

SPEOA- S2400:44 -FILE TO DELETE WAS NOT FOUND

- Cause: The reply to Delete indicated that the file to be deleted did not exist.
- Effect: Follow the error option specified.
- Action: If the problem persists, contact your Honeywell representative.

SPE00- S2400:04 - NO COMMUNICATIONS BUFFER AVAILABLE

- Cause: No communications buffer is available.
- Effect: The session is terminated with retry recommended.
- Action: Increase the memory available via the REGION parameter on the EXECUTE statement or decrease the maximum number of tasks allowed.
- SPE01- S2400:08 ERROR RETURN FROM VTAM WHEN ATTEMPTING TO SEND DELETE
 - Cause: Error return from VTAM when trying to send Delete.
 - Effect: The session is terminated and the error option is followed.
 - Action: If the problem persists, contact your Honeywell representative.
- SPE02- S2400:12 ERROR RETURN FROM VTAM WHEN ATTEMPTING TO RECEIVE REPLY TO DELETE
 - Cause: There was an error return from VTAM when attempting to receive a reply to Delete.
 - Effect: The session is terminated and the error option is followed.
 - Action: If the problem persists, contact your Honeywell representative.
- SPE03- S2400:16 INPUT TOO SHORT TO BE REPLY TO DELETE
 - Cause: The input is too short to be the reply to Delete as expected.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

- SPE04- S2400:20 INPUT IS NOT A REPLY WHEN REPLY EXPECTED FOR DELETE
 - Cause: The input is not a reply when a reply is expected for Delete.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

SPE05- S2400:24 -INPUT IS A REPLY BUT NOT FOR DELETE

Cause: The input is a reply but not for Delete.

- Effect: The session is terminated with no retry recommended.
- Action: If the problem persists, contact your Honeywell representative.

SPE06- S2400:28 -REPLY CONTAINS NON-ZERO ERROR REPORT

- Cause: The reply indicated a nonzero error severity for Delete.
- Effect: The session is terminated with no retry recommended.
- Action: If the problem persists, contact your Honeywell representative.
- SPE07- S2400:32 -REPLY CONTAINS PARAMETER OTHER THAN ERROR REPORT
 - Cause: The reply contained a parameter other than error report.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.
- SPE08- S2400:36 -REPLY DID NOT CARRY SNA CHANGE DIRECTION INDICATOR AS EXPECTED
 - Cause: The SNA CDI is missing from the reply to Delete.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

SPE09- S2400:40 - UPDATE TSF RECORD FAILED

- Cause: The update of the transmission status file record for this session failed.
- Effect: The session is terminated with no retry recommended.
- Action: If the problem persists, contact your Honeywell representative.
- SPF0A- S2500:44 -FILE TO RENAME WAS NOT FOUND
 - Cause: The reply to Rename indicated that the file to be renamed did not exist.
 - Effect: Follow the error option specified.
 - Action: If the problem persists, contact your Honeywell representative.
- SPF00- S2500:04 NO COMMUNICATIONS BUFFER AVAILABLE
 - Cause: No communications buffer is available.
 - Effect: The session is terminated with retry recommended.
 - Action: Increase the memory available via the REGION parameter on the EXECUTE statement or decrease the maximum number of tasks allowed.
- SPF01- S2500:08 ERROR RETURN FROM VTAM WHEN ATTEMPTING TO SEND RENAME
 - Cause: Error return from VTAM when trying to send Rename.
 - Effect: The session is terminated and the error option is followed.
 - Action: If the problem persists, contact your Honeywell representative.
- SPF02- S2500:12 ERROR RETURN FROM VTAM WHEN ATTEMPTING TO RECEIVE REPLY TO RENAME
 - Cause: There was an error return from VTAM when attempting to receive a reply to Rename.
 - Effect: The session is terminated and the error option is followed.
 - Action: If the problem persists, contact your Honeywell representative.

SPF03- S2500:16 - INPUT TOO SHORT TO BE REPLY TO RENAME

- Cause: The input is too short to be the reply to Rename as expected.
- Effect: The session is terminated with no retry recommended.
- Action: If the problem persists, contact your Honeywell representative.
- SPF04- S2500:20 INPUT IS NOT A REPLY WHEN REPLY EXPECTED FOR RENAME
 - Cause: The input is not a reply when a reply is expected for Rename.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

SPF05- S2500:24 -INPUT IS A REPLY BUT NOT FOR RENAME

- Cause: The input is a reply but not for Rename.
- Effect: The session is terminated with no retry recommended.
- Action: If the problem persists, contact your Honeywell representative.

SPF06- S2500:28 -REPLY CONTAINS NON-ZERO ERROR REPORT

- Cause: The reply indicated a nonzero error severity for Rename.
- Effect: The session is terminated with no retry recommended.
- Action: If the problem persists, contact your Honeywell representative.
- SPF07- S2500:32 -REPLY CONTAINS PARAMETER OTHER THAN ERROR REPORT
 - Cause: The reply contained a parameter other than Error Report.
 - Effect: The session is terminated with no retry recommended.
 - Action: If the problem persists, contact your Honeywell representative.

SPF08- S2500:36 -REPLY DID NOT CARRY SNA CHANGE DIRECTION INDICATOR AS EXPECTED

Cause: The SNA CDI is missing from the reply to Rename.

Effect: The session is terminated with no retry recommended.

Action: If the problem persists, contact your Honeywell representative.

SPF09- S2500:40 - UPDATE TSF RECORD FAILED

- Cause: The update of the transmission status file record for this session failed.
- Effect: The session is terminated with no retry recommended.
- Action: If the problem persists, contact your Honeywell representative.
- SPG00- S2600:04 NO COMMUNICATIONS BUFFER AVAILABLE
 - Cause: No communications buffer of the required size is available.
 - Effect: The session is terminated with retry recommended.
 - Action: Increase the memory available via the REGION parameter on the EXECUTE statement or decrease the maximum number of tasks allowed.
- SPG01- S2600:08 ERROR RETURN FROM VTAM WHEN ATTEMPTING TO SEND EXECUTE
 - Cause: Error return from VTAM I/O routines when trying to send an Execute Request.
 - Effect: Follow the error option specified.
 - Action: If the problem persists, contact your Honeywell representative.
- SPH00- OPERATOR SESSION TERMINATION: ROUTINE %%%%%%% : %X%X%X%X
 - Cause: Session with operator has been or will be terminated.
 - Effect: As indicated in Table B-5.
 - Action: As indicated in Table B-5.

Table B-5. Code Meanings for SPH00

Routine	Code	Meaning
S2700	0000	Signoff completion displayed at terminal
S2700	xxxx	Update transmission status file record failed
S3100	0004	Return code from FTGTMEM when attempting to acquire an interactive work area. Session will be terminated.
S3200	xxxx	Should never occur
S3300	xxxx	Should never occur
S3400	xxxx	Should never occur
S3500	xxxx	Should never occur
S3 90 0	0004	Return code from FTFRBUF when attempting to release a buffer. Session will be terminated.

- - Cause: Operation indicated could not be completed. The exact nature of the failure is indicated by the register contents printed.
 - Effect: The session with the logical unit cannot be started. The session will be placed in the complete queue and not re-tried automatically.
 - Action: Save job output and contact your Honeywell representative.
- - Cause: VTAM indicated that the requested operation could not be attempted. This is usually a result of VTAM being halted with the QUICK (or immediate) option.
 - Effect: If session was established, it is now terminated. The session will be retried later.
 - Action: If VTAM was being shut down, retry. Otherwise, collect job output and contact your Honeywell representative.

- SPIEC- C8100: %%%%%%%%%%%%%% FAILED. R15: %X%X%X%X RTNCD/FDBK2: %X%X%X%X / %X%X%X%X
 - Cause: The requested operation completed with an error. The exact cause is indicated by the register contents and other data printed in the message.
 - Effect: The operation will be retried later.
 - Action: Contact your Honeywell representative.
- - Cause: The requested operation completed with an error. The exact cause is indicated by the register contents and other data printed in the message.
 - Effect: The operation will be retried later.
 - Action: Contact your Honeywell representative.
- - Cause: An event other than the normally expected one has been detected. Another message (just before or after this one) will indicate what condition. Examples include: Timeout waiting for STF-6 response, an operator session termination request, or a VTAM shutdown in progress.
 - Effect: The session will be terminated. The session may or may not be retried based on the associated message.
 - Action: No action required for this message. See associated message for additional information.
- - Cause: Session initiation failed for the indicated reason.
 - Effect: Session will be placed on retry queue.
 - Action: None.

- SPIEG- C8100: SIMULATE LOGON ACCEPTED BUT SESSION NOT ESTABLISHED - NSEXIT DRIVEN IN PLACE OF LOGON EXIT
 - Cause: VTAM was unable to establish the requested session after accepting the simulate logon.
 - Effect: The session is placed on the retry queue.
 - Action: Contact your Honeywell representative.
- SPIEH- C8100: SEND ZERO LENGTH RU WITH BEGINNING BRACKET NOT ACCEPTED BY VTAM
 - Cause: An attempt to communicate with an LU-0 has failed. To gain additional information, use the DEBUG=YES option.
 - Effect: Session with LU-0 is terminated. Operator session is placed on HOLD queue.
 - Action: Contact your Honeywell representative.
- SPIEI- C8100: SEND ZERO LENGTH RU WITH BEGINNING BRACKET FAILED
 - Cause: An attempt to communicate with an LU-0 has failed. To gain additional information, use the DEBUG=YES option.
 - Effect: Session with LU-0 is terminated. Operator session is placed on HOLD queue.
 - Action: Contact your Honeywell representative.

SPIEJ- C8100: MODCB / RPL FAILED FOR LU-0

- Cause: An attempt to communicate with an LU-0 has failed. To gain additional information, use the DEBUG=YES option.
- Effect: Session with LU-0 is terminated. Operator session is placed on HOLD queue.
- Action: Contact your Honeywell representative.
- SP20A- C8200:44 EVENT OTHER THAN VTAM PUT COMPLETE RESPONSE RECEIVED - PROTOCOL ERROR
 - Cause: An SNA response has been received when it was not expected.
 - Effect: The session is marked as NO RETRY.
 - Action: If the problem persists, contact your Honeywell representative.

SP20B- C8200:48 - EVENT OTHER THAN VTAM PUT COMPLETE - LOST TERMINAL EXIT ACTIVATED / SESSION DOWN

Cause: The session has been lost.

Effect: The session is marked as RETRY NEEDED.

Action: Investigate reason for loss of session and correct.

SP20C- C8200:52 - EVENT OTHER THAN VTAM PUT COMPLETE - NETWORK SERVICES EXIT ACTIVATED - SESSION NOT UP

Cause: The session has been lost.

Effect: The session is marked as RETRY NEEDED.

- Action: Investigate reason for loss of session and correct.
- SP20D- C8200:56 EVENT OTHER THAN VTAM PUT COMPLETE REQUEST FROM MAINLINE TO TERMINATE IMMEDIATELY
 - Cause: A TERMINATE request has been received form some other part of the SFT-H program. Typically, the operator requested termination or the VTAM TPEND EXIT was activated.
 - Effect: The session is marked as RETRY NEEDED.
 - Action: None.
- SP20E- C8200:60 EVENT OTHER THAN VTAM PUT COMPLETE "DEAD MAN" TIMER EXPIRED - L6 INACTIVE
 - Cause: A significant period of time (about 10 minutes) has passed since any activity was detected on this session.
 - Effect: The session is terminated.
 - Action: If the problem persists, contact your Honeywell representative.
- SP20F- C8200:64 SNA "SIGNAL" RECEIVED INSTEAD OF VTAM SEND COMPLETE: SIGNAL DATA: %X%X%X%X
 - Cause: A SIGNAL request was received while attempting to send data. The SIGNAL data was something other than CHECKPOINT RESPONSE.
 - Effect: The operation requested cannot be performed.
 - Action: If the problem persists, contact your Honeywell representative.

- SP20G- C8200:68 EVENT OTHER THAN VTAM PUT COMPLETE SNA "SIGNAL" RECEIVED = CHECK POINT RESPONSE %X
 - Cause: A SIGNAL request was received while attempting to send data. The SIGNAL data was a CHECKPOINT RESPONSE.
 - Effect: The operation requested cannot be performed.
 - Action: If the problem persists, contact your Honeywell representative.
- SP200- C8200:04 VTAM PUT / ABNORMAL COMPLETION REGS: R15: %X%X%X%X R0: %X%X%X%X
 - Cause: PUT request was not accepted by VTAM.
 - Effect: The session will be terminated and marked for RETRY LATER.
 - Action: If the problem persists, collect documentation and notify HIS.
- SP201- C8200:08 MODCB / RPL FAILED LOGIC ERROR SET RPL TO NORMAL DEFAULT VALUES FOR SEND
 - Cause: Modify RPL failed.
 - Effect: The session is marked as NO RETRY.
 - Action: If the problem persists, contact your Honeywell representative.
- SP202- C8200:12 MODCB / RPL FAILED LOGIC ERROR SET BEGIN AND/OR END BRACKET BITS ON
 - Cause: Modify RPL failed.
 - Effect: The session is marked as NO RETRY.
 - Action: If the problem persists, contact your Honeywell representative.
- SP203- C8200:16 MODCB / RPL FAILED LOGIC ERROR SET CHANGE DIRECTION INDICATOR
 - Cause: Modify RPL failed.
 - Effect: The session is marked as NO RETRY.
 - Action: If the problem persists, contact your Honeywell representative.

SP204- C8200:20 - MODCB / RPL - FAILED - LOGIC ERROR - SET FIRST RU IN CHAIN

Cause: Modify RPL failed.

Effect: The session is marked as NO RETRY.

- Action: If the problem persists, contact your Honeywell representative.
- SP205- C8200:24 MODCB / RPL FAILED LOGIC ERROR SET MIDDLE RU IN CHAIN

Cause: Modify RPL failed.

- Effect: The session is marked as NO RETRY.
- Action: If the problem persists, contact your Honeywell representative.
- SP206- C8200:28 MODCB / RPL FAILED LOGIC ERROR SET LAST RU IN CHAIN

Cause: Modify RPL failed.

Effect: The session is marked as NO RETRY.

- Action: If the problem persists, contact your Honeywell representative.
- SP207- C8200:32 MODCB / RPL FAILED LOGIC ERROR SET ADDRESS AND LENGTH OF DATA TO SEND

Cause: Modify RPL failed.

- Effect: The session is marked as NO RETRY.
- Action: If the problem persists, contact your Honeywell representative.
- SP208- C8200:36 MODCB / RPL FAILED LOGIC ERROR SET SIGNAL REQUEST OUT INFORMATION
 - Cause: Modify RPL failed.
 - Effect: The session is marked as NO RETRY.
 - Action: If the problem persists, contact your Honeywell representative.

- SP209- C8200:40 CHECK FOLLOWING VTAM PUT INDICATED ERROR -R15: %X%X%X%X R0: %X%X%X%X
 - Cause: VTAM indicated an error via the CHECK macro return code following PUT.
 - Effect: The session is marked as NO RETRY.
 - Action: If the problem persists, contact your Honeywell representative.
- SP30A- C8300:44 ERROR RETURN FROM FREE BUFFER REQUEST LOGIC ERROR - SHOULD NEVER OCCUR

Cause: FREE BUFFER request failed.

- Effect: The session is terminated and not marked for retry.
- Action: Contact your Honeywell representative.
- SP30B- C8300:48 ERROR RETURN FROM SHOWCB / RPL / AREA LENGTH AND RECORD LENGTH - SHOULD NEVER OCCUR
 - Cause: The attempt to determine the amount of data received failed.
 - Effect: The session is terminated and not marked for retry.
 - Action: Contact your Honeywell representative.
- SP30C- C8300:52 TIMEOUT WAITING FOR DATA L6 MAY BE INACTIVE
 - Cause: No activity on the session for an extended period of time (10 minutes).
 - Effect: The session is terminated.
 - Action: If the problem persists, contact your Honeywell representative.
- SP30D- C8300:56 WHEN CHECKING FOR RECEIVED DATA, IMMEDIATE TERMINATION REQUEST FROM MAINLINE DETECTED
 - Cause: Termination requested by another part of the SFT-H program.
 - Effect: The session is terminated and marked for retry.
 - Action: None.

SP30E- C8300:60 - NETWORK SERVICES EXIT ACTIVATED - SESSION LOST

Cause: Session lost.

- Effect: The session is terminated and marked for retry.
- Action: If the problem persists, contact your Honeywell representative.
- SP30F- C8300:64 LOST TERMINAL EXIT ACTIVATED SESSION LOST Cause: Session lost.
 - Effect: The session is terminated and marked for retry.
 - Action: If the problem persists, contact your Honeywell representative.
- SP30G- C8300:68 RESPONSE EXIT ACTIVATED PROTOCOL ERROR

Cause: Response received from SFT-6.

- Effect: The session is terminated and not marked for retry.
- Action: If the problem persists, contact your Honeywell representative.
- SP301- C8300:08 VTAM REJECTED RECEIVE REQUEST OTHER THAN TEMPORARY MEMORY NOT AVAILABLE R15: %X%X%X%X R0: %X%X%X%X
 - Cause: VTAM rejected the Receive request for a reason other than storage.
 - Effect: The operation requested cannot be performed.
 - Action: If the problem persists, contact your Honeywell representative.
- SP302- C8300:12 VTAM CHECK FOLLOWING RECEIVE RESULTED IN ERRORS - R15: %X%X%X R0: %X%X%X%X
 - Cause: VTAM CHECK following Receive indicated an error condition.
 - Effect: The operation requested cannot be performed.
 - Action: If the problem persists, contact your Honeywell representative.

- SP303- C8300:16 MEMORY NOT AVAILABLE FOR REST OF CURRENT RU RETRY RECOMMENDED
 - Cause: Memory not available for all of the RU.
 - Effect: The session is terminated and marked for retry later.
 - Action: If the problem persists, allocate more memory or specify a smaller number of tasks.
- SP304- C8300:20 TESTCB/ RPL FAILED LOGIC ERROR SHOULD NEVER OCCUR - R15: %X%X%X% R0: %X%X%X%X
 - Cause: VTAM returned an error indicator when attempting to TESTCB.
 - Effect: The operation requested cannot be performed.
 - Action: If the problem persists, contact your Honeywell representative.
- SP305- C8300:24 TYPE OF DATA RECEIVED WAS NOT FUNCTION MANAGEMENT DATA
 - Cause: VTAM returned input other that FMD. This is invalid for SFT-6.
 - Effect: The session is terminated and not marked for retry.
 - Action: Contact your Honeywell representative.
- SP306- C8300:28 FMD CHAINING ERROR THE RU RECEIVED WAS NOT FIRST IN CHAIN AS EXPECTED
 - Cause: VTAM returned an FMD RU that was not marked FIRST IN CHAIN.
 - Effect: The session is terminated and not marked for retry.
 - Action: Contact your Honeywell representative.
- 4SP307- C8300:32 FMD CHAINING ERROR THE RU RECEIVED WAS NOT MIDDLE OR LAST IN CHAIN AS EXPECTED
 - Cause: VTAM returned an FMD RU that was marked FIRST IN CHAIN.
 - Effect: The session is terminated and not marked for retry.
 - Action: Contact your Honeywell representative.

- SP308- C8300:36 MEMORY NOT AVAILABLE FOR NEXT RU IN CHAIN RETRY RECOMMENDED
 - Cause: Memory for another RU in the current chain is not available.
 - Effect: The session is terminated and marked for retry.
 - Action: Allocate more memory (via the REGION parameter) or decrease the maximum session limit.
- SP309- C8300:40 MEMORY NOT AVAILABLE FOR BUFFER LARGE ENOUGH FOR ENTIRE RECORD - RETRY RECOMMENDED
 - Cause: Memory not available to combine the RU chain into a record.
 - Effect: The session is terminated and marked for retry.
 - Action: Allocate more memory (via the REGION parameter) or decrease the maximum session limit.
- SP900- C8900:04 SEND SIGNAL PRIOR TO UNBIND: NOT ACCEPTED BY VTAM
 - Cause: When attempting to send an SNA SIGNAL just before UNBIND, VTAM did not accept the request to send the SIGNAL.
 - Effect: The UNBIND will be attempted.
 - Action: If the problem persists, contact your Honeywell representative.

S0000- %X%X%X%X (HEX) TSF RECORDS MARKED INVALID

Cause: Restart mode was specified and the Transmission Status file currently contains this number of records.

Effect: None. Information only.

Action: None.

S0001- LU NOT FOUND / TCF SESSION DEFINED AS LU=

- Cause: The LU specified in a transmission control file session header cannot be found in the resource master file.
- Effect: No transmission file status record for this session or logical unit will be validated (in Restart mode) or created (in Startup or Restart mode).
- Action: Add LU to resource master file or remove session from transmission control file.

S0002- LU NOT FOUND / TCF SESSION POINTED TO GROUP

- Cause: The LU indicated in a group record specified by a session header cannot be found in the resource master file.
- Effect: No transmission file status record for this session or logical unit will be validated (in Restart mode) or created (in Startup or Restart mode).
- Action: Add LU to resource master file or remove session from transmission control file.

S0003- GROUP RECORD NOT FOUND / TCF SESSION POINT TO GR

- Cause: For a session header in the transmission control file, the indicated group record cannot be found in the resource master file.
- Effect: No transmission file status record for this session will be validated (in Restart mode) or created (in Startup or Restart mode).
- Action: Add the group to the resource master file OR remove session from transmission control file.
- S0004- STATUS RECORD CHANGED TO "VERIFIED": OLD STATUS: %%%%%%%%%% : NEW STATUS: %%%%%%%%%%
 - Cause: In Restart mode, an existing transmission status file record is considered valid in the session or logical unit combination in the transmission control file and resource master file are valid.
 - Effect: The transmission file status record for this session is set to the status indicated.

Action: None.

- S0005- STATUS RECORD ADDED TO TRANSMISSION STATUS FILE: OLD STATUS: %%%%%%%%% : NEW STATUS: %%%%%%%%%%
 - Cause: In Restart or Startup mode, a new transmission status file record is created if the session or logical unit combination in the transmission control file and resource master file are valid.
 - Effect: The transmission file status record for this session is set to the status indicated.
 - Action: None.
- S0021- RMF RECORD RETRIEVED WAS NOT LU AS EXPECTED
 - Cause: When processing a SESSION/LU = , the record retrieved from the resource master file was not an LU record as needed.
 - Effect: No transmission file status record for this session is added (or validated if in restart mode).
 - Action: Change the transmission control file and/or resource master file to prevent mismatch.
- S0022- RMF RECORD RETRIEVED WAS NOT GR AS EXPECTED
 - Cause: When processing a SESSION/GR = , the record retrieved from the resource master file was not a group record as needed.
 - Effect: No transmission file status record for this session is added (or validated if in Restart mode).
 - Action: Change the transmission control file and/or resource master file to prevent mismatch.
- S0023- RMF GROUP RECORD POINTS TO RECORD THAT IS NOT LU
 - Cause: When processing a SESSION/GR = , the group record was successfully retrieved but an LU record pointed to by the group record is not an LU.
 - Effect: No transmission file status record for this session or logical unit is added (or validated if in Restart mode).
 - Action: Change the transmission control file and/or resource master file to prevent mismatch.

SLART- ALL ACTIVE SFT-6 SESSIONS ARE RE-TRIES

- Cause: All SFT-6 sessions currently active have failed earlier.
- Effect: None Information only message.
- Action: None.
- SIZAT- NO FT-L6 SESSIONS ARE CURRENTLY ACTIVE
 - Cause: No SNA sessions for File Transfer operations are active.
 - Effect: None Information only message.
 - Action: None.
- S1111- TRANSMISSION CONTROL PROGRAM STARTUP RUNID-%%%%%%%%
 - Cause: The Transmission Control Program has been started with this run ID.
 - Effect: None; this is only information for history file documentation.

Action: None.

- S1112- TRANSMISSION CONTROL PROGRAM RESTART RUNID-88888888
 - Cause: The Transmission Control Program has been restarted with this run ID.
 - Effect: None; this is only information for history file documentation.
 - Action: None.
- S1113- JOB PARAMETER: %%%%%%% HAS BEEN SPECIFIED TWICE
 - Cause: The EXEC JCL statement for the Transmission Control Program has duplicate keywords.
 - Effect: The operator will be notified and Transmission Control Program can be stopped at the operator's discretion. If Transmission Control Program is continued, parameters specified on the EXEC statement will all be used. The second occurrence of any parameter will be ignored.
 - Action: Remove the second occurrence of the keyword before reusing the job stream.
- S1114- JOB PARAMETER: %%%%%%% HAS AN INVALID VALUE OF: %%%%%%%%.
 - Cause: The EXEC JCL statement for the Transmission Control Program has a keyword whose value is not a recognized possibility.
 - Effect: The operator will be notified; the Transmission Control Program can be stopped at the operator's discretion. If the Transmission Control Program is continued, parameters specified on the EXEC statement will all be used except for the parameter with the error which will be ignored.
 - Action: Consult the utility documentation for key values allowed for the keyword before reusing the job stream.
- S1115- JOB PARAMETER:%%%%%% HAS A KEYVALUE THAT IS LONGER THAN ALLOWED.
 - Cause: The EXEC JCL statement for the Transmission Control Program has a keyword whose value is longer than allowed.
 - Effect: The operator will be notified; the Transmission Control Program can be stopped at the operator's discretion. If the Transmission Control Program is continued, parameters specified on the EXEC statement will all be used except for the parameter with the error which will be ignored.
 - Action: Consult the utility documentation for key value lengths allowed for the keyword before reusing the job stream.
- S1116- AN UNRECOGNIZED KEYWORD IS INCLUDED ON THE JCL EXEC CARD.
 - Cause: The EXEC JCL statement for the Transmission Control Program has a keyword that is not recognized.
 - Effect: The operator will be notified; the Transmission Control Program can be stopped at the operator's discretion. If the Transmission Control Program is continued, parameters specified on the EXEC statement prior to the invalid keyword will all be used, but those following the invalid keyword will be ignored.
 - Action: Consult the utility documentation for keywords allowed before reusing the job stream.

S1117- AN INVALID KEYVALUE HAS BEEN FOUND ON THE JOB EXEC CARD.

- Cause: The EXEC JCL statement for the Transmission Control Program has a keyword whose key value is not allowed.
- Effect: The operator will be notified; the Transmission Control Program can be stopped at the operator's discretion. If the Transmission Control Program is continued, parameters specified on the EXEC statement prior to the invalid key value will all be used, but those following the invalid key value will be ignored.
- S1118- A SYNTAX ERROR HAS BEEN FOUND ON THE JOB EXEC CARD.
 - Cause: The EXEC JCL statement for the Transmission Control Program has a syntax error.
 - Effect: The operator will be notified; the Transmission Control Program can be stopped at the operator's discretion. If the Transmission Control Program is continued, parameters specified on the EXEC statement prior to the syntax error will all be used, but those following the syntax error will be ignored.
 - Action: Examine the parameter field on the EXEC statement for errors in syntax before reusing the job stream.
- S1119- THE TCP DEFAULT: %%%%%%% HAS BEEN OVERRIDDEN ON THE EXEC CARD BY A PARM VALUE OF: %%%%%%%%.
 - Cause: The EXEC JCL statement for the Transmission Control Program has a parameter value that will override the existing default for this run of the Transmission Control Program only.
 - Effect: This message is meant for the history file only; it is not an error message and will not halt the Transmission Control Program.

Action: None.

S1400- SESSION SUBTASK TERMINATED ABNORMALLY

- Cause: A subtask, SFT-6, or the interactive interface, has terminated abnormally (that is, with an ABEND).
- Effect: The subtask is no longer available for work. The session being processed is marked as completed with retry not recommended.
- Action: If the problem persists, contact your Honeywell representative.

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S1401- SESSION SUBTASK TERMINATED NORMALLY

Cause: A subtask has terminated as expected.

Effect: When all subtasks have terminated, the Transmission Control Program will terminate.

Action: None.

- S1402 SESSION COMPLETED ALL ACTIONS SUCCESSFULLY NO RETRY
 - Cause: All actions in this session were completed successfully.

Effect: The desired work is complete.

Action: None; information only.

- S1403 SESSION DID NOT COMPLETE ALL ACTIONS MARKED AS RETRY
 - Cause: Not all the actions for the session completed successfully. Possible causes are coding errors or an operator's response to an action awaiting reply.

Effect: The desired work was not done.

Action: Resubmit the session with the "RESTART" option.

S1407 SESSION DID NOT COMPLETE ALL ACTIONS - MARKED AS NO-RETRY

- Cause: Not all the actions for the session completed successfully. Possible causes are a "SKIP" option (coded in job or entered by operator in response to an action awaiting reply) or a protocol error.
- Effect: The desired work was not done.

Action: Examine the history file.

- S1408 SESSION COMPLETED WITH NO-TRANSMISSION MARKED AS NO-RETRY
 - Cause: Session ended abnormally or protocol error.
 - Effect: No session actions were completed.
 - Action: Examine the history file.

S1409 SESSION COMPLETED WITH NO-TRANSMISSION MARKED AS RETRY

Cause: Network or logical unit not active.

Effect: Normally, none. However, it is possible that an action was sent to the DPS 6, executed, but not acknowledged (due to line failure).

Action: Examine the history file.

S1701- ERROR ON MODIFY PARAMETER ONE

- Cause: The operator entered an invalid value for MODIFY parameter one.
- Effect: The input is discarded and the operator is invited to try again.

Action: Type HELP for a list of valid parameters.

S1705- COMMAND NOT RECOGNIZED - PLEASE TRY AGAIN

- Cause: The operator entered an invalid command.
- Effect: The input is discarded and the operator is invited to try again.
- Action: Type HELP for a list of valid verbs.
- S1715- HALT REQUEST ACCEPTED
 - Cause: HALT verb and any parameters were accepted.
 - Effect: Shutdown of the Transmission Control Program begins.
 - Action: None.

S1724- AS REQUESTED, SESSION STARTUP NOW ENABLED

- Cause: The operator command to enable session startup was accepted.
- Effect: Any eligible sessions can now be started if resources are available.
- Action: None.

S1725- AS REQUESTED, SESSION STARTUP NOW INHIBITED

- Cause: The operator command to inhibit session startup was accepted.
- Effect: No new sessions can start. Active sessions will continue running.
- Action: None.
- S1726- AS REQUESTED, EXTERNAL (GTF) TRACE ENABLED
 - Cause: The operator command to enable the external (GTF) trace was accepted.
 - Effect: Trace entries will be added to the external (GTF) file.
 - Action: None.
- S1727- AS REQUESTED, EXTERNAL (GTF) TRACE DISABLED
 - Cause: The operator command to disable the external (GTF) trace was accepted.
 - Effect: No more trace entries will be added to the external (GTF) file.
 - Action: None.
- S1728- LAST PARAMETER ON MODIFY MUST BE EITHER "ON" OR "OFF"
 - Cause: The MODIFY verb, session, or TRACE were correct; the final parameter was invalid.
 - Effect: The input is discarded.
 - Action: The operator must reenter the entire command and all parameters.

S1730 -- S1747 COMMAND PARM PARM ACTION

MODIFY	SESS/TRACE	ON/OFF	SESSIONS/TRACES ON/OFF	
HALT			HALT WHEN CURRENT SESSIONS	COMPLETE
HALT	QUICK		HALT AS SOON AS POSSIBLE	
REPLY	LU-NAME	SKIP	IGNORE ERROR	
REPLY	LU-NAME	RETRY	RETRY FAILING OPERATION	
REPLY	LU-NAME	ABORT	TERMINATE SESSION	
REPLY	LU-NAME		DEFAULT	
DISPLAY	Q/A/R/L		DISPLAY INFORMATION	

- Cause: Help message displayed in response to "HELP" request from operator.
- Effect: Operator information message only.
- Action: None.

- Cause: The operator entered the specified reply to an outstanding WTOR.
- Effect: None; this message documents the operator input only.

- S1762- ERROR OPTION NOT UNDERSTOOD MUST BE "SKIP", "ABORT", OR "RETRY"
 - Cause: For an error option reply, the option is either missing or invalid.
 - Effect: Input discarded.
 - Action: The operator must reenter the entire command and all parameters.
- S1763- LU SPECIFIED IS NOT ACTIVE OR NOT AWAITING REPLY
 - Cause: For an error option reply, the LU specified is either not active or is not expecting an operator reply to the error option message.
 - Effect: Input discarded.
 - Action: The operator must reenter command and parameters.

- S1770-QUEUE Q ACTIVE A REPLY R LU Cause: Display options.
 - Effect: Operator information message only.

Action: None.

- S1771- DISPLAY OPTION: Q OR QUEUE SESSION QUEUES
 Cause: Display options: Help message l.
 Effect: Operator information message only.
 Action: None.
- S1772- DISPLAY OPTION: A OR ACTIVE- ACTIVE SESSIONS

Cause: Display options: Help message 2.

- Effect: Operator information message only.
- Action: None.
- S1773- DISPLAY OPTION: R OR REPLY REPLY PENDING SESSIONS
 - Cause: Display options: Help message 3.
 - Effect: Operator information message only.
 - Action: None.
- S1774- DISPLAY OPTION: L OR LU ACTIVE SESSION W/LU
 - Cause: Display options: Help message 4.
 - Effect: Operator information message only.
 - Action: None.
- S177- TRANSMISSION STATUS FILE RECORD NOT FOUND SHOULD NOT OCCUR
 - Cause: During display operation, a transmission status file record that should exist cannot be found in transmission status file.
 - Effect: Terminate current display operation.
 - Action: Save console log for your Honeywell representative.

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- S1778- TRANSMISSION STATUS FILE READ ERROR OTHER THAN NOT FOUND - SHOULD NOT OCCUR
 - Cause: During display operations, a read for transmission status file record failed.
 - Effect: Terminate current display operation.
 - Action: Save the console log for your Honeywell representative.
- S1779- ERROR RETURN FROM FREE BUFFER ROUTINE ATTEMPTING TO FREE A TSF BUFFER
 - Cause: At the end of a DISPLAY operation, freeing transmission status file buffer failed.
 - Effect: Terminate current display operation.
 - Action: Save the console log for your Honeywell representative.

Cause: Prototype for Display Queue messages.

- Effect: None.
- Action: None.
- S1790- D A: LU GROUP REAL LU SESSION SEQ TYPE STATUS COUNT
 - Cause: Prototype for Display Active.

Effect: None.

Action: None.

S1792- D R: LU GROUP REAL LU SESSION SEQ TYPE STATUS COUNT

Cause: Prototype for Display Replies.

Effect: None.

- S1794- D L: LU GROUP REAL LU SESSION SEQ TYPE STATUS COUNT
 - Cause: Prototype for Display LU.
 - Effect: None.
 - Action: None.
- S1795- D L: LOGICAL UNIT NOT CURRENTLY IN SESSION WITH SFT
 - Cause: Display LU failed because the LU is not currently in session.
 - Effect: None.
 - Action: None.
- - Cause: Display ? Prototype.
 - Effect: None.
 - Action: None.
- - Cause: Transmission Control Program Shutdown mode: Common Work Area information.
 - Effect: None; this is only information for the history file/report.
 - Action: None.
- - Cause: Transmission Control Program Shutdown mode: resource master file.
 - Effect: None; this is only information for the history file/report.
 - Action: None.

- Cause: Transmission Control Program Shutdown mode: history master file.
- Effect: None; this is only information for the history file/report.
- Action: None.

- Cause: Transmission Control Program shutdown mode: message master file.
- Effect: None; this is only information for the history file/report.
- Action: None.

- Cause: Transmission Control Program Shutdown mode: Information about a staging file.
- Effect: None; this is only information for the history file/report.
- Action: None.
- - Cause: Transmission Control Program Shutdown mode: transmission control file.
 - Effect: None; this is only information for the history file/report.
 - Action: None.

- Cause: Transmission Control Program Shutdown mode: transmission status file.
- Effect: None; this is only information for the history file/report.
- Action: None.

S1901- TRANSMISSION CONTROL PROGRAM COMPLETION RUN ID - %%%%%%%%

- Cause: The Transmission Control Program has completed for this ID.
- Effect: None; this is only information for the history file/report.

- S200A- ACTION TYPE INVALID FOR INTERACTIVE SESSION
 - Cause: Action type other than ACTION=OPER encountered on session with interactive characteristics.
 - Effect: The action record is skipped.
 - Action: For interactive devices, only ACTION=OPER should be specified.
- S200B- ACTION TYPE INVALID FOR SFT-6 SESSION
 - Cause: Action type of OPER encountered for SFT-6 session.
 - Effect: The action record is skipped.
 - Action: For SFT-6 sessions, ACTION=OPER should not be specified.
- S200C- ACTION BYPASSED: NOT VALID WITH ALTERNATE DESTINATION
 - Cause: Action type other than SEND or OPER encountered when session is directed to alternate destination.
 - Effect: The action record is skipped.
 - Action: Create a new session to perform required operations when original destination is again available.
- S21SB- SUBSTITUTE LU BEING USED; ORIGINAL LU; %%%%%%%%
 - Cause: An attempt is being made to establish a session with a substitute destination.
 - Effect: Session attempted time is recorded in history file.
 - Action: None.

S2100- SESSION STARTING

- Cause: An attempt is being made to establish a session.
- Effect: The "session attempted time" is recorded in the history file.
- Action: None.
- S2200- DDN=%%%%%%% : STAGING FILE OPENED FOR SEND
 - Cause: The staging file was opened.
 - Effect: None: Information only.
 - Action: None.
- - Cause: This message is written to the history file at the start of processing for a SEND action.
 - Effect: None; this is just for documentation in the history file.
 - Action: None.
- - Cause: This message is written to the history file at the end of processing for a SEND action if no errors occurred.
 - Effect: None; this is just for documentation in the history file.
 - Action: None.
- - Cause: This message is written to the history file at the end of processing for a SEND action if an error occurred.
 - Effect: None; this is just for documentation in the history file.
 - Action: The message preceding this one will document the error and suggest corrections.

S2204- %%%%%% RECORDS TRANSFERRED BY SEND

- Cause: The message is written at the end of processing for a SEND action regardless of error condition.
- Effect: None; this is just for documentation in the history file.

Action: None.

- S2205- %%%%%% WAS HIGHEST ACCESSED RECORD NUMBER BY SEND
 - Cause: The message is written at the end of processing for a SEND action regardless of error condition.
 - Effect: None; this is just for documentation in the history file.

Action: None.

Cause: File allocated as requested.

Effect: None: information only.

Action: None.

- - Cause: File not allocated or opened as requested.
 - Effect: SEND operation not attempted.

Action: Correct failure reason and retry.

- - Cause: File not allocated or opened as requested. This message indicates reason for failure.
 - Effect: SEND operation not attempted.
 - Action: Correct failure reason and retry.

S2260- %X IS TCC SUPPLIED BY SERVER IN ACK(EDT)

- Cause: The SEND operation has completed with the completion code indicated.
- Effect: None: Information only.
- Action: None.
- - Cause: This message is written at the start of processing for a Receive action.
 - Effect: None; this is just for documentation in the history file.
 - Action: None.
- - Cause: This message is written at the end of processing for a Receive action if no errors occurred.
 - Effect: None; this is just for documentation in the history file.
 - Action: None.
- - Cause: This message is written at the end of processing for a Receive action after an error has occurred.
 - bffect: None; this is just for documentation in the history file.
 - Action: The message preceding this one will document the error and suggest corrections.

S2304- %%%%%% RECORDS TRANSFERRED BY RECEIVE

- Cause: The message is written at the end of processing for a RECEIVE action regardless or error condition.
- Effect: None; this is just for documentation in the history file.
- Action: None.

S2305- %%%%%% WAS LARGEST RECORD NUMBER ACCESSED BY RECEIVE

- Cause: The message is written at the end of processing for a RECEIVE action regardless of error condition.
- Effect: None; this is just for documentation in the history file.
- Action: None.
- S2310- DDN=%%%%%%% : STAGING FILE OPENED FOR RECEIVE
 - Cause: The staging file was opened for Receive (that is, Output mode).
 - Effect: None: Information only.
 - Action: None.
- S2321- LOGICAL STAGING FILE HDR REUSED:
 - Cause: An existing staging file header record is being reused. This happens when a Receive operation is being restarted and the header record has already been created.
 - Effect: None: Information only.
 - Action: None.
- - Cause: A new staging file Header record is being created. This happens when a Receive operation is being restarted and the header record has already been created.
 - Effect: None: Information only.
 - Action: None.
- S2350- %X IS TCC SENT BY REQUESTOR IN ACK(EDT)
 - Cause: The Transmission Completion code was sent to SFT-6.
 - Effect: None: Information only.
 - Action: None.

S2400- DELETE SENT PREVIOUSLY / BEING RETRIED

- Cause: A Delete was sent previously (in this session or a previous session) but no answer has been received.
- Effect: None: Information only.
- Action: None.
- - Cause: This message is written at the start of processing for a Delete action.
 - Effect: None; this is just for documentation in the history file.
 - Action: None.
- - Cause: This message is written at the end of processing of a Delete action if no errors occurred.
 - __ffect: None; this is just for documentation in the history file.
 - Action: None.
- - Cause: This message is written at the end of processing of a Delete action after an error has occurred.
 - __ffect: None; this is just for documentation in the history file.
 - Action: The message preceding this one will document the error and suggest corrections.

S2500- RENAME SENT PREVIOUSLY / BEING RETRIED

- Cause: The Rename was sent previously (in this session or in a previous one) but no reply has been received.
- Effect: None: Information only.

- Cause: This message is written at the start of processing for a Rename action.
- Effect: None; this is just for documentation in the history file.
- Action: None.
- - Cause: This message is written at the end of processing of a Rename action if no errors occurred.
 - Effect: None; this is just for documentation in the history file.
 - Action: None.
- - Cause: This message is written at the end of processing of a Rename action after an error has occurred.
 - Effect: None; this is just for documentation in the history file.
 - Action: The message preceding this one will document the error and suggest corrections.

S2600- EXECUTE SENT PREVIOUSLY

- Cause: The Execute request was sent previously either in this session or some other session.
- Effect: None: Information only.
- Action: None.

S2601- BEGIN ACTION=EXECUTE

- Cause: This message is written at the start of processing for an Execute action.
- Effect: None; this is just for documentation in the history file.

S2602- ACTION=EXECUTE HAS COMPLETED WITHOUT ERROR

- Cause: This message is written at the end of processing of an Execute action if no errors occurred.
- Effect: None; this is just for documentation in the history file.
- Action: None.

S2603- ACTION=EXECUTE HAS COMPLETED WITH AN ERROR

- Cause: This message is written at the end of processing of an Execute action after an error has occurred.
- Effect: None; this is just for documentation in the history file.
- Action: The message preceding this one will document the error and suggest corrections.

S2701- BEGIN ACTION=OPER

- Cause: This message is written at the start of processing for an Operator action.
- Effect: None; this is just for documentation in the history file.
- Action: None.
- - Cause: This message is written at the end of processing for an Operator action if no errors occurred.
 - Effect: None; this is just for documentation in the history file.
 - Action: None.
- - Cause: This message is written at the end of processing for an Operator action after an error has occurred.
 - Effect: None; this is just for documentation in the history file.
 - Action: The message preceding this one will document the error and suggest corrections.

- S2800- ERROR ON ACTION RECORD# %%% PLEASE RESPOND: END SKIP RETRY OR DEFAULT
 - Cause: The error option was specified as OPER or was allowed to default. An error has occurred.
 - Effect: This message is sent to the console operator.
 - Action: Reply with END, SKIP, RETRY, or DEFAULT, as appropriate.
- 1210A- THE TSF RECORD FOR THIS SESSION WAS MARKED INVALID LOGON REJECTED
 - Cause: The system rejected an operator logon because the transmission status file record was marked invalid before the logon was accepted.
 - Effect: The logon is rejected by the system by closing destination.
 - Action: Examine the history file to determine why the session is marked as invalid. Invalid sessions are not available for logons.
- 1210B- NO MEMORY AVAILABLE FOR CLOSE DESTINATION
 - Cause: The system rejected an operator logon (the reason is recorded in another message), but no memory is available for Close Destination.
 - Effect: There is a pending session between the ACB and the LU that must be terminated by a VTAM operator command (otherwise the Transmission Control Program will continue to function).

Action: Run future SFTTCP jobs with a larger region.

1210C- MODCB FAILED FOR LOGON CLOSE DESTINATION

- Cause: The system rejected an operator logon (the reason is recorded in another message), but the MODCB of the NIB failed before the destination could be closed.
- Effect: There is a pending session between the ACB and the LU that must be terminated by a VTAM operator command (otherwise the Transmission Control Program will continue to function).
- Action: Deactivate the logical unit.

1210D- CLOSE DESTINATION REJECTED BY VTAM

- Cause: The system rejected an operator logon (the reason is recorded in another message), but the Close Destination returned with a non-zero return code. This is caused either by a logic error or VTAM termination.
- Effect: There is a pending session between the ACB and the LU that must be terminated by a VTAM operator command (otherwise the Transmission Control Program will continue to function).
- Action: Deactivate the logical unit.
- 1210E- LOGON REJECTED AFTER VTAM ACCEPTED BECAUSE SESSIONS ARE NOW INHIBITED
 - Cause: The system rejected a logon after VTAM accepted it because new sessions were inhibited at the time that the logon table was searched for sessions to add to the Next to Run queue.
 - Effect: The LU that attempted to log on is issued a Close Destination. The Close Destination releases the LU.

- 1210F- FT-L6 LOGON REJECTED BECAUSE SESSIONS WITH FT-L6 NOT ENABLED
 - Cause: VTAM rejected a logon from an SFT-6 because sessions with SFT-6 are not enabled.
 - Effect: The SFT-6 that attempted to log on is issued a Close Destination. The Close Destination releases the SFT-6.
 - Action: Consult the documentation for Execute (EXEC) statement parameters that enable SFT-6 sessions.
- 1210G- LU-2 LOGON REJECTED BECAUSE OPERATOR SESSIONS ARE NOT ENABLED
 - Cause: VTAM rejected a logon from an LU-2 because operator sessions are not enabled.
 - Effect: The LU-2 that attempted to log on is issued a Close Destination. The Close Destination releases the LU-2.
 - Action: Consult the documentation for Execute (EXEC) statement parameters that enable operator sessions.

- 1210H- ADDITIONAL OPERATOR SESSION CANNOT BE SUPPORTED IMMEDIATELY - LOGON REJECTED
 - Cause: The system rejected an operator logon because either new sessions were inhibited or because the maximum number of concurrent sessions had been reached.
 - Effect: The logon is rejected by issuing a Close Destination.
 - Action: Examine the history file to determine why the session is marked as invalid. Invalid sessions are not available for logons.
- 12101- VTAM HAS REFUSED %%% LOGON REQUESTS BECAUSE LOGON REQUEST TABLE IS NOT LARGE ENOUGH.
 - Cause: The Logon Exit routine cannot find an open slot in the logon request table to queue the logon.
 - Effect: A logon request was rejected by the Logon Exit routine, and a Close Destination was issued by the Exit routine. VTAM will continue to add to this counter for refused logons. The system will still search the entries in the table, and clear this counter after reporting.
 - Action: When the Transmission Control Program completes, count all the refusals of this type. Increase EXREQS in the default values table by reassembly or by an override on the EXEC statement for SFTTCP with the EXTREQ parameter. The logon table is built during system initialization based on this field.
- 12102- THERE HAVE BEEN %%% CLOSE DESTINATION ERRORS IN THE LOGON EXIT ROUTINE
 - Cause: The Logon Exit routine is noting how many Close Destination errors have had VTAM errors.
 - Effect: For every Close Destination error, there is a pending logon that must be corrected by a VTAM operator command. The Close Destination should not fail. This message should be the result of a logic error or VTAM shutdown.
 - Action: Use a VTAM operator command to reject pending logons. Debug the Logon Close Destination Logic.

- 12103- VTAM LOGON EXIT HAS REJECTED THE LOGON REQUEST FOR UNSUPPORTED LU TYPE
 - Cause: The Logon Exit routine is noting that an unsupported device has attempted to log on.
 - Effect: The logon was rejected by the Logon Exit routine, and the destination has been closed.
 - Action: None.
- 12104- VTAM LOGON EXIT HAS REJECTED THE LOGON REQUEST FOR UNSUPPORTED SCREEN SIZE
 - Cause: The Logon Exit routine is noting that an unsupported SNA LU-2 type device has attempted to log on.
 - Effect: The logon was rejected by the Logon Exit routine, and the destination has been closed.
 - Action: None.
- 12105- VTAM LOGON EXIT HAS REJECTED THE LOGON REQUEST BECAUSE OF A MAINLINE TERMINATION
 - Cause: The Logon Exit routine is noting that a logon request was received after a Mainline Termination flag was set.
 - Effect: The logon was rejected by the Logon Exit routine, and the destination has been closed.
 - Action: None.
- 12106- VTAM LOGON EXIT HAS REJECTED THE LOGON REQUEST BECAUSE OF OPERATOR INHIBIT SESSION
 - Cause: The Logon Exit routine is noting that a logon request was received after the operator has set Inhibit New sessions.
 - Effect: The logon was rejected by the Logon Exit routine, and the destination has been closed.
 - Action: None.

- - Cause: The system cannot find a transmission status file record for this logon request.
 - Effect: The logon is rejected by the system by closing destination.
 - Action: At SFTTCP startup, a transmission control file record for the logon request must be in the file. No unexpected logons are accepted.
- 12108- VSAM ERROR WHILE UPDATING THE TSF RECORD TO RUN NEXT STATUS - LOGON REJECTED
 - Cause: The system had a VSAM error during update of transmission status file record.
 - Effect: The logon is rejected by the system by closing destination.
 - Action: The transmission status file has been damaged and can no longer be considered valid. The best procedure is to halt SFTTCP quickly, allocate the transmission status file cluster, and rerun the job. Restarting the job is not recommended because of possible invalid data in the transmission status file.
- 12109- OPERATOR SESSION REJECTED FOR TSF RECORD NOT HELD
 - Cause: The system rejected an operator logon because the transmission status file record was not a member of the held queue.
 - Effect: The logon is rejected by the system by closing destination.
 - Action: Only held sessions can be initiated by logons. There is no corrective action.

FILE MAINTENANCE UTILITY (SFTBATCH) MESSAGES

- 20001- END OF FILE REACHED WHILE READING A CONTINUED CONTROL STATEMENT
 - Cause: Continuation was specified on the control statement at End-of File.
 - Effect: The operation requested cannot be performed.
 - Action: Remove the character in the continuation column of the last control statement and resubmit the job.
- 22001- LABEL ON CONTROL STATEMENT EXCEEDS MAXIMUM SIZE LIMITATION
 - Cause: There are too many characters in the first field of the control statement.
 - Effect: The operation requested is not performed.
 - Action: Modify the control statement by recoding the label within size limits.
- 22002- INVALID CHARACTER(S) FOUND IN LABEL OR FIRST CHARACTER OF LABEL IS INVALID
 - Cause: The label of the control statement contains invalid characters or the first character is not allowed (it is not A through Z).
 - Effect: The operation requested is not performed.
 - Action: Modify the label to remove invalid characters and resubmit the control statement.
- 22003- VERB MISSING
 - Cause: A control statement with only a label has been found.
 - Effect: Processing for this control statement is stopped and the operation requested is not performed.
 - Action: Remove this control statement from the file; it is invalid.
- 22004- VERB ON CONTROL CARD EXCEEDS MAXIMUM SIZE LIMITATION
 - Cause: There are too many characters in the verb field of the control statement.
 - Effect: The operation requested is not performed.
 - Action: Modify the control statement by recoding the verb.

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24001- THE CONTROL CARD IS COMPLETELY BLANK

- Cause: No characters were found on the control statement.
- Effect: No operation is attempted.
- Action: Remove the control statement from the job flow.
- 24002- COLUMNS 1 THROUGH 15 ON THE CONTINUATION CARD ARE NOT BLANK
 - Cause: The control statement preceding this one was flagged as being continued but this card has characters in space that should be blank.
 - Effect: The operation is terminated and the control statement marked as continued is ignored.
 - Action: 1. The preceding card was incorrectly marked as continue and should be corrected and the job resubmitted.
 - 2. This control statement should be shifted right so that the first character is in column 16 and the job resubmitted.
- 40001- UNRECOGNIZED/UNSUPPORTED VERB %%%%%%%%
 - Cause: Invalid verb at the start of the control statement.
 - Effect: The operation requested cannot be performed.
 - Action: Examine the beginning of the control statement for possible misspelling, for starting in the wrong column, or for omission of a verb.
- 42001- INVALID KEYWORD %%%%%%%%
 - Cause: An invalid key word was specified on an ADDLU, DELLU, LISTLU, ADDGRP, or DELGRP.
 - Effect: The remaining keywords are checked for validity; the requested operation is not performed.
 - Action: Modify the control statement by removing the invalid keyword and resubmit the control statement.

42002- INVALID KEY VALUE FOR KEYWORD - %%%%%%%%

- Cause: The keyvalue for the identified keyword is longer than allowed.
- Effect: The remaining keywords are checked for validity; the requested operation is not performed.
- Action: Modify the control statement by shortening the keyvalue for the identified keyword and resubmit the control statement.
- - Cause: A syntax error was detected in a control statement.
 - Effect: Processing for this control statement is stopped and the operation requested is not performed.
 - Action: Correct the syntax error and resubmit the control statement.

42004- DUPLICATE KEYWORD - %%%%%%%%

- Cause: The keyword identified has already been specified earlier in the control statement.
- Effect: The remaining keywords on the verb are checked for validity, and the operation requested is not performed.
- Action: Delete one of the duplicate keywords and resubmit the control statement.

42005- MISSING REQUIRED KEYWORD - %%%%%%%%

- Cause: The keyword specified is missing from the control statement and is required for this operation.
- Effect: The remaining keywords are checked for validity; the requested operation is not performed.
- Action: Specify the required keyword(s) and resubmit the control statement.
- 42006- KEYWORD %%%%%%% CANNOT BE SPECIFIED FOR THIS VERB
 - Cause: The keyword identified is not allowed on the control statement for this verb.
 - Effect: The remaining keywords are checked for validity; the requested operation is not performed.
 - Action: Delete the specified keyword(s) and resubmit the control statement.

- 42007- KEYWORD %%%%%%% HAS A KEYVALUE LENGTH LESS THAN THE REQUIRED MINIMUM
 - Cause: The keyword identified has a key value with a length less than the required minimum for this operation.
 - Effect: The remaining keywords are checked for validity; the requested operation is not performed.
 - Action: Correct the identified keyword and resubmit the control statement.
- 42008- ILLEGAL CHARACTERS IN KEYVALUE FOR KEYWORD %%%%%%%%
 - Cause: The keyword identified has a key value containing characters that are not allowed.
 - Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
 - Action: Correct the identified keyword and resubmit the control statement.
- 42009- ILLEGAL DATE ENTRY FORMAT
 - Cause: The key value specified for date does not have a valid format.
 - Effect: The rest of the keywords on the verb are checked for validity; the operation requested is not performed.
 - Action: Consult the documentation for the required format for the date keyword; resubmit the control statement.
- 42010- ILLEGAL TIME ENTRY FORMAT
 - Cause: The key value specified for time does not have a valid format.
 - Effect: The rest of the keywords on the verb are checked for validity; the operation requested is not performed.
 - Action: Consult the documentation for the required format for the time keyword; resubmit the control statement.

42011- UNABLE TO OPEN RESOURCE MASTER FILE(RMF)

- Cause: VSAM Open failed for the resource master file. This could be caused by the following:
 - 1. DD card missing in this job step for the resource master file.
 - 2. No Access Method services Verify was performed.
- Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
- Action: Correct the identified keyword and resubmit the control statement.
- 42100- LU %%%%%%% ADDED TO RESOURCE MASTER FILE SUCCESSFULLY
 - Cause: The successful completion of the requested operation.
 - Effect: The LU record is created on the resource master file.

- 42101- NO MEMORY AVAILABLE TO BUILD RESOURCE MASTER FILE RECORD FOR LU - %%%%%%%
 - Cause: No memory is available in the address space to build a resource master file LU record.
 - Effect: The operation is terminated and the LU is not added to the resource master file.
 - Action: Allocate a larger REGION= size on the EXEC statement and rerun the job.
- 42102- DUPLICATE LU %%%%%%% ENCOUNTERED ON RESOURCE MASTER FILE
 - Cause: There is already an LU or group record on the resource master file with the same name as the one specified on the control statement LU= parameter.
 - Effect: The operation is terminated and the control statement is ignored.
 - Action: Delete the LU or group record from the resource master file and rerun the job.

- 42103- RESOURCE MASTER FILE FILE I/O ERROR WHILE TRYING TO ADD LU - %%%%%%%
 - Cause: An I/O error occurred while trying to add the LU to the resource master file.
 - Effect: The operation is terminated; the control statement is ignored.
 - Action: Try to export the resource master file to a sequential file, then try to import the resource master file to a different cluster with a larger allocation. Rerun the job with the same control statement.
- 42200- LU %%%%%%% DELETED FROM RESOURCE MASTER FILE
 - Cause: The successful completion of the requested operation.
 - Effect: The LU record is deleted from the resource master file.
 - Action: None.
- 42201- NO MEMORY AVAILABLE TO READ RESOURCE MASTER FILE RECORD FOR LU - %%%%%%% - DURING DELLU FUNCTION
 - Cause: No memory is available in the address space to build a resource master file LU record.
 - Effect: The operation is terminated; the LU is not added to the resource master file.
 - Action: Allocate a larger REGION= size on the EXEC statement and rerun the job.
- 42202- UNABLE TO FIND LU %%%%%%% FOR DELLU FUNCTION(READ)
 - Cause: The LU specified cannot be found on the resource master file.
 - Effect: The operation is terminated; the control statement is ignored.
 - Action: Check for correct LU= key value in the control statement.

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- 42203- OTHER FILE I/O ERROR DURING READ FOR LU %%%%%%% DURING DELLU FUNCTION(READ)
 - Cause: An I/O error occurred while trying to delete the LU from the resource master file.
 - Effect: The operation is terminated; the control statement is ignored.
 - Action: Try to export the resource master file to a sequential file; then try to import the resource master file to a different cluster with a larger allocation. Finally, rerun the job with the same control statement.

42204- UNABLE TO FIND LU - %%%%%%% - FOR DELLU FUNCTION(DELETE)

- Cause: The LU specified cannot be found on the resource master file.
- Effect: The operation is terminated; the control statement is ignored.
- Action: List the transmission control file to verify that this LU still exists; rerun the job.
- 42205- OTHER FILE I/O ERROR DURING READ FOR LU %%%%%%% DURING DELLU FUNCTION(DELETE)
 - Cause: An I/O error occurred while trying to delete the LU from the resource master file.
 - Effect: The operation is terminated; the control statement is ignored.
 - Action: Try to export the resource master file to a sequential file, then try to import the resource master file to a different cluster with a larger allocation. Finally, rerun the job with the same control statement.
- 42400- RMF LISTING MODULE UNABLE TO READ NULL RMF ENTRY
 - Cause: The resource master file does not contain the LU to be listed.
 - Effect: Processing of the LISTLU command is terminated.
 - Action: Create the LU if desired.

42401- RMF DOES NOT CONTAIN REQUESTED LOGICAL UNIT(S)

- Cause: I/O error occurred while reading the resource master file.
- Effect: The LISTLU command is terminated.
- Action: Rewrite the resource master file if this error persists.
- 42402- I-O ERROR OCCURRED IN READING RMF
 - Cause: I/O error occurred while reading the resource master file.
 - Effect: LISTLU command terminated.
 - Action: Rewrite the resource master file if this error persists.
- 42403- %%%%%%%% IS A GROUP NOT A LOGICAL UNIT
 - Cause: The LU record has an unknown record type.
 - Effect: The LISTLU command is is terminated.
 - Action: Rewrite the resource master file to correct the records.
- 42404- RMF ENTRY FOUND HAS UNKNOWN ENTRY TYPE
 - Cause: The resource master file record does not have an entry type of L or G. This is an internal error.
 - Effect: The LISTLU command is terminated.
 - Action: If the problem persists, contact your Honeywell representative.
- 42405- LIST REQUEST COMPLETED
 - Cause: A LIST action has completed.
 - Effect: None; information only.
 - Action: None.

42500- GROUP %%%%%%% ADDED TO RESOURCE MASTER FILE SUCCESSFULLY

- Cause: The successful completion of the requested operation.
- Effect: The group record is created on the resource master file.
- Action: None.

- 42501- NO MEMORY AVAILABLE TO BUILD RESOURCE MASTER FILE RECORD FOR GROUP -%%%%%%%
 - Cause: No memory is available in the address space to build a resource master file group record.
 - Effect: The operation is terminated; the group is not added to the resource master file.
 - Action: Allocate a larger REGION= size on the EXEC statement and rerun the job.
- 42502- DUPLICATE GROUP %%%%%%% ENCOUNTERED ON RESOURCE MASTER FILE
 - Cause: There is already an LU or group record on the resource master file with the same name as the one specified on the control statement GROUP= parameter.
 - Effect: The operation is terminated; the control statement is ignored.
 - Action: Delete the LU or group record from the resource master file and rerun the job.
- 42503- RESOURCE MASTER FILE FILE I/O ERROR WHILE TRYING TO ADD GROUP - %%%%%%% -
 - Cause: An I/O error occurred while trying to add the group to the resource master file.
 - Effect: The operation is terminated; the control statement is ignored.
 - Action: Try to export the resource master file to a sequential file, then try to import the resource master file to a different cluster with a larger allocation. Finally, rerun the job with the same control statement.
- 42504- MORE THAN 500 LUS HAVE BEEN INCLUDED IN GROUP %%%%%%%%
 - Cause: The maximum number of LUs in a group is 500. This group has more than 500.
 - Effect: The operation is terminated; the group is not added to the resource master file.
 - Action: 500 LUs is the limit for one group. If this is not sufficient, try using two smaller groups for this one large one.

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42505- UNABLE TO RELEASE BUFFER, POSSIBLE HIDDEN LOGIC ERROR

- Cause: The allocated buffer for the resource master file cannot be released. This is most likely caused by a logic error that overwrote the buffer trailer at some time.
- Effect: The operation is terminated without adding the group to the resource master file.
- Action: Check all code that changes resource master file buffer; retry the Add Group operation.

42506- LENGTH OF KEYVALUE ADDLU= EXCEEDS LIMIT

- Cause: The length of the key value is bigger than the maximum permitted.
- Effect: The remaining keywords will be validated; the operation will terminate without adding the group to the resource master file.
- Action: Correct the control statement to not exceed the maximum for this key value.
- 42600- GROUP %%%%%%% DELETED FROM RESOURCE MASTER FILE
 - Cause: The successful completion of the requested operation.
 - Effect: The group record is deleted from the resource master file.
 - Action: None.
- 42601- NO MEMORY AVAILABLE TO READ RESOURCE MASTER FILE RECORD FOR GROUP - %%%%%%% - DURING DELGRP FUNCTION
 - Cause: No memory is available in the address space to build a resource master file group record.
 - Effect: The operation is terminated; the group is not added to the resource master file.
 - Action: Allocate a larger REGION= size on the EXEC statement and rerun the job.

- 42602- UNABLE TO FIND GROUP %%%%%%% FOR DELGRP FUNCTION(READ)
 - Cause: The group specified cannot be found on the resource master file.
 - Effect: The operation is terminated; the control statement is ignored.
 - Action: Check for correct GROUP= key value in the control statement.
- 42603- OTHER FILE I/O ERROR DURING READ FOR GROUP %%%%%%% DURING DELGRP FUNCTION(READ)
 - Cause: An I/O error occurred while trying to delete the group from the resource master file.
 - Effect: The operation is terminated; the control statement is ignored.
 - Action: Try to export the resource master file to a sequential file, then try to import the resource master file to a different cluster with a larger allocation. Finally, rerun the job with the same control statement.
- 42604- GROUP %%%%%%%% IS NOT A GROUP IT IS AN LU
 - Cause: The group specified is actually an LU record.
 - Effect: The operation is terminated; the control statement is ignored.
 - Action: List the transmission control file to find the name of the group to delete; change the control statements; rerun the job.
- 42605- OTHER FILE I/O ERROR DURING READ FOR GROUP %%%%%%% DURING DELGRP FUNCTION(DELETE)
 - Cause: An I/O error occurred while trying to delete the group from the resource master file.
 - Effect: The operation is terminated and the control statement is ignored.
 - Action: Try to export the resource master file to a sequential file, then try to import the resource master file to a different cluster with a larger allocation. Finally,, rerun the job with the same control statement.

42800- LISTGRP UNABLE TO READ NULL RMF ENTRY

- Cause: The resource master file does not contain the group to be listed.
- Effect: Processing of the LISTGRP command is terminated.

Action: Create the group if desired.

- 42801- RMF DOES NOT CONTAIN REQUESTED GROUP(S)
 - Cause: An I/O error occurred while reading the resource master file.
 - Effect: The LISTGRP command is terminated.
 - Action: Rewrite the resource master file if this error persists.
- 42802- I/O ERROR OCCURRED IN READING RMF
 - Cause: The group name specified is the name of an LU.
 - Effect: The LISTGRP command is terminated.
 - Action: List the entire resource master file to find the correct group.
- 42803- %%%%%%%% IS A LOGICAL UNIT NOT A GROUP
 - Cause: The group record has an unknown record type.
 - Effect: The LISTGRP Command is terminated.
 - Action: Rewrite the resource master file to correct the records.
- 42804- %%%%%%% HAS UNKNOWN ENTRY TYPE
 - Cause: The resource master file record entry type is neither L nor G. This is an internal error.
 - Effect: The LISTGRP statement is terminated.
 - Action: If the problem persists, contact your Honeywell representative.
- 42805- LIST REQUEST COMPLETED
 - Cause: The statement has completed successfully.
 - Effect: None; information only.
 - Action: None.

- Cause: An invalid keyword was specified on the verb.
- Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
- Action: Modify the control statement by removing the invalid keyword and resubmit the control statement.

43002- INVALID KEYVALUE FOR KEYWORD - %%%%%%%%

- Cause: The key value for the identified keyword is longer than allowed.
- Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
- Action: Modify the control statement by shortening the key value for the identified keyword and resubmit the control statement.
- 43003- SYNTAX ERROR PROCESSING KEYWORD %%%%%%%%
 - Cause: A syntax error was detected in this control statement.
 - Effect: Processing for this control statement is stopped and the operation requested is not performed.
 - Action: Correct the syntax error and resubmit the control statement.

43004- DUPLICATE KEYWORD - %%%%%%%%

- Cause: The keyword identifier has already been specified earlier in the control statement.
- Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
- Action: Delete one of the duplicate keywords and resubmit the control statement.
43005- KEYWORD - %%%%%%% - IS REQUIRED FOR THIS VERB

- Cause: The keyword identified is missing in the control statement and is required for this operation.
- Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
- Action: Specify the required keyword(s) and resubmit the control statement.
- 43006- KEYWORD %%%%%%% NOT ALLOWED FOR THIS VERB
 - Cause: The keyword identified is not allowed for this verb.
 - Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
 - Action: Delete the specified keyword(s) and resubmit the control statement.
- 43007- KEYVALUE FOR KEYWORD %%%%%%% DOES NOT HAVE MINIMUM REQUIRED LENGTH
 - Cause: The keyword identified has a key value with a length less than the required minimum for this operation.
 - Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
 - Action: Correct the identified keyword and resubmit the control statement.
- 43008- KEYVALUE FOR KEYWORD %%%%%%% HAS INVALID CHARACTERS
 - Cause: The keyword identified has a key value containing invalid characters.
 - Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
 - Action: Correct the identified keyword and resubmit the control statement.

43009- INVALID KEYVALUE IN DATE= KEYWORD

- Cause: The key value after DATE= has an improper format.
- Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
- Action: Consult the documentation for the required format for the DATE= key value and resubmit the control statement.
- 43010- INVALID KEYVALUE FOR TIME= KEYWORD
 - Cause: The TIME= key value has an improper format.
 - Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
 - Action: Consult the documentation for the required format for the TIME= key value and resubmit the control statement.
- 43011- OPEN FAILED FOR TRANSMISSION CONTROL FILE(TCF)
 - Cause: The VSAM open failed for the transmission control file. This could be caused by the following:
 - 1. The DD statement is missing in this job step for the transmission control file.
 - 2. No Access Method Services Verify was performed.
 - Effect: The rest of the keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Examine the JCL for possible omissions.
- 4305A- DSORG= KEYWORD SPECIFIED ON ADDACT/MODACT FOR OTHER THAN ACTION=SEND
 - Cause: DSORG is an invalid keyword for ADDACT and MODACT unless ACTION=SEND.
 - Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
 - Action: Modify the control statement by removing the invalid keyword and resubmit the control statement.

4305B- DSORG= KEYVALUE NOT RECOGNIZED

Cause: An invalid key value was specified for DSORG.

- Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
- Action: Correct the invalid key value and resubmit the control statement.
- 4305C- PRIORITY VALUE TOO LARGE MAXIMUM OF 255 ALLOWED
 - Cause: Priority value is greater than the allowed maximum of 255.
 - Effect: The remaining keywords on the verb are checked for validity; the operation requested is not performed.
 - Action: Specify a priority of less than 256 and resubmit.

4305D- RECFM= KEYVALUE NOT RECOGNIZED

- Cause: An invalid key value was specified for RECFM.
- Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
- Action: Correct the invalid key value and resubmit the control statement.
- 4305E- DELATTR= KEYWORD SPECIFIED AND DSORG=FR WAS NOT SPECIFIED
 - Cause: DELATTR= is dependent on DSORG=; DSORG= cannot be found.
 - Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
 - Action: Modify the control statement by removing the invalid keyword or inserting the missing keyword and resubmit the control statement.

4305F- DELATTR= KEYVALUE NOT RECOGNIZED

- Cause: An invalid key value was specified for DELATTR.
- Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
- Action: Correct the invalid key value and resubmit the control statement.

- 4305G- OUTDD= KEYWORD SPECIFIED ON ADDACT/MODACT FOR OTHER THAN ACTION=RECEIVE
 - Cause: OUTDD= is an invalid keyword for ADDACT and MODACT unless ACTION=RECEIVE.
 - Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
 - Action: Modify the control statement by removing the invalid keyword and resubmit the control statement.
- 4305H- OUTDDPAS= KEYWORD SPECIFIED ON ADDACT/MODACT FOR OTHER THAN ACTION=RECEIVE
 - Cause: OUTDDPAS= is an invalid keyword for ADDACT and MODACT unless ACTION=RECEIVE.
 - Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
 - Action: Modify the control statement by removing the invalid keyword and resubmit the control statement.
- 4305I- OUTDDPAS= KEYWORD SPECIFIED BUT OUTDD= KEYWORD WAS NOT SPECIFIED
 - Cause: OUTDDPAS= is dependent on OUTDD=; OUTDD= cannot be found.
 - Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
 - Action: Modify the control statement by removing the invalid keyword or inserting the missing keyword and resubmit the control statement.
- 4305J- FILEID IS REQUIRED SPECIFY SFT-6 PATH NAME
 - Cause: The FILEID keyword not specified but is required.
 - Effect: The remaining keywords on the verb are checked for validity; the operation requested is not performed.
 - Action: Add FILEID keyword; value, then resubmit.

- 4305L- KEYLEN= KEYWORD SPECIFIED ON ADDACT/MODACT FOR OTHER THAN ACTION=SEND
 - Cause: KEYLEN= is an invalid keyword for ADDACT and MODACT unless ACTION=SEND.
 - Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
 - Action: Modify the control statement by removing the invalid keyword and resubmit the control statement.
- 4305M- KEYOFF= KEYWORD SPECIFIED ON ADDACT/MODACT FOR OTHER THAN ACTION=SEND
 - Cause: KEYOFF= is an invalid keyword for ADDACT and MODACT unless ACTION=SEND.
 - Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
 - Action: Modify the control statement by removing the invalid keyword and resubmit the control statement.
- 4305N- CISIZE= KEYWORD SPECIFIED ON ADDACT/MODACT FOR OTHER THAN ACTION=SEND
 - Cause: CISIZE= is an invalid keyword for ADDACT and MODACT unless ACTION=SEND.
 - Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
 - Action: Modify the control statement by removing the invalid keyword and resubmit the control statement.
- 43050- SPACE= KEYWORD SPECIFIED ON ADDACT/MODACT FOR OTHER THAN ACTION=SEND
 - Cause: SPACE= is an invalid keyword for ADDACT and MODACT unless ACTION=SEND.
 - Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
 - Action: Modify the control statement by removing the invalid keyword and resubmit the control statement.

- 4305P- RECL= KEYWORD SPECIFIED ON ADDACT/MODACT FOR OTHER THAN ACTION=SEND
 - Cause: RECL= is an invalid keyword for ADDACT and MODACT unless ACTION=SEND.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Modify the control statement by removing the invalid keyword and resubmit the control statement.
- 4305Q- FREESP= KEYWORD SPECIFIED ON ADDACT/MODACT FOR OTHER THAN ACTION=SEND
 - Cause: FREESP is an invalid keyword for ADDACT and MODACT unless ACTION=SEND.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Modify the control statement by removing the invalid keyword and resubmit the control statement.
- 4305R- OVFLFREQ= KEYWORD SPECIFIED ON ADDACT/MODACT FOR OTHER THAN ACTION=SEND
 - Cause: OVFLFREQ is an invalid keyword for ADDACT and MODACT unless ACTION=SEND.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Modify the control statement by removing the invalid keyword and resubmit the control statement.
- 4305S- RECFM= KEYWORD SPECIFIED ON ADDACT/MODACT FOR OTHER THAN ACTION=SEND
 - Cause: RECFM is an invalid keyword for ADDACT and MODACT unless ACTION=SEND.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Modify the control statement by removing the invalid keyword and resubmit the control statement.

- 4305T- NEWNAME= KEYWORD SPECIFIED ON ADDACT/MODACT FOR OTHER THAN ACTION=RENAME
 - Cause: NEWNAME is an invalid keyword for ADDACT and MODACT unless ACTION=RENAME.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Modify the control statement by removing the invalid keyword and resubmit the control statement.
- 4305U- ARG= KEYWORD SPECIFIED ON ADDACT/MODACT FOR OTHER THAN ACTION=EXECUTE
 - Cause: ARG is an invalid keyword for ADDACT and MODACT unless ACTION=EXEC.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Modify the control statement by removing the invalid keyword and resubmit the control statement.
- 4305V- ERROUT= KEYWORD SPECIFIED ON ADDACT/MODACT FOR OTHER THAN ACTION=EXECUTE
 - Cause: ERROUT is an invalid keyword for ADDACT and MODACT unless ACTION=EXEC.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Modify the control statement by removing the invalid keyword and resubmit the control statement.
- 4305W- NAME= HAS NOT BEEN SPECIFIED FOR ACTION=SEND/RECEIVE
 - Cause: A required keyword for ACTION=SEND or ACTION=RECEIVE has not been specified.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Modify the control statement to include a NAME= keyword and resubmit the control statement.

- 4305X- CKPINTVL= KEYWORD SPECIFIED ON ADDACT FOR OTHER THAN ACTION=SEND OR RECEIVE
 - Cause: CKPINTVL is an invalid keyword for ADDACT unless ACTION=SEND or ACTION=RECEIVE.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Modify the control statement by removing the invalid keyword and resubmit the control statement.
- 4305Y- SPACE= KEYWORD HAS BEEN SPECIFIED WITH MORE THAN TWO SUBPARAMETERS
 - Cause: SPACE= only supports two subparameters; the first is Initial Allocation and the second is Maximum Allocation.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Modify the control statement by removing the extra portion of the subparameters and resubmit the control statement.
- 4305Z- SPACE= SUBPARAMETER NUMBER(2) IS SMALLER THAN SUBPARAMETER NUMBER(1)
 - Cause: The SPACE= format for subparameters is positional; the first subparameter is Initial Allocation and the second is Maximum Allocation. Initial Allocation cannot be larger than Maximum Allocation.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Modify the control statement to correct the subparameters and resubmit the control statement.

43051- NO MEMORY AVAILABLE FOR BUFFER GETMAIN

- Cause: No memory is available in the address space to build a transmission control file record.
- Effect: The operation is terminated.
- Action: Allocate a larger REGION= size on the EXEC statement and rerun the job.

- 43052- INDD= KEYWORD SPECIFIED ON ADDACT/MODACT FOR OTHER THAN ACTION=SEND
 - Cause: INDD= is an invalid keyword for ADDACT and MODACT unless ACTION=SEND.
 - Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
 - Action: Modify the control statement by removing the invalid keyword and resubmit the control statement.
- 43053- INDDPASS= KEYWORD SPECIFIED ON ADDACT/MODACT FOR OTHER THAN ACTION=SEND
 - Cause: INDDPASS= is an invalid keyword for ADDACT and MODACT unless ACTION=SEND.
 - Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
 - Action: Modify the control statement by removing the invalid keyword and resubmit the control statement.
- 43054- INDDPASS= KEYWORD SPECIFIED BUT INDD= NOT SPECIFIED
 - Cause: INDDPASS= is dependent on INDD=; INDD= cannot be found.
 - Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
 - Action: Modify the control statement by removing the invalid keyword or inserting the missing keyword and resubmit the control statement.
- 43055- SOURCE= KEYWORD SPECIFIED ON ADDACT/MODACT FOR OTHER THAN ACTION=SEND/RECEIVE
 - Cause: SOURCE= is an invalid keyword for ADDACT and MODACT unless ACTION=SEND or ACTION=RECEIVE.
 - Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
 - Action: Modify the control statement by removing the invalid keyword and resubmit the control statement.

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- 43056- NAME= KEYWORD SPECIFIED ON ADDACT/MODACT FOR OTHER THAN ACTION=SEND/RECEIVE
 - Cause: NAME= is an invalid keyword for ADDACT and MODACT unless ACTION=SEND or ACTION=RECEIVE
 - Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
 - Action: Modify the control statement by removing the invalid keyword and resubmit the control statement.
- 43057- DISP= KEYWORD SPECIFIED ON ADDACT/MODACT FOR OTHER THAN ACTION=SEND
 - Cause: DISP= is an invalid keyword for ADDACT and MODACT unless ACTION=SEND or ACTION=RECEIVE
 - Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
 - Action: Modify the control statement by removing the invalid keyword and resubmit the control statement.
- 43058- DISP= KEYWORD KEYVALUE SUBPARMETER(1) NOT RECOGNIZED
 - Cause: An invalid key value was specified for DISP= subparameter(1).
 - Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
 - Action: Correct the invalid keyword subparameter and resubmit the control statement.
- 43059- DISP= KEYWORD KEYVALUE SUBPARMETER(2) NOT RECOGNIZED
 - Cause: An invalid key value was specified for DISP= subparameter(2).
 - Effect: The remaining keywords on the verb are checked for validity and the operation requested is not performed.
 - Action: Correct the invalid keyword subparameter and resubmit the control statement.

4306A- KEYLEN= KEYWORD SPECIFIED WHEN DSORG=IS NOT SPECIFIED

- Cause: The KEYLEN= keyword can only be specified if DSORG=IS; DSORG=IS was not specified.
- Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
- Action: Modify the control statement by removing the invalid keyword or changing the value of DSORG= and resubmit the control statement.

4306B- KEYLEN=0 IS ILLEGAL FOR DSORG=IS

Cause: An invalid key value of 0 was specified.

- Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
- Action: Modify the control statement by either removing this keyword or using a nonzero value.
- 4306C- KEYLEN= KEYWORD MUST BE SPECIFIED FOR DSORG=IS FILES
 - Cause: If DSORG=IS, KEYLEN= must be specified; KEYLEN= was not found.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Modify the control statement by inserting the missing keyword and resubmit the control statement.
- 4306D- KEYOFF= KEYWORD SPECIFIED WHEN DSORG=IS NOT SPECIFIED
 - Cause: KEYOFF= can only be specified if DSORG=IS; DSORG=IS was not found.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Modify the control statement by removing the invalid keyword or inserting the missing keyword and resubmit the control statement.

4306E- CISIZE=0 IS INVALID

- Cause: An invalid key value of 0 was specified.
- Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
- Action: Modify the control statement by either removing this keyword or using a nonzero value.

- 4306F- DELATTR= KEYWORD SPECIFIED ON ADDACT/MODACT FOR OTHER THAN ACTION=SEND
 - Cause: DELATTR is an invalid keyword for ADDACT and MODACT unless ACTION=SEND.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Modify the control statement by removing the invalid keyword and resubmit the control statement.

4306G- NEWNAME= MUST BE SPECIFIED FOR ACTION=RENAME

- Cause: If ACTION=RENAME, NEWNAME= must be specified; NEWNAME= was not found.
- Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
- Action: Modify the control statement by inserting the missing keyword and resubmit the control statement.

4306H- SPACE= HAS INVALID CHARACTER(S) IN SUBPARAMETER(S)

- Cause: There are invalid characters in one or more SPACE= subparameters.
- Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
- Action: Correct the invalid subparameter and resubmit the control statement.
- 4306I- FREESP= KEYWORD SPECIFIED ON ADDACT/MODACT FOR OTHER THAN DSORG=IS
 - Cause: FREESP is an invalid keyword for ADDACT and MODACT unless DSORG=IS.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Modify the control statement by removing the invalid keyword and resubmit the control statement.

- 4306J- OVFLFREQ= KEYWORD SPECIFIED ON ADDACT/MODACT FOR OTHER THAN DSORG=IS
 - Cause: OVFLFREQ is an invalid keyword for ADDACT and MODACT unless DSORG=IS.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Modify the control statement by removing the invalid keyword and resubmit the control statement.
- 4306K- DSNAME WAS SPECIFIED ON NON-SEND ACTION TYPE
 - Cause: The DSNAME keyword is not allowed on any Action except ACTION=SEND.
 - Effect: The rest of the keywords will be verified but the action record will not be added to the transmission control file.
 - Action: Remove this keyword from this action and add it to the correct SEND action record.
- 4306L- INVALID OR UNPAIRED QUOTES FOR DSNAME KEYVALUE
 - Cause: The DSNAME keyword cannot be stripped of its quotation marks because of invalid format or no ending quote.
 - Effect: The rest of the keywords will be verified but the action record will not be added to the transmission control file.
 - Action: Correct the quoted key value.
- 4306M- DSNAME WAS SPECIFIED BUT SUB DISPOSITION WAS SPECIFIED AS DELETE
 - Cause: The DSNAME keyword is not allowed if disposition for DSNAME that will be dynamically allocated is deleted. Only staging files can have a subdisposition of delete.
 - Effect: The rest of the keywords will be verified but the action record will not be added to the transmission control file.
 - Action: Correct the disposition sub-parameter to the proper key value to keep the DSNAME file.

4306N- MEMBER WAS SPECIFIED WITHOUT DSNAME

- Cause: The member keyword is dependent on DSNAME keyword having been included in the utility control language.
- Effect: The rest of the keywords will be verified but the action record will not be added to the transmission control file.
- Action: Add the required keyword DSNAME to this action record.

43060- DYNPASS WAS SPECIFIED WITHOUT DSNAME

- Cause: The DYNPASS keyword is dependent on DSNAME keyword having been included in the utility control language.
- Effect: The rest of the keywords will be verified but the action record will not be added to the transmission control file.
- Action: Add the required keyword DSNAME to this action record.

4306P- CONVERT WAS SPECIFIED WITHOUT DSNAME

- Cause: The convert keyword is dependent on DSNAME keyword having been included in the utility control language.
- Effect: The rest of the keywords will be verified but the action record will not be added to the transmission control file.
- Action: Add the required keyword DSNAME to this action record.

4306Q- CONVERT KEYVALUE IS INVALID

- Cause: The CONVERT= key value is not one of the supported values.
- Effect: The rest of the keywords will be verified but the action record will not be added to the transmission control file.
- Action: Examine the user documentation for the supported key values for the convert keyword.

- 4306R- MUTUALLY EXCLUSIVE KEYWORDS DSNAME AND INDD HAVE BEEN SPECIFIED
 - Cause: The DSNAME keyword is not allowed if the INDD keyword is specified. Since both keywords imply a file to SEND, only one of the keywords can be specified.
 - Effect: The rest of the keywords will be verified but the action record will not be added to the transmission control file.
 - Action: Remove the keyword that implies the wrong file type:

-- INDD implies SEND a staging file

- -- DSNAME implies SEND a dynamically allocated file.
- 43061- COMPRESS= KEYWORD SPECIFIED ON ADDACT/MODACT FOR OTHER THAN ACTION=RECEIVE
 - Cause: COMPRESS is an invalid keyword for ADDACT and MODACT unless ACTION=RECEIVE.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Modify the control statement by removing the invalid keyword and resubmit the control statement.
- 43062- COMPRESS= KEYVALUE NOT RECOGNIZED
 - Cause: An invalid keyword parameter was specified.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Correct the invalid keyword parameter and resubmit the control statement.
- 43063- LU= KEYWORD SPECIFIED WHEN GROUP= ALREADY HAS BEEN SPECIFIED
 - Cause: The LU= keyword is in conflict with the GROUP= keyword.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Modify the control statement by removing the unwanted keyword and resubmit the control statement.

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- 43064- GROUP= KEYWORD SPECIFIED WHEN LU= ALREADY SPECIFIED
 - Cause: The GROUP= keyword is in conflict with the LU= keyword.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Modify the control statement by removing the unwanted keyword and resubmit the control statement.
- 43065- EITHER GROUP= OR LU= KEYWORD MUST BE SPECIFIED FOR THIS VERB
 - Cause: The verb requires that either GROUP= or LU= be specified.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Modify the control statement by inserting the needed keyword and resubmit the control statement.
- 43066- DISP= KEYVALUE NOT RECOGNIZED
 - Cause: An invalid key value was specified.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Correct the invalid key value and resubmit the control statement.
- 43067- ERROPT= KEYVALUE NOT RECOGNIZED
 - Cause: An invalid key value was specified.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Correct the invalid key value and resubmit the control statement.

43068- ACTION= KEYVALUE NOT RECOGNIZED

- Cause: An invalid key value was specified.
- Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
- Action: Correct the invalid key value and resubmit the control statement.

43069- SEQ= KEYWORD REQUIRED FOR DELACT OR MODACT VERBS

Cause: DELACT and MODACT require the SEQ= keyword.

- Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
- Action: Modify the control statement by inserting the needed keyword and resubmit the control statement.
- 43100- SESSION %%%%%%% ADDED TO TRANSMISSION CONTROL FILE SUCCESSFULLY
 - Cause: The successful completion of the requested operation.
 - Effect: The session record is created on the resource master file.
 - Action: None.
- - Cause: No memory is available in the address space to build a transmission control file header record.
 - Effect: The operation is terminated and the session is not added to the transmission control file.
 - Action: Allocate a larger REGION= size on the EXEC statement and rerun the job.
- 43102- DUPLICATE SESSION ID %%%%%%% FOUND ON TRANSMISSION CONTROL FILE
 - Cause: There is already a session header record on the transmission control file with the same ID as specified on the control statement.
 - Effect: The operation is terminated and the control statement is ignored.
 - Action: Delete the session record from the transmission control file and rerun the job.

- 43103 UNABLE TO VERIFY EXISTENCE OF RMF RECORD: OPEN FAILED FOR RMF
 - Cause: The resource master file file could not be opened. Possible causes are a missing DD statement or an incorrect password.
 - Effect: The logical unit or group name is not verified; the session record is added to the transmission control file.
 - Action: Investigate the cause of the open failure.
- 43104 LU OR GROUP NAME FOR SESSION IS NOT DEFINED IN RMF
 - Cause: The logical unit or group record was not added to the resource master file.
 - Effect: The logical unit or group name is not verified; the session record is added to the transmission control file.
 - Action: Investigate the cause of the open failure. If the resource master file record does not exist when the Transmission Control Program is executed, this session will not be attempted.
- 43105 I/O ERROR (OTHER THAN RECORD NOT FOUND) ON RMF WHEN ATTEMPTING TO VERIFY EXISTENCE OF GROUP/LU
 - Cause: The resource master file is corrupted, or there is a hardware error.
 - Effect: The logical unit or group name is not verified; the session record is added to the transmission control file.
 - Action: Investigate the cause of the error. Job output may contain messages generated by host modules.
- 43106 SESSION SPECIFIED USING LU= KEYWORD BUT RMF RECORD IS FOR A GROUP
 - Cause: There is a mismatch between the session specification and the resource master file specification.
 - Effect: When the Transmission Control Program executed, a session for each will be added to the transmisison control file.
 - Action: Correct the mismatch.

- 43107 SESSION SPECIFIED USING GROUP= KEYWORD BUT RMF RECORD IS FOR A LU
 - Cause: There is a mismatch between the session specification and the resource master file specification.
 - Effect: When the Transmission Control Program executed, a session for each will be added to the transmisison control file.
 - Action: Correct the mismatch.
- - Cause: The successful completion of the requested operation.
 - Effect: The session header is deleted from the transmission control file and any associated action records are also deleted.
 - Action: None.
- - Cause: An I/O error occurred while trying to delete an action record for this session header.
 - Effect: The operation is terminated and an undetermined number of action records for this session header have been deleted. The session header has not been deleted.
 - Action: Try to export the transmission control file to a sequential file; then try to import the transmission control file to a different cluster with a larger allocation. Finally, rerun the job with the same control statement.
- - Cause: No memory is available in the address space to build a transmission control file action record.
 - Effect: The operation is terminated and the session header is not deleted from the transmission control file.
 - Action: Allocate a larger REGION= size on the EXEC statement and rerun the job.

- - Cause: An I/O error occurred while trying to read an action record for this session header prior to deleting the action record.
 - Effect: The operation is terminated; an undetermined number of action records for this session header have been deleted; the session header has not been deleted.
 - Action: Try to export the transmission control file to a sequential file; then try to import the transmission control file to a different cluster with a larger allocation. Finally, rerun the job with the same control statement.
- - Cause: The session ID specified cannot be found on the transmission control file.
 - Effect: The operation is terminated and the control statement is ignored. No records have been deleted.
 - Action: Check for correct SESSID= key value and correct LU= or correct GROUP= key value in control statement.
- - Cause: The session ID specified cannot be found on the transmission control file or a VSAM error occurred while getting the session header.
 - Effect: The operation is terminated and the control statement is ignored. No records have been deleted.
 - Action: The message printed prior to this one will identify the problem and solution.

- - Cause: An I/O error occurred while trying to delete the session header record in the transmission control file.
 - Effect: The operation is terminated, all action records have been deleted, but the session header record has not been deleted.
 - Action: Try to export the transmission control file to a sequential file; then try to import the transmission control file to a different cluster with a larger allocation. Finally, rerun the job with the same control statement.
- - Cause: An I/O error occurred while trying to delete the session header record in the transmission control file.
 - Effect: The operation is terminated, all action records have been deleted, but the session header record has not been deleted
 - Action: Try to export the transmission control file to a sequential file; then try to import the transmission control file to a different cluster with a larger allocation. Finally, rerun the job with the same control statement.
- 43401- VSAM I/O ERROR ON FIRST POINT AT SESSION HEADER
 - Cause: An I/O error has been reported by the VSAM Read module while first pointing to a session header record.
 - Effect: The operation is terminated without completely printing the transmission control file.
 - Action: Consult available IBM error recovery methods for VSAM files, and reprint the transmission control file.

43402- VSAM I/O ERROR WHILE GETTING NEXT SESSION HEADER

- Cause: An I/O error has been reported by the VSAM Read module while reading the next session header record.
- Effect: The operation is terminated without completely printing the transmission control file.
- Action: Consult available IBM error recovery methods for VSAM files, and reprint the transmission control file.
- 43403- VSAM I/O ERROR WHILE READING FIRST ACTION RECORD
 - Cause: An I/O error has been reported by the VSAM Read module while reading the first action record for this session.
 - Effect: The operation is terminated without completely printing the transmission control file.
 - Action: Consult available IBM error recovery methods for VSAM files, and reprint the transmission control file.
- 43404- VSAM I/O ERROR WHILE GETTING NEXT ACTION RECORD
 - Cause: An I/O error has been reported by the VSAM Read module while reading the next action record for this session.
 - Effect: The operation is terminated without completely printing the transmission control file.
 - Action: Consult available IBM error recovery methods for VSAM files, and reprint the transmission control file.
- - Cause: Most likely a logic error has lost the proper key to be pointed to while doing a reread of a record that was previously successfully read.
 - Effect: The operation is terminated without completely printing the transmission control file.
 - Action: Check the logic for possible misplacement of the key on reread.

43406- VSAM I/O ERROR WHILE RE-READING LAST SESSION HEAD

- Cause: An I/O error has been reported by the VSAM Read module while rereading the header record in order to continue the header read next loop.
- Effect: The operation is terminated without completely printing the transmission control file.
- Action: Consult available IBM error recovery methods for VSAM files, and reprint the transmission control file.
- 43500- ACTION FOR SESSION ID %%%%%%% LU/GROUP %%%%%%% SEQ=%%% - HAS BEEN ADDED TO THE TCF
 - Cause: The successful completion of the requested operation.
 - Effect: The action record is added to the transmission control file and the session header record is updated for the addition.

Action: None.

- 43501- OTHER FILE I/O ERROR DURING ADDITION OF ACTION RECORD ID - %%%%%%% LU/GROUP %%%%%%% - DURING ADDACT COMMAND
 - Cause: An I/O error occurred while trying to add action record.
 - Effect: The operation is terminated and the action record has not been added. The session header will not be changed.
 - Action: Try to export the transmission control file to a sequential file; then try to import the transmission control file to a different cluster with a larger allocation. Finally, rerun the job with the same control statement.
- 43502- DUPLICATE SEQUENCE NUMBER FOR SESSION ID %%%%%%% LU/GROUP %%%%%%% - HAS BEEN FOUND
 - Cause: The sequence number computed already exists (data reliability error) or the automatically assigned sequence number has exceeded 999 (user error).
 - Effect: The action record is not added and the session header is unaffected.
 - Action: If data reliability error, the session header must be deleted and readded; then all action records must be readded. If user error, two smaller session headers must be used to hold all the action records.

- 43503- NO MEMORY AVAILABLE TO READ TRANSMISSION CONTROL FILE FOR SESSION HEADER ID - %%%%%%% LU/GROUP %%%%%%%
 - Cause: No memory is available in the address space to build A transmission control file session header record.
 - Effect: The operation is terminated and the action record is not added to the transmission control file.
 - Action: Allocate a larger REGION= size on the EXEC statement and rerun the job.
- 43505- UNABLE TO FIND SESSION HEADER FOR SESSION ID %%%%%%% LU/GROUP %%%%%%% - FOR ADDACT COMMAND
 - Cause: The session ID specified cannot be found on the transmission control file.
 - Effect: The action record is not added to the transmission control file and the session header is not changed.
 - Action: Check for correct SESSID= key value and correct LU= or correct GROUP= key value in control statement.
- 43507- OTHER FILE I/O ERROR DURING UPDATE OF SESSION HEADER ID -%%%%%%%% LU/GROUP %%%%%%% - TO RECORD ADDED ACTION
 - Cause: An I/O error occurred while trying to update the session header record in the transmission control file to reflect the addition of an action record.
 - Effect: The operation is terminated, the action record has been added to the session header record has not been updated to show the addition.
 - Action: Try to export the transmission control file TO a sequential file; then try to import the transmission control file to a different cluster with a larger allocation. Delete the unupdated session header; then do an ADDSES to recreate the header, and then do Add actions for all the action records.

- 43508- OTHER FILE I/O ERROR DURING READ OF SESSION HEADER ID -%%%%%%%% LU/GROUP %%%%%%% - FOR UPDATE OF ADDED ACTION
 - Cause: An I/O error occurred while trying to read the session header record in the transmission control file before update to reflect the addition of an action record.
 - Effect: The operation is terminated, the action record has been added to the session header record has not been updated to show the addition.
 - Action: Try to export the transmission control file TO a sequential file; then try to import the transmission control file to a different cluster with a larger allocation. Delete the unupdated session header; then do an ADDSES to recreate the header, and then do Add actions for all the action records.
- - Cause: The successful completion of the requested operation.
 - Effect: The action record is deleted from the transmission control file and the session header record is updated for the deletion.
 - Action: None.
- - Cause: An I/O error occurred while trying to delete action record.
 - Effect: The operation is terminated and the action record has not been deleted.
 - Action: Try to export the transmission control file to a sequential file; then try to import the transmission control file to a different cluster with a larger allocation. Finally, rerun the job with the same control statement.

43602- DELETE ACTION FAILED - UNABLE TO FIND ACTION RECORD

- Cause: The action ID specified cannot be found on the transmission control file.
- Effect: The operation is terminated and the control statement is ignored. No records have been deleted.
- Action: Check for correct SESSID= key value and correct LU= or correct GROUP= key value in control statement. Then check for correct ACTION= key value in control statement.
- - Cause: No memory is available in the address space to build A transmission control file action record.
 - Effect: The operation is terminated and the action record is not deleted from the transmission control file.
 - Action: Allocate a larger REGION= size on the EXEC statement and rerun the job.
- - Cause: An I/O error occurred while trying to read an action record prior to deleting the record.
 - Effect: The operation is terminated, the action record has not been deleted and the session header has not been updated.
 - Action: Try to export the transmission control file to a sequential file; then try to import the transmission control file to a different cluster with a larger allocation. Finally, rerun the job with the same control statement.
- - Cause: The session ID specified cannot be found on the transmission control file.
 - Effect: The operation is terminated and the control statement is ignored. No records have been deleted.
 - Action: Check for correct SESSID= key value and correct LU= or correct GROUP= key value in control statement.

43606- DELETE ACTION FAILED BECAUSE SESSION COULD NOT BE LOCATED

- Cause: The session ID specified cannot be found on the transmission control file or a VSAM error occurred while getting the session header.
- Effect: The operation is terminated and the control statement is ignored. No records have been deleted.
- Action: The message printed prior to this one will identify the problem and solution.
- - Cause: An I/O error occurred while trying to update the session header record in the transmission control file to reflect the deletion of an action record.
 - Effect: The operation is terminated; the action record has been deleted but the session header record has not been updated to show the deletion.
 - Action: Try to export the transmission control file TO a sequential file; then try to import the transmission control file to a different cluster with a larger allocation. Delete the unupdated session header; then do an ADDSES to recreate the header, and then do ADDACTs for all the action records.
- - Cause: An I/O error occurred while trying to read the session header record in the transmission control file before update to reflect the deletion of an action record.
 - Effect: The operation is terminated, the action record has been deleted but the session header record has not been updated to show the deletion.
 - Action: Try to export the transmission control file to a sequential file; then try to import the transmission control file to a different cluster with a larger allocation. Delete the unupdated session header; then do an ADDSES to recreate the header, and then do Add actions for all the action records.

4400A- INVALID KEYVALUE FOR TIME= KEYWORD

Cause: The TIME= key value has an improper format.

Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.

Action: Consult the documentation for the required format for the TIME key value and resubmit the control statement.

- - Cause: An invalid keyword was specified on a key verb.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Modify the control statement by removing the invalid keyword and resubmit the control statement.

44002- INVALID KEYVALUE FOR KEYWORD - %%%%%%%%

- Cause: The key value for the identified keyword is longer than allowed.
- Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
- Action: Modify the control statement by shortening the key value for the identified keyword and resubmit the control statement.
- 44003- SYNTAX ERROR PROCESSING KEYWORD %%%%%%%%
 - Cause: A syntax error was found in a control statement.
 - Effect: Processing for this control statement is stopped and the requested operation is not performed.
 - Action: Correct the syntax error and resubmit the control statement.

44004- DUPLICATE KEYWORD - %%%%%%%%

- Cause: The keyword identified has already been specified earlier in the control statement.
- Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
- Action: Delete one of the duplicate keywords and resubmit the control statement.

44005- KEYWORD - %%%%%%% - IS REQUIRED FOR THIS VERB

- Cause: The keyword identified is missing on the control statement and is required for this operation.
- Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
- Action: Specify the required keyword(s) and resubmit the control statement.
- 44006- KEYWORD %%%%%%% NOT ALLOWED FOR THIS VERB
 - Cause: The keyword identified is not allowed on the control statement and is required for this operation.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Delete the specified keyword(s) and resubmit the control statement.
- 44007- KEYVALUE FOR KEYWORD %%%%%%% DOES NOT HAVE MINIMUM REQUIRED LENGTH
 - Cause: The keyword identified has a key value with a length less than the required minimum for this operation.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Correct the identified keyword and resubmit the control statement.
- 44008- KEYVALUE FOR KEYWORD %%%%%%% HAS INVALID CHARACTERS
 - Cause: The keyword identified has a key value containing characters that are not allowed.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Correct the identified keyword and resubmit the control statement.
- 44009- INVALID KEYVALUE IN DATE= KEYWORD
 - Cause: The DATE= key value has an improper format.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Correct the DATE key value and resubmit the control statement.

4405A- CISIZE=0 IS INVALID

Cause: An invalid key value of 0 was specified.

- Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
- Action: Modify the control statement by either removing this keyword or using a nonzero value.

4405B- DSORG= KEYVALUE NOT RECOGNIZED

- Cause: An invalid keyword parameter was specified.
- Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
- Action: Correct the invalid keyword value and resubmit the control statement.

4405C- SPACE= HAS INVALID CHARACTER(S) IN SUBPARAMETER(S)

- Cause: An invalid format of a SPACE= subparameter was specified.
- Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
- Action: Correct the invalid keyword subparameter and resubmit the control statement.

4405D- RECFM= KEYVALUE NOT RECOGNIZED

- Cause: An invalid keyword parameter was specified.
- Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
- Action: Correct the invalid key value and resubmit the control statement.
- 4405E- DELATTR= KEYWORD SPECIFIED AND DSORG=FR WAS NOT SPECIFIED
 - Cause: DELATTR can only be specified if DSORG=FR; DSORG=FR was not found.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Modify the control statement by removing the invalid keyword or inserting the missing keyword and resubmit the control statement.

4405F- DELATTR= KEYVALUE NOT RECOGNIZED

Cause: An invalid keyword parameter was specified.

- Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
- Action: Correct the invalid key value and resubmit the control statement.
- 4405I- OUTDDPAS= KEYWORD SPECIFIED BUT OUTDD= KEYWORD WAS NOT SPECIFIED
 - Cause: OUTDDPAS can only be specified if OUTDD is; OUTDD was not found.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Modify the control statement by removing the invalid keyword or inserting the missing keyword and resubmit the control statement.
- 4405J- CONVERT= KEYVALUE NOT RECOGNIZED

Cause: An invalid key value was specified.

- Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
- Action: Correct the invalid key value and resubmit the control statement.

4405K- COMPRESS= KEYVALUE NOT RECOGNIZED

- Cause: An invalid key value was specified.
- Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
- Action: Correct the invalid key value and resubmit the control statement.
- 4405L- KEYLEN= KEYWORD SPECIFIED WHEN DSORG=IS NOT SPECIFIED
 - Cause: KEYLEN can only be specified if DSORG=IS. Either DSORG was not specified or it was not specified as DSORG=IS.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Modify the control statement by removing the invalid keyword or changing the value of DSORG and resubmit the control statement.

4405M- KEYLEN=0 IS ILLEGAL FOR DSORG=IS

- Cause: An invalid key value of 0 was specified for KEYLEN.
- Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
- Action: Modify the control statement by either removing this keyword or using a nonzero value.

4405N- KEYLEN= KEYWORD MUST BE SPECIFIED FOR DSORG=IS FILES

- Cause: KEYLEN must be specified if DSORG=IS; KEYLEN was not found.
- Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
- Action: Modify the control statement by inserting the missing keyword and resubmit the control statement.
- 44050- KEYOFF= KEYWORD SPECIFIED WHEN DSORG=IS NOT SPECIFIED
 - Cause: KEYOFF can only be specified if DSORG=IS; DSORG=IS was not found.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Modify the control statement by removing the invalid keyword or inserting the missing keyword and resubmit the control statement.
- 4405P- DISP= KEYVALUE NOT RECOGNIZED
 - Cause: An invalid key value was specified.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Correct the invalid key value and resubmit the control statement.

4405Q- DECOMPR= KEYVALUE NOT RECOGNIZED

- Cause: An invalid key value was specified.
- Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
- Action: Correct the invalid key value and resubmit the control statement.

4405R- TRUNMSG= KEYVALUE NOT RECOGNIZED

Cause: An invalid key value was specified.

- Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
- Action: Correct the invalid key value and resubmit the control statement.

4405S- PADCHAR= KEYVALUE LENGTH IS INVALID

- Cause: An invalid length for the key value was specified.
- Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
- Action: Correct the invalid key value length and resubmit the control statement.
- 44051- NO MEMORY AVAILABLE FOR BUFFER GETMAIN
 - Cause: No memory is available in the address space to build A transmission control file record.
 - Effect: The operation is terminated.
 - Action: Allocate a larger REGION= size on the EXEC statement and rerun the job.
- 44054- INDDPASS= KEYWORD SPECIFIED BUT INDD= NOT SPECIFIED
 - Cause: The INDDPASS keyword requires the INDD keyword; INDD was not found.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Modify the control statement by removing the invalid keyword or inserting the missing keyword and resubmit the control statement.
- 44058- SPACE= KEYWORD HAS BEEN SPECIFIED WITH MORE THAN TWO SUBPARAMETERS
 - Cause: The SPACE= format only allows two subparameters. The first one is Initial Allocation and the second is Maximum Allocation.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Modify the control statement by removing the extra portion of the subparameter and resubmit the control statement.

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- 44059- SPACE= SUBPARAMETER NUMBER(2) IS SMALLER THAN SUBPARAMETER NUMBER(1)
 - Cause: The SPACE= format for subparameters is positional. The first one is Initial Allocation and the second is Maximum Allocation. Initial Allocation cannot be larger than Maximum Allocation.
 - Effect: The remaining keywords on the verb are checked for validity; the requested operation is not performed.
 - Action: Modify the control statement to correct the subparameters and resubmit the control statement.
- 4410A- NOT ENOUGH MEMORY AVAILABLE TO STAGE FILE, GET BUFFER FAILED
 - Cause: A buffer large enough to hold the largest staging record could not be allocated.
 - Effect: The operation is terminated before any records have been written to the staging file.
 - Action: Examine the trace table for a VSAM error message cause and retry the staging operation.
- 4410B- UNABLE TO CLOSE STAGING FILE %%%%%%%%
 - Cause: Unable to close the VSAM staging file.
 - Effect: The operation is terminated, the file has been staged, but this program cannot close the staging file.
 - Action: The staging file will be closed by a higher level module; examine the trace table to find the cause of the VSAM error.

4410C- UNABLE TO OPEN QSAM FILE TO BE STAGED - %%%%%%%%

- Cause: The Open macro for a QSAM file failed.
- Effect: The operation is terminated without any records written to the staging file.
- Action: 1. The INDD= control statement could be a VSAM file instead of a QSAM file.
 - 2. A JCL error in the definition of the QSAM file could cause this failure.

- 4410D- FILE TRANSFER PACKAGE DOES NOT SUPPORT QSAM FILES OF UNDEFINED RECORD LENGTH
 - Cause: The File Transfer Package checks the file format and disallows undefined record length.
 - Effect: The operation is terminated without any records written to the staging file.

Action: This file cannot be staged.

- 4410E- FILE TRANSFER PACKAGE DOES NOT SUPPORT QSAM VARIABLE SPANNED FILES
 - Cause: The File Transfer Package checks the file format and disallows variable spanned QSAM files from being staged.
 - Effect: The operation is terminated without any records written to the staging file.

Action: This file cannot be staged.

- 4410F- I/O ERROR WRITING TO STAGING FILE %%%%%%%%
 - Cause: An I/O error has been reported by the VSAM Write module while writing a record to the staging file.
 - Effect: The operation is terminated midway through the stage operation. This will leave a partially complete staging file with a header record showing "Transfer Not Complete".
 - Action: Consult available IBM recovery methods for VSAM files, erase the staging file, and retry the staging operation.
- 4410G- DUPLICATE KEY FOUND FOR NON-HEADER RECORD IN STAGE FILE %%%%%%%
 - Cause: A duplicate record was found in the staging file during the write of a nonheader record.
 - Effect: The operation is terminated without completion. The staging file header will show "Transfer Not Complete".
 - Action: Erase the staging file and retry stage.

- 4410H- CANNOT COMPRESS RECORD NUMBER %%%%% IN QSAM FILE %%%%%%%%
 - Cause: The compress logic has reached End-of-Buffer before finding End-of-Record. This is caused by too large a record or a logic error in compress.
 - Effect: The operation is terminated without completion. The logical staging file header will show "Transfer Not Complete".
 - Action: Examine the record number in the QSAM file specified. If the record length is too large, the file cannot be staged; however, if the record length is fine, examine the data to find out why the compress failed.
- 4410I- THE INPUT FILE %%%%%%% CONTAINS NO DATA RECORDS, STAGE CANNOT COMPLETE SUCCESSFULLY
 - Cause: End-of-File on the input file has been reached before any records have been written to the staging file.
 - Effect: The operation is terminated without completion. The logical staging file header will show "Transfer Not Complete", and there will be no other records for this logical file.
 - Action: Examine the input file specified. If the file is empty, prepare the input file. If the file is not empty, then examine the control statements for the DDNAME= that was specified and make sure that the correct name was specified.
- 4410J- I-O ERROR READING INPUT FILE: %%%%%%%%
 - Cause: Error detected when attempting to read record from QSAM data set.
 - Effect: The operation is terminated without completion. The logical staging file header will show "Transfer Not Complete".
 - Action: Examine the input file specified. If the file is empty, re-prepare the input file. If the file is not empty, determine the cause of error. When the cause of error is corrected, erase the logical staging file, and retry the operation.
44100- FILE %%%%%%% SUCCESSFULLY STAGED INTO %%%%%%%%

Cause: The specified file was staged successfully.

- Effect: The operation is complete; the staging file can now be accessed.
- Action: None.
- - Cause: The file specified for OUTDD= cannot be opened as a VSAM file.
 - Effect: The operation is terminated without writing any records to the staging file.
 - Action: Check the JCL for file type to verify that the DD statement for OUTDD= is that of a VSAM file. If no OUTDD= is being used, then check the file structure for the default staging file name as defined in the default table.
- 44102- LOGIC ERROR, NAME OF LOGICAL STAGING FILE IS NULL WHICH IS NOT ALLOWED
 - Cause: The file name specified as NAME= is equal to NULLS.
 - Effect: The operation is terminated without writing any records to the staging file.
 - Action: There is an error in the control statement. Check the logic because NAME= is a required field and NULLS should have been detected earlier.
- 44103- I/O ERROR WHILE WRITING STAGING FILE HEAD IN FILE -%%%%%%%%
 - Cause: An I/O error has been reported by the VSAM Write module during the write of the header record.
 - Effect: The operation is terminated without writing any records to the staging file.
 - Action: Consult available error recovery methods for VSAM files and retry the staging operation.

- - Cause: A duplicate header record has been found in the staging file during the write of the header record.
 - Effect: The operation is terminated without writing any records to the staging file.
 - Action: 1. Determine if this is an accidental attempt to do a duplicate stage of the same QSAM file. If so, no correction is required.
 - Determine if the control statements used the wrong OUTDD=, NAME=, or SOURCE=. If so, change the control statements and stage the file.
 - 3. If neither of the above, list the headers in the staging file and determine if the existing logical file is valid data. If it is valid data, the new logical file must be staged with a new NAME= or new SOURCE= statement. If it is invalid data, erase the invalid data and stage a new logical file.
- 44105- I/O ERROR WHILE LOOKING FOR DUPLICATE HEADER RECORD IN FILE %%%%%%%
 - Cause: An I/O error has been reported by the VSAM Read module.
 - Effect: The operation is terminated without writing any records to the staging file.
 - Action: Consult available error recovery methods for VSAM files and retry the staging operation.
- - Cause: The logical file header cannot be updated for Transfer complete at the end of the staging operation. Most likely a logic error caused this error.
 - Effect: The staging file header still have the "Transfer Not Complete" flag set; the record count will be zero, but the file has been completely staged.
 - Action: Try an erase to see if that can find the logical file header. If the erase is successful, then there is a logic error in the stage programming. If the erase is successful, then the possible overlap of erase and stage could cause the error.

- 44107- I/O ERROR ON UPDATE OF HEADER AT COMPLETION OF STAGE IN FILE - %%%%%%%
 - Cause: An I/O error has been reported by the VSAM Read module while updating the header record to show transfer complete.
 - Effect: The operation is terminated after the file has been staged, but the header record will show that the stage operation is not complete.
 - Action: Consult available IBM error recovery methods for VSAM files, erase the staging file, and retry the staging operation.
- 44108- I/O ERROR ON RE-READ OF HEADER FOR UPDATE ON STAGE DONE -FILE %%%%%%%
 - Cause: An I/O error has been reported by the VSAM Read module while rereading the header record in order to update the Transfer Complete flag.
 - Effect: The operation is terminated after the file has been staged, but the header record will show that the stage operation is not complete.
 - Action: Consult available IBM error recovery methods for VSAM files, erase the staging file, and retry the staging operation.
- 44109- UNABLE TO RELEASE BUFFER, POSSIBLE HIDDEN LOGIC ERROR
 - Cause: The allocated buffer for the staging file cannot be released. This would most likely be caused by a logic error that overwrote the buffer trailer at some time.
 - Effect: The operation is terminated before any records have been written to the staging file.
 - Action: Check all code that changes the staging file contents; retry the staging operation.
- 4420A- UNABLE TO ALLOCATE BUFFER FOR DECOMPRESS
 - Cause: A buffer large enough to hold the largest output record could not be allocated.
 - Effect: The operation is terminated before any records have been written to the output file.
 - Action: Examine the trace table for the VSAM error message cause and retry the unstage.

4420B- UNABLE TO CLOSE STAGING FILE - %%%%%%%%%

Cause: Unable to close the VSAM staging file.

- Effect: The operation is terminated; the file has been unstaged, but this program cannot close the staging file.
- Action: The staging file will be closed by a higher level module. Examine the trace table to find the cause of the VSAM error.
- 4420C- UNABLE TO OPEN QSAM FILE %%%%%%% TO BE USED FOR OUTPUT
 - Cause: The Open macro for a QSAM file failed.
 - Effect: The operation is terminated without any records written to the output file.
 - Action: 1. The DDNAME= control statement could be a VSAM file instead of a QSAM file.
 - 2. A JCL error in the definition of the QSAM file could cause this failure.
- 4420D- FILE TRANSFER PACKAGE DOES NOT SUPPORT QSAM FILES OF UNDEFINED RECORD LEN
 - Cause: The File Transfer package checks the file format AND does not allow undefined record length.
 - Effect: The operation is terminated without any records written to the output file.
 - Action: This file cannot be used as an output file.
- 4420E- FILE TRANSFER PACKAGE DOES NOT SUPPORT QSAM VARIABLE SPANNED FILES
 - Cause: The File Transfer package checks the file format and does not allow variable spanned QSAM files.
 - Effect: The operation is terminated without any records written to the output file.
 - Action: This file cannot be used as an output file.

4420F- I/O ERROR ON QSAM OUTPUT FILE

- Cause: AN I/O error has been reported by the QSAM Read module while looking for the next staging file record.
- Effect: The operation is terminated before the staging file was completely unstaged. The output file will be closed and reopened in an attempt to clear the partial file.
- Action: Consult available IBM recovery methods for QSAM files and retry the unstage. It is possible that a partial output file remains if it was not marked for reuse.
- 4420G- CONVERT FORMAT MISMATCH, CONVERT TO %%%%%% SPECIFIED FOR %%%%%~ PROCEEDING
 - Cause: Some kind of user error. The file will be passed through a translate table for the format it is already stored in.
 - Effect: The operation will continue but it is most likely that the data in the output file will not be usable.
 - Action: Check the status field in the staging file. If the status field is correct, clear the output file and unstage again without a CONVERT= statement.
- 4420H- COMPRESSED DATA FORMAT ERROR IN RECORD NUMBER - %%%%%%%%
 - Cause: The decompress logic has found a record that exceeds the input length.
 - Effect: The operation is terminated without completion. The output file will be closed and reopened in an attempt to clear the partially written file.
 - Action: Examine the record number in the staging file specified. Determine why the compress erred and correct the logic. The staging file must be restaged correctly before it is unstaged.

- 4420I- DECOMPRESSED DATA IS EXCEEDING BUFFER SIZE IN RECORD NUMBER - %%%%%%%
 - Cause: The decompress logic has found a record that exceeds the output buffer limits.
 - Effect: The operation is terminated without completion. The output file will be closed and reopened in an attempt to clear the partially written file.
 - Action: Examine the record number in the staging file specified. Determine why the output buffer is not large enough. It is possible that the Get Buffer does not get a large enough buffer or that the compress has an error.
- 4420J- INVALID LENGTH IN COMPRESSED DATA IN RECORD NUMBER -%%%%%%%%
 - Cause: The decompress logic has found a repeating string with a length less than three bytes. The compression routine is in error.
 - Effect: The operation is terminated without completion. The output file will be closed and opened in an attempt to clear the partially written file.
 - Action: Examine the record number in the staging file specified. Determine why the compress erred and correct the logic. The staging file must be restaged correctly before it is unstaged.
- 4420K- LOGICAL FILE IS MARKED AS TRANSFER NOT COMPLETE, UNSTAGE FUNCTION WILL PROCEED
 - Cause: The status flag in the logical file header is set to "Transfer Not Complete". Something halted the complete staging of this file.
 - Effect: The operation will attempt to unstage as much of the logical file as is found.
 - Action: Determine what halted the staging procedure. The output file is of questionable value. There is no way to determine if the output file is complete; therefore, an erase of the logical file and a rereceive of the remote file is recommended.

- - Cause: The status flag in the logical file header is set to "Delete in Process".
 - Effect: The operation is terminated without any records written to the output file.

Action: This logical file cannot be unstaged.

- 4420M- I/O ERROR ON RE-READ OF HEADER FOR UPDATE OF DELETE IN PROC-FILE %%%%%%%
 - Cause: An I/O error has been reported by the VSAM Read module while rereading the header record in order to update the "Delete in Process" flag.
 - Effect: The operation is terminated after the file has been unstaged; the staging file is not erased.
 - Action: Consult available IBM recovery methods for VSAM files; manually erase the staging file.
- - Cause: The logical file header cannot be found for "Delete in Process" flag set at the end of the unstage operation. Most likely a logic error has caused this condition.
 - Effect: The staging file will be unstaged but not erased on the completion of the operation.
 - Action: Try an erase to see if that can find the logical file header. If the erase is successful, then there is a logic error in the unstage/erase programming. If the erase is good, then the possible overlap of erase and unstage could cause the error.
- 44200- I/O ERROR ON UPDATE OF HEADER FOR DELETE IN PROCESS IN FILE - %%%%%%%
 - Cause: An I/O error has been reported by the VSAM Write module while updating the header record to show "Delete in Process".
 - Effect: The operation is terminated after the file has been unstaged but the staging file has not been erased.
 - Action: Consult available IBM recovery methods for VSAM files; manually erase the staging file.

- - Cause: The logical file header cannot be found for deletion at the end of an erase function in an unstage operation. Most likely a logic error has caused this condition.
 - Effect: The staging file will be unstaged but not completely erases on completion of the operation.
 - Action: Try an erase to see if that can find the logical file header. If the erase is successful, then there is a logic error in the unstage/erase programming. If the erase is good, then the possible overlap of erase and unstage could cause the error.

4420Q- UNABLE TO ERASE RECORD IN FILE - %%%%%%%%

- Cause: The VSAM Write module has returned an error code instead of erasing a record in the staging file.
- Effect: The operation is terminated midway through the erase function of unstage. The output file will be fully unstaged but the staging file will only be partially erased.
- Action: Examine the trace table to find the error code returned by VSAM and manually erase the staging file.
- 4420R- I/O ERROR ERASING RECORD IN FILE %%%%%%%%
 - Cause: An I/O error has been reported by the VSAM Write module while erasing a record in the staging file.
 - Effect: The operation is terminated midway through the erase function of the unstage. The output file will be fully unstaged but the staging file will only be partially erased.
 - Action: Consult available IBM recovery methods for VSAM files; manually erase the staging file.
- 4420S- TRUNCATION ERROR IN REL RECD NO. %%%%%%% WHILE UNSTAGING FILE %%%%%%% TO FILE %%%%%%%%
 - Cause: A staging file record is being truncated on output.
 - Effect: There is a partial loss of data from the input staging file record. The unstage operation will continue.
 - Action: The RECL and BLKSIZE parameters on the DD statement for the QSAM output file must be increased.

- 4420T- I/O ERROR ERASING LOGICAL FILE HEADER IN STAGING FILE %%%%%%%%
 - Cause: An I/O error has been reported by the VSAM Write module while erasing the header record in the staging file.
 - Effect: The operation is terminated midway through the erase function of the unstage. The output file will be fully unstaged but the staging file will only be partially erased.
 - Action: Consult available IBM recovery methods for VSAM files; manually erase the staging file.
- 4420U- I/O ERROR WHILE GETTING LOGICAL FILE HEADER TO DELETE IN FILE - %%%%%%%
 - Cause: An I/O error has been reported by the VSAM Read module while looking for the header record to delete.
 - Effect: The operation is terminated midway through the erase function of the unstage. The output file will be fully unstaged but the staging file will only be partially erased.
 - Action: Consult available IBM recovery methods for VSAM files; manually erase the staging file.
- 4420V- LOGICAL FILE IS MARKED AS HAVING A ZERO RECORD COUNT, THE UNSTAGE FUNCTION WILL PROCEED
 - Cause: The relative record count in the logical file header is set to zero. Something halted the complete staging of this file or the remote file received was empty.
 - Effect: The operation will attempt to unstage as much of the logical file as is found.
 - Action: Determine what halted the staging procedure. The output file is of questionable value. There is no way to determine if the output file is complete; therefore, an erase of the logical file and a rereceive of the remote file is recommended.

Cause: A successful unstage operation occurred.

Effect: The operation is complete.

Action: None.

- Cause: The file specified for INDD= cannot be opened as a VSAM file.
- Effect: The operation is terminated without writing any records to the output file.
- Action: Check the JCL for file type to verify that the DD statement for INDD= is that of a VSAM file. If no INDD= is being used, then check the file structure for the default staging file name as defined in the default table.
- 44202- LOGIC ERROR, NAME OF LOGICAL STAGING FILE IS NULL WHICH IS NOT ALLOWED
 - Cause: The file name specified as NAME= is equal to NULLS.
 - Effect: The operation is terminated without writing any records to the output file.
 - Action: There is an error in the control statement. Check logic because this is a required field; NULLS should have been trapped earlier.
- - Cause: The logical file header requested was not found in the staging file.
 - Effect: The operation will terminate without writing any records to the output file.
 - Action: This is most likely a user error. Either the wrong logical file was requested of the wrong INDD= for the staging file name was specified. Correct the error and reattempt the unstage.
- 44204- UNABLE TO RELEASE BUFFER, POSSIBLE HIDDEN LOGIC ERROR
 - Cause: The allocated buffer for the decompress cannot be released. This would most likely be caused by a logic error in the decompress that overwrote the buffer trailer at some time.
 - Effect: The operation is terminated before any records have been written to the output file.
 - Action: Check the code for decompress for possibility of overwriting the buffer trailer.

- 44205- I/O ERROR WHILE LOOKING FOR LOGICAL HEADER RECORD IN FILE %%%%%%%
 - Cause: An I/O error has been reported by the VSAM Read module while looking for a logical header record.
 - Effect: The operation is terminated without writing any records to the output file.
 - Action: Consult available IBM recovery methods for VSAM files and retry the unstage.
- 44206- WARNING-DECOMPRESS SPECIFIED BUT LOGICAL FILE IS NOT COMPRESSED
 - Cause: The status field in the logical header does not show data as being compressed, but DECOMPR=YES was specified in the control statements.
 - Effect: The operation will continue and the unstage will attempt to decompress the staging file.
 - Action: Verify that the staging file status field is correct. If the staging file was not compressed, then the output file data will be invalid. The output file should be cleared and the unstage should be run with no DECOMPR= .
- 44207- WARNING-LOGICAL FILE IS IN COMPRESSED FORMAT, BUT DECOMPRESS WAS INHIBITED (DECOMPR=NO)
 - Cause: The status filed in the logical header shows data as being compressed, but DECOMPR=NO was specified in the control statements.
 - Effect: The operation will continue and the unstage will write the output file without trying to decompress.
 - Action: Verify that the staging file status field is correct. If the staging file was compressed, then the output file data will be compressed also. If this is incorrect, clear the output file and unstage with DECOMPR=YES.

- 44208- I/O ERROR WHILE LOOKING FOR LOGICAL HEADER RECORD IN FILE %%%%%%%
 - Cause: An I/O error has been reported by the VSAM Read module while looking for the next staging file record.
 - Effect: The operation is terminated before the staging file was completely unstaged. The output file will be closed and reopened in an attempt to clear the partial file.
 - Action: Consult available IBM recovery methods for VSAM files and retry the unstage. It is possible that a partial output file remains if it is not marked for reuse.
- 44209- ERROR WHILE TRYING TO ALLOCATE BUFFER
 - Cause: A VSAM I/O module reported an error during a Get Buffer request.
 - Effect: The operation is terminated before any records have been written to the output file.
 - Action: Examine the trace table for the VSAM error message cause and retry the unstage.
- 4430A- UNABLE TO ERASE RECORD IN FILE %%%%%%%%
 - Cause: The VSAM Write module has returned an error code instead of erasing a record in the staging file.
 - Effect: The operation is terminated midway through the Erase operation. The staging file will only be partially erased.
 - Action: Examine the trace table to find the error code returned by VSAM and reerase the staging file.
- 4430B- I/O ERROR ERASING LOGICAL FILE HEADER IN STAGING FILE %%%%%%%
 - Cause: An I/O error has been reported by the VSAM Write module while erasing the header record in the staging file.
 - Effect: The operation is terminated at the end of the erase operation. The staging file will be erased except for the header record.
 - Action: Consult available IBM recovery methods for VSAM files; and reerase the staging file.

- 4430C- I/O ERROR WHILE GETTING LOGICAL FILE HEADER TO DELETE IN FILE - %%%%%%%
 - Cause: An I/O error has been reported by the VSAM Read module while looking for the header record to delete.
 - Effect: The operation is terminated at the end of the erase operation; the staging file will be erased except for the header.
 - Action: Consult available IBM recovery methods for VSAM files; and reerase the staging file.
- 44300- STAGING FILE %%%%%%%% HAS BEEN ERASED

Cause: A successful erase operation is being reported.

Effect: The operation is complete.

Action: None.

- - Cause: The file specified for INDD= cannot be opened as a VSAM file.
 - Effect: The operation is terminated without erasing any records from the staging file.
 - Action: Check JCL for file type to verify that the DD statement for INDD= is that of a VSAM file. If no INDD= is being used, then check the file structure for the default staging file name as defined in the Default Table.
- 44302- LOGIC ERROR, NAME OF LOGICAL STAGING FILE IS NULL WHICH IS NOT ALLOWED
 - Cause: The file name specified as NAME= is equal to NULLS.
 - Effect: The operation is terminated without erasing any records from the staging file.
 - Action: There is an error in the control statement. Check logic because this is a required field, and NULLS should have been trapped earlier.

- - Cause: The logical file header for the file to be erased is not found.
 - Effect: No records are erased from the staging file.
 - Action: Possible error in control statements for INDD=, NAME=, or SOURCE= . Otherwise, the logical file does not exist.
- 44304- I/O ERROR ON READ OF HEADER FOR UPDATE OF DELETE IN PROCESS-FILE %%%%%%%
 - Cause: An I/O error has been reported by the VSAM Read module while reading the header record in order to update the "Delete in Process" flag.
 - Effect: The operation is terminated before any records are erased from the staging file.
 - Action: Consult available IBM recovery methods for VSAM files; manually erase the staging file.
- 44305- LOGIC ERROR, SOURCE OF LOGICAL STAGING FILE IS NULL WHICH IS NOT ALLOWED
 - Cause: The source specified in SOURCE= is equal to NULLS.
 - Effect: The operation is terminated without erasing any records from the staging file.
 - Action: There is an error in the control statement. Check logic because this is a required field, and NULLS should have been trapped earlier.
- 44306- I/O ERROR WHILE READING NEXT RECORD TO DELETE IN FILE %%%%%%
 - Cause: An I/O error has been reported by the VSAM Read module while looking for the next record to delete.
 - Effect: The operation is terminated midway through the erase operation; the staging file will only be partially erased.
 - Action: Consult available IBM recovery methods for VSAM files; and reerase the staging file.

44307- UNABLE TO CLOSE STAGING FILE - %%%%%%%%%

Cause: Unable to close the VSAM staging file

- Effect: The operation is terminated, the file has been erased, but this program cannot close staging file.
- Action: The staging file will be closed by a higher level module; examine the trace table to find the cause of the VSAM error.
- 44308- I/O ERROR ON UPDATE OF HEADER FOR DELETE IN PROCESS IN FILE - %%%%%%%
 - Cause: An I/O error has been reported by the VSAM Write module while updating the header record to show "Delete in Process".
 - Effect: The operation is terminated before erasing any records from the staging file.
 - Action: Consult available IBM recovery methods for VSAM files; and reerase the staging file.
- - Cause: The logical file header cannot be found for deletion at the end of an erase function. Most likely a logic error has caused this condition.
 - Effect: The staging file will be erased except for the header record.
 - Action: Retry the erase to see if you can find the logical file header. If erase is successful, the there is a logic error in the erase programming. If erase is good, then a possible overlap of erases could cause error.
- 44401- UNABLE TO OPEN STAGING FILE %%%%%%%%
 - Cause: The file specified for INDD= cannot be opened as a VSAM file.
 - Effect: The operation is terminated while printing a list.
 - Action: Check JCL for file type to verify that the DD statement for INDD= is that of a VSAM file. If no INDD= is being used, then check the file structure for the default staging file name as defined in the default table.

- 44402- NULL KEY NOT FOUND IN STAGING FILE %%%%%%% NON FORMATTED FILE ERROR
 - Cause: The staging file is searched for a null record to use as a starting point but the null record is not found. The file was not correctly formatted at start time.
 - Effect: The operation is terminated while printing a list.
 - Action: The file might be damaged and should be verified before further use. A null record must be inserted at the start.
- 44403- I/O ERROR GETTING NEXT STAGING FILE HEADER RECORD TO PRINT - FILE %%%%%%%
 - Cause: An I/O error has been reported by the VSAM Read module while reading the next header record in order to print.
 - Effect: The operation is terminated without completely printing the staging file.
 - Action: Consult available IBM recovery methods for VSAM files; and reprint the staging file.
- 44404- UNABLE TO CLOSE STAGING FILE %%%%%%%%
 - Cause: Unable to close the VSAM staging file.
 - Effect: The operation is terminated, the file has been printed, but this program cannot close staging file.
 - Action: The staging file will be closed by a higher level module; examine the trace table to find the cause of the VSAM error.
- 44405- I/O ERROR GETTING LAST RECORD FOR LOGICAL FILE IN STAGING FILE %%%%%%%
 - Cause: An I/O error has been reported by the VSAM Read module while reading the last record for a logical staging file.
 - Effect: The operation is terminated without completely printing the staging file.
 - Action: Consult available IBM recovery methods for VSAM files; and reprint the staging file.

- 44406- I/O ERROR GETTING NEXT STAGING FILE HEADER IN STAGING FILE %%%%%%%
 - Cause: An I/O error has been reported by the VSAM Read module while reading the next record in a staging file which is expected to be a staging file header.
 - Effect: The operation is terminated without completely printing the staging file.
 - Action: Consult available IBM recovery methods for VSAM files; and reprint the staging file.
- 44407- I/O ERROR RE-READING A LOGICAL FILE HEADER IN STAGING FILE %%%%%%%
 - Cause: An I/O error has been reported by the VSAM Read module while rereading a logical file header that SFT-H still expects to find.
 - Effect: The operation is terminated without completely printing the staging file.
 - Action: Consult available IBM recovery methods for VSAM files; and reprint the staging file.
- 45001- INVALID KEYWORD %%%%%%%%
 - Cause: Invalid keyword specified.
 - Effect: The rest of the keywords on the verb are checked for validity; the operation requested is not performed.
 - Action: Correct the invalid keyword; resubmit the control statement.
- - Cause: The key value for the identified keyword is longer than allowed.
 - Effect: The rest of the keywords on the verb are checked for validity; the operation requested is not performed.
 - Action: Modify the control statement by shortening the key value for the identified keyword and resubmit the control statement.

- Cause: A syntax error was detected in a control statement.
- Effect: Processing for this control statement is stopped; the operation requested is not performed.
- Action: Correct the syntax error; resubmit the control statement.

45004- DUPLICATE KEYWORD - %%%%%%%%

- Cause: The keyword identified has already been specified in the control statement.
- Effect: The rest of the keywords on the verb are checked for validity; the operation requested is not performed.
- Action: Delete one of the duplicate keywords; resubmit the control statement.

45005- MISSING REQUIRED KEYWORD - %%%%%%%%

- Cause: The keyword identified is missing on the control statement and is required for this operation.
- Effect: The rest of the keywords on the verb are checked for validity; the operation requested is not performed.
- Action: Specify the required keyword(s); resubmit the control statement.
- 45006- KEYWORD %%%%%%% CANNOT BE SPECIFIED FOR THIS VERB
 - Cause: The keyword identified is not allowed on the control statement for this operation.
 - Effect: The rest of the keywords on the verb are checked for validity; the operation requested is not performed.
 - Action: Delete the specified keyword(s); resubmit the control statement.
- 45007- KEYWORD %%%%%%% HAS A KEYVALUE LENGTH LESS THAN THE REQUIRED MINIMUM
 - Cause: The keyword identified has a key value with a length less than the required minimum for this operation.
 - Effect: The rest of the keywords on the verb are checked for validity; the operation requested is not performed.
 - Action: Correct the identified keyword; resubmit the control statement.

45008- ILLEGAL CHARACTERS IN KEYVALUE FOR KEYWORD - %%%%%%%%

- Cause: The keyword identified has a key value containing invalid characters.
- Effect: The rest of the keywords on the verb are checked for validity; the operation requested is not performed.
- Action: Correct the identified keyword; resubmit the control statement.
- 45009- ILLEGAL DATE ENTRY FORMAT
 - Cause: The key value specified for date does not have a valid format.
 - Effect: The rest of the keywords on the verb are checked for validity; the operation requested is not performed.
 - Action: Consult the documentation for the required format for the date keyword; resubmit the control statement.

45010- ILLEGAL TIME ENTRY FORMAT

- Cause: The key value specified for time does not have a valid format.
- Effect: The rest of the keywords on the verb are checked for validity; the operation requested is not performed.
- Action: Consult the documentation for the required format for the time keyword; resubmit the control statement.
- 45101- MEMORY UNAVAILABLE FOR THE HISTORY FILE FORMAT
 - Cause: No memory was allocated at the start of format checking and moving of control statement input.
 - Effect: The history file has no buffer to read into or use to store key values. The operation is terminated without further editing of key values.
 - Action: Increase the size of the REGION parameter on the job statement. Resubmit the control statement.

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45102- FORMAT FOR STARTING DATE IS INVALID

- Cause: The month value specified in MMDDYY is greater than 12.
- Effect: The rest of the key values will be verified, but the requested report will not print.
- Action: Correct the format of the starting date; resubmit the control statement.

45103- FORMAT FOR ENDING DATE IS INVALID

- Cause: The month value specified in MMDDYY is greater than 12.
- Effect: The rest of the key values will be verified, but the requested report will not print.
- Action: Correct the format of the ending date; resubmit the control statement.

45104- VALUE SPECIFIED FOR TYPE= IS INVALID

- Cause: The value specified for TYPE= is not recognized.
- Effect: The rest of the key values will be verified, but the requested report will not print.
- Action: Correct the value of the TYPE=; resubmit the control statement.
- 45105- ENDING DATE SPECIFIED IS BEFORE STARTING DATE
 - Cause: The ending date must be the same or later than the starting date.
 - Effect: The rest of the key values will be verified, but the requested report will not print.
 - Action: Correct the ending date to have a valid date range; resubmit the control statement.

45106- ENDING TIME SPECIFIED IS BEFORE STARTING TIME

- Cause: The ending time must be later than the starting time.
- Effect: The rest of the key values will be verified, but the requested report will not print.
- Action: Correct the ending time to have a valid time range; resubmit the control statement.

- 4520A- UNABLE TO CLOSE WORK STAGING FILE %%%%%%% ON EXIT FROM MODULE
 - Cause: The VSAM Close macro has returned an error condition during the close of the staging file used as work space.
 - Effect: The requested report has been printed; only the work file is still open.
 - Action: The work file is only used by the exception report. If it remains open, no correction is needed; the exception report will close and reopen to clear at start of the next exception report.
- 4520B- UNABLE TO OPEN VSAM HISTORY FILE AT REPORT END
 - Cause: The VSAM Open macro has returned an error condition during the open of the history file that occurs once the report has finished.
 - Effect: The requested report will have been printed, but the history file will not be repositioned at "File Start". Any further processing of the history file during this job will either result in a "File Not Opened" error or an End-of-File condition.
 - Action: 1. Specify DEBUG=YES on the job statement and rerun the job; examine the trace table to determine the cause of the failed open.
 - 2. The next time that the File Maintenance Utility is executed, the history file will be opened and correctly positioned.
- 45201- UNABLE TO OPEN VSAM HISTORY FILE
 - Cause: The VSAM Open macro has returned an error condition during the open of the history file.
 - Effect: The requested report will not print.
 - Action: 1. Verify that the history file has a DD statement and DSN is correct.
 - 2. Specify DEBUG=YES on the job statement and rerun the job; examine the trace table to determine the cause of the failed open.

- 45202- I/O ERROR WHILE TRYING TO FIND NULL RECORD IN VSAM HISTORY FILE
 - Cause: Either the null record in the history file is missing, or a VSAM file I/O error was encountered.
 - Effect: The requested report will not print.
 - Action: 1. Verify that the history file has been formatted and verified.
 - 2. Specify DEBUG=YES on the job statement and rerun the job; examine the trace table to determine the cause of the I/O error.
- 45203- I/O ERROR WHILE TRYING TO READ THE NEXT RECORD IN THE VSAM HISTORY FILE
 - Cause: A VSAM I/O error occurred while reading the next history file record.
 - Effect: The requested report will not print.
 - Action: 1. Check that the history file was verified before job execution.
 - 2. If VSAM I/O error, export the history file to a sequential file, delete the old cluster, allocate the cluster, and import the history file to the cluster.
 - 3. Rerun the job with the same control statement.
- 45204- UNABLE TO CLOSE VSAM HISTORY FILE
 - Cause: The VSAM Close macro has returned an error condition during the close of the history file.
 - Effect: The requested report will not be printed.
 - Action: Change the DEBUG= to YES on the job statement and rerun the job; examine the resulting trace table for VSAM return code.
- 45205- UNABLE TO ALLOCATE VSAM BUFFER FOR SUMMARY TOTALS FOR SUMMARY REPORT OR WORK FILE FOR EXCEPTION REPORT
 - Cause: The VSAM Get Buffer macro has returned a nonzero value while allocating a buffer for summary totals.
 - Effect: The requested report will not be printed.
 - Action: Increase the REGION= parameter on the job statement and rerun the job.

45206- UNABLE TO OPEN QSAM HISTORY FILE - %%%%%%%%

- Cause: The QSAM Open macro has returned an error condition during the open of the history file.
- Effect: The requested report will not print.
- Action: 1. Verify that history file has DD statement and DSN is correct.
 - 2. Verify that the JCL correctly sets up QSAM file.
- 45207- UNABLE TO OPEN WORK STAGING FILE %%%%%%%%
 - Cause: The VSAM Open macro has returned an error condition during the open of the staging file to be used for work.
 - Effect: The requested report will not print.
 - Action: Verify that the staging file has a DD statement and the DDNAME is correct.
- 45208- UNABLE TO FREE THE VSAM BUFFER USED FOR THE WORK STAGING FILE
 - Cause: The VSAM Free Buffer macro has returned a nonzero value while freeing the buffer for the work staging file.
 - Effect: The requested report will not be printed or will be partially printed.
 - Action: There is a logic error that has allowed the buffer trailer to be overwritten. Examine all uses of this buffer to determine possible logic flaw.
- 45209- UNABLE TO ALLOCATE VSAM BUFFER FOR EXCEPTION REPORT WORK FILE
 - Cause: The VSAM Get Buffer macro has returned a nonzero value while allocating a buffer for summary totals.
 - Effect: The requested report will not be printed or will be partially printed.
 - Action: Increase the REGION= parameter on the job statement and rerun the job.

- 45251- THE DEFAULT NUMBER OF STAGING FILES OPEN(%%) HAS BEEN EXCEEDED
 - Cause: The summary report uses the default number of staging files open to size its totals buffer; however more staging files than the default allowed have been found.
 - Effect: The requested report will not print.
 - Action: Print the detail report to determine the number of staging files open. Change the default values table and reprint the summary report.
- 45252- I/O ERROR WHILE TRYING TO FIND NULL RECORD IN VSAM WORK STAGING FILE - %%%%%%%
 - Cause: Either the null record in the VSAM work staging file is missing or a VSAM file I/O error has been encountered.
 - Effect: The requested report will not print.
 - Action: 1. A logic error in the File Clear portion of the exception report could cause this.
 - 2. Specify DEBUG=YES on the job statement and rerun the job; examine the trace table to determine the cause of the I/O error.
- 45253- I/O ERROR WHILE TRYING TO READ THE NEXT RECORD IN THE VSAM WORK STAGING FILE %%%%%%%
 - Cause: A VSAM I/O error occurred while reading the next record in the work staging file.
 - Effect: The requested report will not print or will print partially.
 - Action: 1. The staging file used as work space for the exception report must have the cluster deleted and reallocated.
 - 2. Rerun the job with the same control statement.

- 45254- I/O ERROR WHILE TRYING TO WRITE THE NEXT RECORD IN THE VSAM WORK STAGING FILE %%%%%%%
 - Cause: A VSAM I/O error occurred while writing a record in the work staging file.
 - Effect: The requested report will not print or will print partially.
 - Action: 1. The staging file used as work space for the exception report must have the cluster deleted and reallocated to a larger cluster.
 - 2. Rerun the job with the same control statement.
- 45255- DUPLICATE KEY ENCOUNTERED IN WORK STAGING FILE %%%%%%%%
 - Cause: A duplicate record was found in the work staging file.
 - Effect: The requested report will not print or will print partially.
 - Action: This could only be caused by a logic error in the report. Look in these two places:
 - 1. The logic that clears the work staging file.
 - 2. The logic that writes records to the work staging file.

- 45256- I/O ERROR OR NOT FOUND WHILE TRYING TO RE-READ A SESSION START RECORD IN THE VSAM WORK STAGING FILE - %%%%%%%%
 - Cause: A VSAM I/O error or a logic error occurred while trying to reread a session Start record in the work staging file.
 - Effect: The requested report will not print or will print partially.
 - Action: There are two possible causes:
 - A logic error is causing the key to the work file to be improperly be saved or is being wiped out.
 - 2. There is an I/O error in the work staging file.

To determine the action:

- Replace the DEBUG= parameter on the job statement with DEBUG=YES, and rerun the job.
- 2. Examine the trace table for the cause of the I/O error.
- If there is a VSAM error:
- 1. The staging file used as work space for the exception report must have the cluster deleted and reallocated.
- 2. Rerun the job with the same control statement.

If a logic error causes the "NOT FOUND", correct the logic and rerun the job.

45257- UNABLE TO OPEN WORK STAGING FILE - %%%%%%%%

- Cause: The VSAM Open macro has returned an error condition during the open of the staging file to be used for work.
- Effect: The requested report will not print.
- Action: Verify that the staging file has a DD statement and DDNAME is correct.

- 45258- I/O ERROR WHILE TRYING TO READ THE NEXT RECORD IN THE VSAM WORK STAGING FILE %%%%%%%
 - Cause: A VSAM I/O error occurred while reading the next record in the work staging file during the print cycle.
 - Effect: The requested report prints partially.
 - Action: 1. The staging file used as work space for the exception report must have the cluster deleted and reallocated.
 - 2. Rerun the job with the same control statement.
- 45259- UNABLE TO CLOSE WORK STAGING FILE %%%%%%%%
 - Cause: The VSAM Close macro has returned an error condition during the close of the staging file to be used for work.
 - Effect: The requested report terminates in a partially complete state.
 - Action: Change the DEBUG= to YES on the job statement and rerun the job; examine the resulting trace table for a VSAM return code.
- 46001- INVALID KEYWORD %%%%%%%%
 - Cause: Invalid keyword specified.
 - Effect: The rest of the keywords on the verb are checked for validity; the operation requested is not performed.
 - Action: Correct the invalid keyword; resubmit the control statement.
- - Cause: The key value for the identified keyword is longer than allowed.
 - Effect: The rest of the keywords on the verb are checked for validity; the operation requested is not performed.
 - Action: Modify the control statement by shortening the key value for the identified keyword and resubmit the control statement.

- Cause: A syntax error was detected in a control statement.
- Effect: Processing for this control statement is stopped and the operation requested is not performed.
- Action: Correct the syntax error and resubmit the control statement.

46004- DUPLICATE KEYWORD - %%%%%%%%

- Cause: The keyword identified has already been specified earlier in the control statement.
- Effect: The rest of the keywords on the verb are checked for validity; the operation requested is not performed.
- Action: Delete one of the duplicate keywords, and resubmit the control statement.

46005- MISSING REQUIRED KEYWORD - %%%%%%%%

- Cause: The keyword identified is missing on the control statement and is required for this operation.
- Effect: The rest of the keywords on the verb are checked for validity; the operation requested is not performed.
- Action: Specify the required keyword(s); resubmit the control statement.
- 46006- KEYWORD %%%%%%% CANNOT BE SPECIFIED FOR THIS VERB
 - Cause: The keyword identified is not allowed on the control statement.
 - Effect: The rest of the keywords on the verb are checked for validity; the operation requested is not performed.
 - Action: Delete the specified keyword(s); resubmit the control statement.
- 46007- KEYWORD %%%%%%% HAS A KEYVALUE LENGTH LESS THAN THE REQUIRED MINIMUM
 - Cause: The keyword identified has a key value with a length less than the required minimum for this operation.
 - Effect: The rest of the keywords on the verb are checked for validity; the operation requested is not performed.
 - Action: Correct the identified keyword; resubmit the control statement.

46008- ILLEGAL CHARACTERS IN KEYVALUE FOR KEYWORD - %%%%%%%%

- Cause: The keyword identified has a key value that contains invalid characters.
- Effect: The rest of the keywords on the verb are checked for validity; the operation requested is not performed.
- Action: Correct the identified keyword; resubmit the control statement.
- 46100- MESSAGE %%%%% ADDED TO MESSAGE FILE SUCESSFULLY
 - Cause: The successful completion of the requested operation.
 - Effect: The message is created on the message file.
 - Action: None.
- 46101- NO MEMORY AVAILABLE TO BUILD MESSAGE RECORD FOR MESSAGE %%%%
 - Cause: No memory is available in the address space to build a message file record.
 - Effect: The operation is terminated and the message is not added to the message file.
 - Action: Allocate a larger REGION= size on the EXEC statement and rerun the job.
- 46102- DUPLICATE MESSAGE %%%%% ENCOUNTERED ON MESSAGE FILE
 - Cause: There is already a message record on the message file with the same code as specified on the control statement.
 - Effect: The operation is terminated and the control statement is ignored.
 - Action: Delete the message record from the message file and rerun the job.
- 46103- MESSAGE FILE I/O ERROR WHILE TRYING TO ADD MESSAGE %%%%%
 - Cause: An I/O error occurred while trying to all the message to the message file.
 - Effect: The operation is terminated and the control statement is ignored.
 - Action: Try to export the message file to a sequential file; then rerun the job with the same control statement.

46200- MESSAGE - %%%%% - DELETED FROM MESSAGE FILE

- Cause: The successful completion of the requested operation.
- Effect: The message record is deleted from the message file.

Action: None.

- 46201- NO MEMORY AVAILABLE TO READ MESSAGE RECORD FOR MESSAGE -%%%%% - DURING DELMSG FUNCTION
 - Cause: No memory is available in the address space to build a message record.
 - Effect: The operation is terminated and the message is not deleted from the message file.
 - Action: Allocate a larger REGION= size on the EXEC statement and rerun the job.
- 46202- UNABLE TO FIND MESSAGE %%%% FOR DELMSG FUNCTION(READ)
 - Cause: The message specified cannot be found on the message file.
 - Effect: The operation is terminated and the control statement is ignored.
 - Action: Check for correct MSGID= key value in the control statement.
- 46203- OTHER FILE I/O ERROR DURING READ FOR MESSAGE %%%% DURING DELMSG FUNCTION(READ)
 - Cause: An I/O error occurred while trying to delete the message from the message file.
 - Effect: The operation is terminated and the control statement is ignored.
 - Action: Try to export the message file to a sequential file with a larger allocation and rerun the the job with the same control statement.

- 46204- UNABLE TO FIND MESSAGE %%%% FOR DELMSG FUNCTION(DELETE)
 - Cause: The message specified cannot be found on the message file.
 - Effect: The operation is terminated and the control statement is ignored.
 - Action: List the message file to verify that this MSGID= still exists; rerun the job.
- 46205- OTHER FILE I/O ERROR DURING READ FOR MESSAGE %%%% DURING DELMSG FUNCTION(DELETE)
 - Cause: An I/O error occurred while trying to delete the message from the message file.
 - Effect: The operation is terminated and the control statement is ignored.
 - Action: Try to export the message file to a sequential file with a larger allocation and rerun the the job with the same control statement.
- 46401- MESSAGE FILE IS UNFORMATTED, UNABLE TO FIND NULL KEY RECORD
 - Cause: The message file is searched for a null record to use as a starting point; the null record is not found. The file was not correctly formatted at start time.
 - Effect: The operation is terminated before printing a list.
 - Action: The file might be damaged and should be verified before further use. A null record must be inserted at the start.

46402- VSAM I/O ERROR WHILE GETTING NULL KEY MESSAGE

- Cause: An I/O error has been reported by the VSAM Read module while reading the next message record in order to print.
- Effect: The operation is terminated without completely printing the message file.
- Action: Consult available IBM recovery methods for VSAM files; and reprint the message file.

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46403- VSAM I/O ERROR WHILE READING NEXT MESSAGE RECORD

- Cause: An I/O error has been reported by the VSAM Read module while reading the next message record in order to print.
- Effect: The operation is terminated without completely printing the message file.
- Action: Consult available IBM recovery methods for VSAM files; and reprint the message file.

47100- NOT ABLE TO FIND INITIAL NULL TSF RECORD

Cause: The file was not initialized correctly.

- Effect: Job must be rerun.
- Action: Correct the JCL before rerunning (possible missing DD statement).
- 47101- I/O ERROR ON FIRST READ OF TCF
 - Cause: VSAM error encountered reading transmission control file.
 - Effect: Rerun.
 - Action: Export transmission status file to tape; assign a NEW_NAME; import to NEW_NAME.
- 47102- I/O ERROR ON TSF READ (NOT FIRST READ)
 - Cause: A VSAM error occurred during a read operation.
 - Effect: Rerun the job.
 - Action: Export to tape; assign transmission status file to alternate device; import to new assignment.
- 47201 INVALID KEYWORD %%%%%%%% ONLY "TYPE" KW ALLOWED
 - Cause: You entered an invalid keyword while coding a summary statistics report job.
 - Effect: The summary status report is not produced.
 - Action: Correct the keyword and resubmit the job.

- Cause: You entered an invalid keyword while coding a summary statistics report job. Valid keywords are COMP, COMPLETE, INCOMP, INCOMPLETE, NOSTART, NOT-STARTED, NOTRAN, and NO-TRANSMISSION.
- Effect: The summary status report is not produced.
- Action: Correct the keyword and resubmit the job.
- - Cause: While preparing a summary statistics report, the sum of completed actions exceeded the total number of actions.
 - Effect: The summary status report is not produced.
 - Action: If the problem persists, contact your Honeywell representative.
- 47204 CAN NOT FIND TSF DUMMY (FIRST) RECORD

Cause: The transmission status file is corrupted.

- Effect: The summary status report is not produced.
- Action: If the problem persists, contact your Honeywell representative.
- 47205 VSAM I/O ERROR READING TSF DUMMY (FIRST) RECORD
 - Cause: VSAM could not read the first record of the transmission status file.
 - Effect: The summary status report is not produced.
 - Action: If the problem persists, contact your Honeywell representative.
- - Cause: VSAM could not read the record with the indicated key from the transmisison status file.
 - Effect: The summary status report is not produced.
 - Action: If the problem persists, contact your Honeywell representative.

- - Cause: While preparing a summary status report, the sum of record from all reports did not equal the number of records in the transmission status file.
 - Effect: The summary status report is not produced.
 - Action: If the problem persists, contact your Honeywell representative. Include an IDCAMS dump of the transmission status file.

Appendix C TRANSMISSION CONTROL PROGRAM CONDITION CODES

If the Transmission Control Program (SFTTCP) detects an error during execution, it terminates and issues a condition code which appears in the job listing. The meanings of the codes are listed in Table C-1.

Code	Meaning
00	All sessions and their associated actions completed successfully; pass data set empty
04	All sessions and their associated actions completed successfully; pass data set not empty
08	Not all actions (or no actions) of any or all sessions completed successfully; pass data set empty
0C	Not all actions (or no actions) of any or all sessions completed successfully; pass data set not empty
200	Failure opening message file
204	Failure opening history file
Table C-l (cont). Transmission Control Program Error Codes

Code	Meaning
208	Failure opening resource master file
212	Failure opening transmission control file
216	Failure opening transmission status file
220	Failure closing resource master file
224	Operator communications failure
228	Failure documenting startup parameters
232	Failure building trace table
236	Nonrecoverable error in internal module SlllO probable incorrect parameter value
240	Failure building in-core queues
244	Failure establishing ABEND exit
248	Failure building events table
252	Failure loading default values table
256	Failure loading translate tables
260	Failure establishing VTAM communications
264	Default table has non-zero error count
268	Error reading transmission status file dummy record
272	Error verifying empty transmission status file at startup
276	Status record found in transmission status file during startup
280	Error updating transmission status file dummy record
284	Error reading transmission status file record to mark NOT VERIFIED
288	Error updating transmission status file record to NOT VERIFIED

Table C-1 (cont). Transmission Control Program Error Codes

Code	Meaning
292	Error pointing to first transmission control file session record
296	Error reading next transmission control file session record
300	Error reading resource master file LU record/ session = LU
304	Error reading resource master file group record/ session = group
308	No LUs in transmission status file group record
312	Error reading resource master file LU record/ session = group
316	Error releasing transmission control file buffer
320	Error releasing transmission status file buffer
324	Error releasing resource master file LU buffer
328	Error releasing resource master file group buffer
332	Error reading transmission status file record/ restart mode
336	Error updating transmission status file record/ restart mode
340	Error adding transmission status file record/ start or restart mode
1424	PASSDATA DD card missing

Appendix D FILE MAINTENANCE UTILITY PROGRAM CONDITION CODES

The File Maintenance Utility (SFTBATCH) generates the condition codes listed in Table D-1.

Table D-1. File Maintenance Utility Condition Codes

Code	Definition
00	All work completed without error
04	Highest level errors were syntax or keyvalue errors
08	Duplicate record/I/O error
12	Not enough memory available for the requested function
1001	Default Values Table not available
1002	Default Values Table not properly defined errors at assembly time
1010	SYSIN file or DD card not available
1011	SYSPRINT file or DD card not available

Table D-1 (cont). File Maintenance Utility Condition Codes

Code	Definition
1012	MESSAGE file or DD card not available
1013	HISTORY file or DD card not available
1014	SNAPDUMP file or DD card not available
1015	REPORT file or DD card not available

Appendix E FILE TRANSFER FACILITY ABEND CODES

This appendix lists File Transfer Facility ABEND codes. The numbering convention is:

0000-0999:		Reserved for testing
1000-1999:		Utility modules
2000-2999:		Communications program
3000-3999:	-	Common modules/common macros
4000-4090:		Dynamic file allocation ABENDs
4091-4094:		Reserved
4095:		Out of register save areas.

Cođe	Meaning
000	STOP ON ERROR IN C0000/CADDTCF/CADDRMF
892	C8A00 SHOW CB/RPL/CID/MACRO FAILED
893	C8A00 SHOW CB/NIB/LUN/MACRO FAILED
894	C8A00 GET MAIN FAILED/NO TEMP RPL AROUND
895	C8A00 CLSDST NOT ACCEPTED/NOT ENOUGH STORAGE
896	C8A00 CLSDST NOT ACCEPTED/RETRY LIMIT

Cođe	Meaning
897	C8A00 SHOWCB/RPL/RTNCD-FDBK/MACRO FAILED
898	C8A00 FREE MAIN OF TEMPRPL AREA FAILED
899	STOP IN C8200 ON ANY ERROR
996	STOP IN CF000 ON UNDEFINED/NOT IMPLIMENTED OP
999	STOP IN CF001 ON ERROR
1001	FTDFLT LOAD FAILED
1002	ERROR IN FTDFLT TABLE
1003	GET MAIN FAILED
1004	ERROR IN USER SUPPLIED PARM LIST
1005	ERROR IN RC FROM PARSER
1006	ERROR IN DISP INTO KEYWORD TABLE
1007	UNDEFINED
1010	UNABLE TO OPEN SYSIN DATA SET
1011	UNABLE TO OPEN SYSPRINT DATA SET
1012	UNABLE TO OPEN MESSAGE FILE
1013	UNABLE TO OPEN HISTORY FILE
1014	UNABLE TO OPEN SNAP DUMP FILE
1015	UNABLE TO ALLOCATE A MESSAGE FILE BUFFER AT INIT
1015	UNABLE TO OPEN REPORT FILE
1020	FTESTAE FAILED
1110	SYSIN I/O ERROR
1200	INVALID FUNCTION CODE FOR BRANCH TABLE
1201	GETMAIN FOR KEY VALUE TABLE FAILED
1202	LOGIC/TABLE DEFINITION ERROR BETWEEN U4100, U4200

Code	Meaning
1203	COULD NOT NOTIFY HSTF OR SYSPRINT THAT U4210 WAS UNABLE TO OBTAIN MEMORY TO BUILD A RECORD TO ADD TO RMF
1204	UNABLE TO NOTIFY USER (VIA HSTF OR SYSPRINT) THAT SOME TYPE OF VSAM FILE I/O ERROR OCCURRED DURING DEFLU FUNCTION
1205	KEYWORD TABLE IN U4200 SPECIFIES HAS MORE ENTRIES THAN THE BRANCH TABLE IN U4210 WILL ALLOW FOR PROCESSING
1206	COULD NOT NOTIFY HSTF OR SYSPRINT THAT U4220 WAS UNABLE TO OBTAIN MEMORY TO BUILD A RECORD TO DELETE FROM THE RMF
1207	UNABLE TO NOTIFY USER (VIA HSTF OR SYSPRINT) THAT SOME TYPE OF VSAM FILE I/O ERROR OCCURRED DURING DELLU FUNCTION (READ)
1210	UNABLE TO REPORT THAT THE RMF LISTING MODULE WAS UNABLE TO READ NULL RMF ENTRY
1211	UNABLE TO REPORT THAT THE RMF DOES NOT CONTAIN LU ENTRY
1212	UNABLE TO REPORT I/O ERROR OCCURRED IN READING RMF
1213	UNABLE TO REPORT THAT LU NAME CORRESPONDS TO NAME OF RMF GROUP
1214	UNABLE TO REPORT THE CORRUPTION OF RMF
1220	COULD NOT NOTIFY HSTF OR SYSPRINT THAT U4250 WAS UNABLE TO OBTAIN MEMORY TO BUILD A RECORD TO ADD TO RMF
1221	UNABLE TO NOTIFY USER (VIA HSTF OR SYSPRINT) THAT SOME TYPE OF VSAM FILE I/O ERROR OCCURRED DURING ADDGRP FUNCTION
1222	KEYWORD TABLE IN U4200 SPECIFIES HAS MORE ENTRIES THAN THE BRANCH TABLE IN U4250 WILL ALLOW FOR PROCESSING
1223	COULD NOT NOTIFY HSTF OR SYSPRINT THAT U4260 WAS UNABLE TO OBTAIN MEMORY TO BUILD A RECORD TO DELETE FROM THE RMF
1224	UNABLE TO NOTIFY USER (VIA HSTF OR SYSPRINT) THAT SOME TYPE OF VSAM FILE I/O ERROR OCCURRED DURING DELGRP FUNCTION (READ) IN U4260

Code	Meaning
1215	UNABLE TO REPORT THAT THE LISTGRP PROCESSOR WAS UNABLE TO READ NULL RMF ENTRY
1216	UNABLE TO REPORT THAT THE RMF DOES NOT CONTAIN GROUP ENTRY
1217	UNABLE TO REPORT I/O ERROR OCCURRED INREADING RMF
1218	UNABLE TO REPORT THAT GROUP NAME CORRESPONDS TO NAME OF RMF LOGICAL UNIT
1219	UNABLE TO REPORT THE CORRUPTION OF RMF
1250	INVALID FUNCTION CODE FOR BRANCH TABLE
1251	GETMAIN FOR KEY VALUE TABLE FAILED
1252	LOGIC/TABLE DEFINITION ERROR BETWEEN U4100, U4300
1253	GETMAIN FOR TCF RECORD BUILD FAILED
1254	LOGIC TABLE DEFINITION ERROR BETWEEN U4100/U4300
1255	ODD NUMER OF QUOTES PROCESSING FILEID= KW
1256	SESSID - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1257	LU - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1258	GROUP - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1259	DATE - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1260	TIME - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1261	PRIORITY-LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1262	ERROPT - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1263	L6PASS - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1264	ACTION - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1265	SEQ - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1266	INDD - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1267	INDDPASS LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300

E-4

Code	Meaning
1268	SOURCE - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1269	NAME - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1270	DISP - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1271	FILEID - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1272	DSORG - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1273	KEYLEN - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1274	KEYOFF - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1275	CISIZE - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1276	SPACE - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1277	RECL - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1278	FREESP - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1279	OVLFREQ- LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1280	RECFM - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1281	DELATTR- LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1282	OUTDD - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1283	OUTDDPAS LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1284	NEWNAME- LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1285	ARG - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1286	VERB FUNCTION CODE INVALID FOR BR TABLE IN U4305
1287	ERROUT- LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1288	ACTION RECORD OPCODE INVALID FOR BR TABLE IN U4305
1289	ACTION RECORD OPCODE OF X'00' INVALID IN U4305
1290	CKPINTVL-LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300
1291	COMPRESS-LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300

CR60-01

Table E-l (cont).	File	Transfer	Facility	ABEND	Codes
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Code	Meaning
1292	RESERVED
1293	RESERVED
1294	RESERVED
1295	LOGIC ERR - ODD NUMBER OF QUOTES FOUND IN NEWNAME=
1296	LOGIC ERR - ODD NUMBER OF QUOTES FOUND IN ARG=
1297	LOGIC ERR - ODD NUMBER OF QUOTES FOUND IN ERROUT=
1298	ERROR IN DSNAME BRANCH TABLE DW121582
1299	ERROR IN MEMBER BRANCH TABLE DW121582
1300	ERROR IN DYNPASS BRANCH TABLE DW121582
1301	ERROR IN CONVERT BRANCH TABLE DW121582
1302	INVALID SUBPARM COUNTER PROCESSING SPACE= KEYWRD
1310	NO BUFFER TWA43BUF=0 UPON ENTRY - U4305 WAS NOT PREVIOUSLY CALLED
1311	UNABLE TO NOTIFY HSTF OR SYSPRINT THAT U4310 SOME TYPE OF VSAM FILE I/O ERROR OCCURRED DURING DEFSES FUNCTION
1320	NO BUFFER TWA43BUF=0 UPON ENTRY - U4305 WAS NOT PREVIOUSLY CALLED (BY U4320)
1321	UNABLE TO NOTIFY HSTF OR SYSPRINT THAT U4320 SOME TYPE OF VSAM FILE I/O ERROR OCCURRED DURING DELSES FUNCTION
1340	UNASSIGNED
1341	ERROR OCCURRED BUT MESSAGE CANNOT BE PRINTED TO NOTIFY USER BECAUSE OF VSAM ERROR IN MSG FILE
1342	FILE DATA ERROR, ACTION RECORD HAS INVALID ACTION CODE WHICH CAUSES ABEND IN BRANCH TABLE
1350	NO BUFFER TWA43BUF=0 UPON ENTRY - U4305 WAS NOT PREVIOUSLY CALLED (BY U4350)
1351	UNABLE TO NOTIFY HSTF OR SYSPRINT THAT U4350 SOME TYPE OF VSAM FILE I/O ERROR OCCURRED DURING DEFSES FUNCTION

Code	Meaning				
1350	NO BUFFER TWA43BUF=0 UPON ENTRY - U4305 WAS NOT PREVIOUSLY CALLED (BY U4360)				
1351	UNABLE TO NOTIFY HSTF OR SYSPRINT THAT U4360 SOME TYPE OF VSAM FILE I/O ERROR OCCURRED DURING DELACT FUNCTION				
1950	INVALID FUNCTION CODE FOR BRANCH TABLE				
1951	GETMAIN FOR KEY VALUE TABLE FAILED				
1952	LOGIC/TABLE DEFINITION ERROR BETWEEN U4100, U4400				
1800	GETMAIN FOR SF RECORD BUILD FAILED				
1801	LOGIC TABLE DEFINITION ERROR BETWEEN U4100/U4400				
1802	ODD NUMER OF QUOTES PROCESSING FILEID= KW				
1803	DDNAME - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4400				
1804	INDD - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4400				
1805	INDDPASS LOGIC/TABLE DEF ERROR BETWEEN U4100, U4400				
1806	SOURCE - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4400				
1807	NAME - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4400				
1809	FILEID - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4400				
1810	DSORG - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4400				
1811	KEYLEN - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300				
1212	KEYOFF - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4300				
1813	CISIZE - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4400				
1814	SPACE - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4400				
1815	RECL - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4400				
1816	FREESP - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4400				
1817	OVLFREQ- LOGIC/TABLE DEF ERROR BETWEEN U4100, U4400				
1818	RECFM - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4400				

Code	Meaning
1819	DELATTR- LOGIC/TABLE DEF ERROR BETWEEN U4100, U4400
1820	OUTDD - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4400
1821	OUTDDPAS LOGIC/TABLE DEF ERROR BETWEEN U4100, U4400
1822	CONVERT- LOGIC/TABLE DEF ERROR BETWEEN U4100, U4400
1823	COMPRESS LOGIC/TABLE DEF ERROR BETWEEN U4100, U4400
1824	DISP - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4400
1825	DCOMPR - LOGIC/TABLE DEF ERROR BETWEEN U4100, U4400
1826	TRUNMSG- LOGIC/TABLE DEF ERROR BETWEEN U4100, U4400
1827	PADCHAR- LOGIC/TABLE DEF ERROR BETWEEN U4100, U4400
1828	SPACE - SUBPARM LOG/TAB DEF ERR BTWXT U4100, U4400
1840	NO BUFFER TWA44BUF=0 UPON ENTRY - U4405 WAS NOT PREVIOUSLY CALLED (BY U4400)
1841	VSAM ERROR WHILE PRINTING ERROR MESSAGE, USER COULD NOT BE NOTIFIED OF CAUSE OF ERROR
1850	NO BUFFER TWA44BUF=0 UPON ENTRY - U4405 WAS NOT PREVIOUSLY CALLED (BY U4400)
1851	VSAM ERROR WHILE PRINTING ERROR MESSAGE, USER COULD NOT BE NOTIFIED OF CAUSE OF ERROR
1860	NO BUFFER TWA44BUF=0 UPON ENTRY - U4405 WAS NOT PREVIOUSLY CALLED (BY U4400)
1861	VSAM ERROR WHILE PRINTING ERROR MESSAGE, USER COULD NOT BE NOTIFIED OF CAUSE OF ERROR
1870	NO BUFFER TWA44BUF=0 UPON ENTRY - U4405 WAS NOT PREVIOUSLY CALLED (BY U4400)
1871	VSAM ERROR WHILE PRINTING ERROR MESSAGE, USER COULD NOT BE NOTIFIED OF CAUSE OF ERROR
1900	INVALID FUNCTION CODE FOR BRANCH TABLE
1901	GETMAIN FOR KEY VALUE TABLE FAILED

Code	Meaning
1902	LOGIC/TABLE DEFINITION ERROR BETWEEN U4100, U4500
1910	UNABLE TO GET MEMORY FOR HISTORY BUFFER AND UNABLE TO NOTIFY USER BECAUSE OF VSAM ERROR IN MSG FILE.
1912	INVALID IN BRANCH TABLE, UNKNOWN LOGIC ERROR.
1920	NO BUFFER TWA44BUF=0 UPON ENTRY - U4410 WAS NOT PREVIOUSLY CALLED (BY U4500)
1921	VSAM ERROR WHILE PRINTING ERROR MESSAGE, USER COULD NOT BE NOTIFIED OF CAUSE OF ERROR
1930	VSAM ERROR WHILE PRINTING ERROR MESSAGE, USER COULD NOT BE NOTIFIED OF CAUSE OF ERROR
1400	INVALID FUNCTION CODE FOR BRANCH TABLE
1401	GETMAIN FOR KEY VALUE TABLE FAILED
1402	LOGIC/TABLE DEFINITION ERROR BETWEEN U4100, U4600
1410	COULD NOT NOTIFY HSTF OR SYSPRINT THAT U4610 WAS UNABLE TO OBTAIN MEMORY TO BUILD A RECORD TO ADD TO MESSAGE FILE
1411	UNABLE TO NOTIFY USER (VIA HSTF OR SYSPRINT) THAT SOME TYPE OF VSAM FILE I/O ERROR OCCURRED DURING ADDMSG FUNCTION
1412	KEYWORD TABLE IN U4600 SPECIFIES HAS MORE ENTRIES THAN THE BRANCH TABLE IN U4610 WILL ALLOW FOR PROCESSING
1413	ODD NUMBER OF QUOTES FOUND IN TEXT= STRING INDICATES A FAILURE IN U2200, U2400, CA000, AND/OR U4600 (IN THIS ORDER)
1420	COULD NOT NOTIFY HSTF OR SYSPRINT THAT U4620 WAS UNABLE TO OBTAIN MEMORY TO BUILD A RECORD TO ADD TO MESSAGE FILE
1421	UNABLE TO NOTIFY USER (VIA HSTF OR SYSPRINT) THAT SOME TYPE OF VSAM FILE I/O ERROR OCCURRED DURING DELMSG FUNCTION (READ)
1460	AN ERROR OCCURRED WHILE LISTING THE MESSAGE FILE, THE OPERATOR COULD NOT BE NOTIFIED BECAUSE OF VSAM I/O ERROR ON MESSAGE FILE READ.

Code	Meaning
1474	CANT GET A BUFFER FOR TSF
1475	CANT OPEN TSF
1476	CANT CLOSE TSF
1477	CANT RETURN TSF BUFFER
1480	INVALID FUNCTION CODE
1481	MESSAGE FILE READ ERROR
1482	UNABLE TO READ MSSG NOT ON FILE MESSAGE
1483	FTGETMEM FAILED
2000	S1000: LOAD OF MODULE S1100 FAILED
2001	S1000: DELETE OF MODULE S1100 FAILED
2101	S1110: PARSER RETURNED UNKNOWN RETURN CODE
2102	S1110: PARSER RETURNED UNKNOWN KEYWORD OFFSET
2002	S1120: SESSION WITH INVALID STATE ENCOUNTERED
2110	S1210: FREE MEMORY FAILED OF CONTROL BLKS DW121582
2014	S1300: ACQ ELEMENT NOT AVAILABLE: SHOULD NOT OCCOR
2003	S1400: FAILURE ASSOCIATED W/ MULTIPLE WAIT/EVENTS
2004	S1420: INVALID SERVICE REQUEST CODE FROM SUBTASK
2005	S1420: NON-ZERO RETURN CODE FROM S142X SUBROUTINE
2006	S1421: INVALID BLOCK TYPE ON SNAP SERVICE REQUEST
2007	S1423: READ STATUS RECORD FAILURE
2008	S1423: UPDATE STATUS RECORD FAILURE
2009	S1423: FREE STATUS RECORD BUFFER FAILURE
2010	S1424: OPEN PASS DATA SET FAILED
2011	S1424: CLOSE PASS DATA SET FAILED

Code	Meaning				
2012	S1424: REQUEST NOT DELETE SESSION OR LOG SF				
2016	S1425: INVALID SERVICE TYPE CODE FROM SUBTASK				
2017	S1425: INVALID REPLY PARAMETER FROM SUBTASK				
2018	S1425: INVALID STATUS PAREMETER FROM SUBTASK				
2019	S1425: INVALID Q-TYPE PARAMETER FROM SUBTASK				
2013	C8015: LERAD/SYNAD-NO REG SAVE AREA AVAILABLE				
2014	C8015: LERAD/SYNAD-R0 .GT. X'18' ON ENTRY				
2015	C8015: NO SAVE AREA AVAILABLE / CANNOT DO SHOWCB				
2016	C8015: SHOWCB RPL RTNCD/FEEDBK FAILED				
2031	C8030: SWA HAS NO EMPTY SLOTS FOR SIGNAL DATA				
2032	C8030: NOT A L6 SESSION				
2033	C8030: TESTCB/RPL/CONTROL=SIGNAL FAILED				
2034	C8030: INPUT NOT A SIGNAL				
2035	C8030: SHOWCB/RPL/SIGDATA FAILURE				
2041	C8040: SHOWCB/RPL/VARIOUS FAILED IN RESP EXIT				
2042	C8040: RESP XT ACTIVE FOR SESSION OTHER THAN FT-L6				
2061	C8060: LSTERM ACTIVE FOR SESSION OTHER THAN FT-L6				
2071	C8070: SHOWCB/RPL/AREA FAILED IN NSEXIT				
2072	C8070: NSEXIT ACTIVE FOR SESSION OTHER THAN FT-L6				
2081	C8080: SHOWCB/RPL/AREA FAILED IN LOGON EX DW121582				
2082	C8080: FREEMEM FAILED AFTER LOGON REQ FIN DW121582				
2301	S2700: RC FROM S3200 IS NOT 00, 04, OR 08				
2302	S2700: RC FROM S3300 IS NOT 00, 04, OR 08				
2311	S3100: FAILURE LOADING TRANSLATE TABLE				

Code	Meaning				
2312	S3100: FAILURE LOADING PANELS TABLE				
2321	S3200: FAILURE ACQUIRING SEND BUFFER				
2322	S3200: FAILURE FREEING BUFFER				
2323	S3200: FAILURE SENDING DATA TO OPERATOR				
2324	S3200: OVERRUN MOVING DATA INTO OUTPUT BUFFER				
2331	S3300: FAILURE ACQUIRING BUFFER				
2332	S3300: FAILURE FREEING BUFFER				
2333	S3300: FAILURE RECIEVING DATA TO OPERATOR				
2334	S3300: INPUT DATA DID NOT CONTAIN CDI INDICATOR				
2341	S3400: INPUT NOT AVAILABLE				
2342	S3400: SBA PARM NOT FOUND IN PANEL TABLES				
2343	S3400: INPUT FIELD TOO SHORT TO BE SBA, PARM				
2344	S3400: INPUT NOT SBA ORDER WHEN EXPECTED				
2345	S3400: DATA TOO LONG FOR IWA				
2390	S3500:				
2320	S3900:				
2601	PRVQ: ERROR SEARCHING ACQ FOR ENTRY CURNT DISPLD				
2602	PRVQ: ERROR SEARCHING ACQ FOR ENTRY CURNT DISPLD				
2611	DSES: NO TSF KEY AVAILABLE FOR DISPLAY				
2612	DSES: READ ERROR RETREIVING TSF KEY				
2613	DSES: INVALID MODE ON ENTRY TO DISPLAY FUNCTION				
2614	DSES: INVALID MODE ON EXIT FROM DISPLAY FUNCTION				
2621	CSTX: BAD RETURN CODE FROM S1425 - SHOULD NOT OCCR				
2631	PRPX: BAD RETURN CODE FROM S1425 - SHOULD NOT OCCR				

Code	Meaning
2641	CDES: BAD INPUT IN PARMA FIELD - FTTRNTAB ERROR
2642	CDES: NO TSF BUFFER WHEN ONE SHOULD BE AVAILABLE
2643	CDES: BAD RETURN CODE FROM S1425 - SHOULD NOT OCCR
2651	HELP: HELP SUBFUNCTION NOT SUPPORTED
2661	ERMS: ERROR MESSAGE WRITER - SUBFUNCTION FAILURE
2671	GSTX: BAD RETURN CODE FROM S1425 - SHOULD NOT OCCR
2672	DTSQ: INVALID PARM VALUE IN IWCPARMA SUOULD NOT OCR
2673	DTSQ: IWDTSQ AREA CORRUPTEDSHOULD NOT OCCUR
2900	S2ERROR: NO TSF BUFFER
2901	S2ERROR: CSECT NAME NOT FOUND IN S2ERROR TABLES
2902	S2ERROR: ERROR CODE NOT FOUND IN S2ERROR TABLES
2903	S2ERROR: TSF UPDATE ERROR
2909	S2000: ABEND RETRY ROUTINE ENTERED / NO TSF BUFFER
2910	S2100: TSF READ / UPDATE / GET BUFFER FAILED
2930	S2300: TSF UPDATE FAILED
2931	S2300: RC FROM S23X0 NOT = 00 OR 04 / LOGIC ERROR
2933	S2310: BAD RETURN CODE FROM S2ERROR
2934	S2320: BAD RETURN CODE FROM S2ERROR
2935	S2330: ACK(PRF) DOES NOT CONTAIN RESTART PARM
2936	S2330: ACK(PRF) RESTART RANK TOO HIGH
2939	S2360: BAD RETURN CODE FROM S2ERROR
2940	S2400: TSF UPDATE FAILED
2940	S2400: INVALID RETURN CODE FROM S2XACK
2940	S2500: TSF UPDATE FAILED

Code	Meaning
2940	S2500: INVALID RETURN CODE FROM S2XACK
2993	S2001: TSF ACTION RECORD STATUS FIELD INVALID
2994	S2000: BAD RETURN CODE FROM MODULE S2100
2995	S2000: BAD RETURN CODE FROM MODULE S2001
2996	S2000: INVALID ACTION TYPE
2997	S2000: S2X00 RETURN CODE INVALID
2998	S2000: S2800 RETURN CODE INVALID
2999	S2000: S2800 RETURN CODE INVALID
3000	CF000: NON-RECOVERABLE ERROR DETECTED IN CF000 ABEND TASK TO FACILITATE CORRECTIVE ACTION
3001	CF000: NON-RECOVERABLE ERROR DETECTED IN CF000 ABEND STEP TO FACILITATE CORRECTIVE ACTION
3002	CF001: MODCB ACB / DDNAME-PASSWORD FAILED ABEND STEP TO FACILITATE CORRECTIVE ACTION
3003	CF001: SHOWCB ACB / STRING NUMBER FAILED ABEND STEP TO FACILITATE CORRECTIVE ACTION
3004	CF001: MODCB RPL / ACB ADDRESS FAILED ABEND STEP TO FACILITATE CORRECTIVE ACTION
3005	CF001: REQUEST IS NOT OPEN/CLOSE/TEST OPEN ABEND STEP TO FACILITATE CORRECTIVE ACTION
3006	CF001: PASSWORD LENGTH ERROR ON OPEN - INDICATES THAT CALLING MODULE HAS PASS= THAT POINTS TO A FIELD WITHOUT A PASSWORD LENGTH BYTE
3007	CF001: PASSWORD LENGTH ERROR ON OPEN - INDICATES THAT CALLING MODULE HAS PASS= THAT HAS MORE THAN EIGHT CHARACTERS
3020	CF002: LOGIC ERROR - AFTER COMPUTING LENGTH OF MEMORY NECESSARY FOR ALL VSAM CONTROL BLOCKS, MEMORY WAS NOT SUFFICIENT TO ALLOCATE ENOUGH CONTROL BLOCKS. LIKELY TO BE A LOGIC ERROR IN COMPUTING LENGTH OF MEMORY NEEDED FOR CONTROL BLOCKS.

Code	Meaning
3021	CF002: GENCB FOR ACB OR RPL FAILED. THIS SHOULD NOT HAPPEN.
3022	CF002: ENOUGH MEMORY FOR VSAM CONTROL BLOCKS COULD NOT BE ALLOCATED.
3100	CA000: ERR IN TRT TABLE DISPLACEMENTS - BRTABLE INDEX GREATER THAN X'14' TRYING FOR KEYW
3101	CA000: ERR IN TRT TABLE DISPLACEMENTS - BRTABLE INDEX GREATER THAN X'14' TRYING FOR KEYV
3102	CA000: APPARENT LOGIC ERROR IN U2200/U2400
3103	CA000: BR TABLE LOGIC ERROR - CAQUOTE
3104	CA000: MORE RIGTH PARENS THAN LEFT - CALPRN
3105	CA000: MORE RIGHT PARENS THAN LEFTS - CALPRN
3106	CA000: EQUAL PAREN CNT WHEN LENGTH EXHAUSTED
3107	CA000: NEGATIVE CNT IN CAPRN020
3108	CA000: MORE RIGHT PARANES THAN LEFTS
3109	CA000: APPARENT LOGIC ERROR IN U2200/U2400
3110	CF100: GET BUFFER FOR MSG/HST MSG FAILED
3111	CF100: GET MSG FILE RECORD FAILED
3112	CF100: PUT RECORD TO HISTORY FILE FAILED
3113	CF100: FREE BUFFER FOR MSG/HST FILE WRITE
3114	CF100: "NOT FOUND" MSG NOT FOUND IN MSG FILE
3115	CF100: MSG FILE READ ERROR: READING "NOT FOUND" MS
3124	CA000: CALLER DIDNT SET UP PCBNKEYT FLD CORRECTLY
3700	C7000: SHOWCB / RPL LENGTH FAILED
3701	C8300: WAIT RECEIVE LIST ECBS DONE/NO ECB POSTED
3702	C8300: RESETSR FAILED / ECB OTHER THAN DATA IN

Code	Meaning
4010	S1426: INVALID REQUEST CODE
4086	CG000: INVALID REQUEST CODE
4087	CG000: VSAM MODCB ERROR RETRUN
4088	CG000: VSAM SHOWCB ERROR RETURN
4089	CG001: INVALID REQUEST CODE
4090	CG001: ALLOCATE REQUEST / FILE ALREADY ALLOCATD
4095	MISC: SAVEAREA CHAINS EXHAUSTED

Appendix F SAMPLE SFT JOB

The code listed in Figures F-1 through F-7 is that of the sample job included on the distribution tape.

The sample job performs two end-to-end tests:

- 1. SFT-6 to SFT-H to SFT-6
- 2. SFT-H to SFT-6 to SFT-H

These two tests are performed via six job steps (SFTVSAMU, SFTUTL1, SFTCOMM1, SFTUTL2, SFTCOMM2, and SFTUTL3) and two procedures (SFTIDCAM and SFTH). The sample job assumes that the installation supports both the online operator interface and dynamic file allocation.

For ease of reference, the lines of code are numbered on the far right-hand side of each line. The comments following each figure refer to these line numbers.

//JOBNAME JOB ACCOUNTINFO, 'USER INFORMATION', CLASS=A, MSGCLASS=A 0001 0002 //SFTVSAM PROC PRT=A, USERCAT= 'XXXXXXXX', 0003 11 USERPFX=NNNNNNNN 0004 0005 //*** USE THIS JCL TO ALLOCATE ALL OTHER VSAM CLUSTERS USED BY * 0006 //*** THE SFT-H PRODUCT. 0007 0008 //*** THIS JOB WILL DEFINE THE FILES WITH THE 'UNIQUE' OPTION. 0009 //*** RUN JOB 'SFTVSAMR' IF YOU WISH TO USE THE 'REUSE' OPTION. ź 0010 REFER TO THE ACCESS METHODS SERVICES MANUAL FOR 0011 //*** //*** INFORMATION ON THESE TWO PARAMETERS. 0012 0013 //*** YOU MUST EDIT THE IDCAMS PARAMETERS AND THE SYMBOLIC 'USERPFX=' TO SUPPLY THE HIGH LEVEL PREFIX NAME FOR YOUR 0014 //*** 0015 '//*** VSAM DATASETS. YOU MUST EDIT THE VOLUME PARAMETER FOR 0016 //*** VOLUME SERIAL OF YOUR VSAM PACK. YOU MUST EDIT THE SYMBOLIC * 'USERCAT=' TO SUPPLY THE VSAM CATALOG THE FILES WILL BE UNDER* 0017 //*** 0018 ·//*** 0019 ·//*** REPLACE 'XXXXXXX' WITH YOUR INSTALLATION VSAM USER 0020 //*** CATALOG NAME. 0021 REPLACE 'NNNNNNN' WITH YOUR INSTALLATION NAME //*** 0022 //*** REPLACE 'VVVVVV' WITH YOUR INSATALLATION VSAM VOLUME 0023 //*** * 0024 //*** YOU MAY WANT TO SUPPLY THE FOLLOWING SYMBOLIC: 0025 //*** //*** 0026 PRT= (PRINT SYSOUT QUEUE. 'A' IS DEFAULT) 0027 //*** 0028 //*** EDIT JOBNAME, ACCOUNT INFO., USER INFORMATION, JOB CLASS, 0029 //*** 0030 AND MSGCLASS BEFORE EXECUTION. //*** 0031 0032 //DELCLUST EXEC PGM=IDCAMS, REGION=512K 0033 0034 0035 //* //* * DELETE OLD CLUSTERS 0036 * 0037 //* COND CODE OF 0 - ALL FILES EXIST COND CODE OF 8 - ONE OR MORE DO NOT EXIST * 0038 1/* * 0039 1/* + 0040 0041 //SYSPRINT DD SYSOUT=&PRT 0042 //SYSIN DD DUMMY, DCB=BLKSIZE=80 0043 0044 //ALLOVSAM EXEC PGM=IDCAMS, REGION=512K 0045 0046 0047 //* DEFINE NEW CLUSTERS 0048 //* //* USE THE 'UNIQUE' OPTION IN THE DEFINE 0049 * 0050 COND CODE = 0 - ALL FILES DEFINED COND CODE > 0 - PROBLEM WITH DEFINING FILES //* + 0051 //* * 0052 11* * 0053 · //**************** ************** 0054 //SYSTERM DD SYSOUT=&PRT 0055 0056 //SYSPRINT DD SYSOUT=&PRT //******* 0057 //LOADVSAM EXEC PGM=IDCAMS, REGION=512K 0058 //STEPCAT DD DSN=&USERCAT, DISP=SHR 0059

Figure F-1. Sample SFT Job SFTV SAMU

0060 //* LOAD DUMMY RECORD INTO VSAM FILES * 0061 //* //* * 0062 * 0063 COND CODE = 0 - ALL FILES LOADEDCOND CODE > 0 - PROBLEM WITH LOAD //* 0064 * 11* * 0065 0066 //SYSTERM DD SYSOUT=&PRT 0067 //SYSPRINT DD SYSOUT=&PRT 0068 0069 DD DSN=&USERPFX..SNAR12.HST.CLUSTER,DISP=SHR //ACBHST DD DSN=&USERPFX..SNAR12.RMF.CLUSTER,DISP=SHR 0070 //ACBRMF 0071 //ACBTCF DD DD DSN=&USERPFX..SNAR12.TCF.CLUSTER,DISP=SHR //ACBTSF DSN=&USERPFX..SNAR12.TSF.CLUSTER,DISP=SHR 0072 //FTSFOUT DD DSN=&USERPFX..SNAR12.DFL2.CLUSTER,DISP=SHR 0073 DSN=&USERPFX..SNAR12.DFL1.CLUSTER, DISP=SHR 0074 //FTSFIN DD //FTSFIN1 DD DSN=&USERPFX..SNAR12.DFL9.CLUSTER, DISP=SHR 0075 DSN=&USERPFX..SNAR12.PROTO(TSF), DISP=SHR DSN=&USERPFX..SNAR12.PROTO(TCF), DISP=SHR DSN=&USERPFX..SNAR12.PROTO(TCF), DISP=SHR //TSFPROTO DD 0076 0077 //TCFPROTO DD //RMFPROTO DD /TCFPROTO DD 0078 0079 //HSTPROTO DD DSN=&USERPFX..SNAR12.PROTO(HST), DISP=SHR //STFPROTO DD DSN=&USERPFX..SNAR12.PROTO(SF),DISP=SHR 0800 //******* 0081 0082 0083 0084 //* /* LIST CATALOG FOR CLUSTERS JUST DEFINED */ 0085 0086 0087 DD DUMMY, DCB=BLKSIZE=80 //SYSIN 0088 //*** END PROC SFTVSAM ***** 0089 // PEND 0090 EXEC SFTVSAM 0091 //DELCLUST.SYSIN DD * 0092 DELETE (0093 NNNNNNN. SNAR12.HST. CLUSTER _ 0094 NNNNNNN, SNAR12, RMF, CLUSTER 0095 NNNNNNN. SNARl2.TCF.CLUSTER 0096 _ NNNNNNN. SNARl2.TSF.CLUSTER 0097 NNNNNNN. SNARl2.DFL1.CLUSTER _ 0098 _ NNNNNNN. SNARL2.DFL2.CLUSTER 0099 NNNNNNN.SNAR12.DFL9.CLUSTER) -0100 0101 CLUSTER PURGE 0102 /* 0103 //ALLOVSAM.SYSIN DD * 0104 0105 /* DEFINE HISTORY FILE 0106 0107 DEFINE CLUSTER (0108 NAME (NNNNNNNN. SNAR12.HST.CLUSTER) RECORDS (1000 100) _ 0109 _ 0110 _ VOLUMES (VVVVVV) 0111 NONINDEXED 0112 OWNER('HIS') 0113 _ UNIQUE 0114 SHAREOPTIONS(2) _ 0115 SPANNED 0116 0117 TO(99365)) DATA (0118 NAME (NNNNNNN, SNAR12, HST, DATA) 0119 RECORDSIZE(194 194)) 0120

Figure F-1 (cont). Sample SFT Job SFTVSAMU

/* + +	+ + + + + + + + + + + + + + + + + + + */	0121
/*	DEFINE RESOURCE MASTER FILE */	0122
/* + +	+ + + + + + + + + + + + + + + + + + + +	0123
DEFINE	CLUSTER (-	0124
	NAME (NNNNNNNN SNAP] 2 PMF (LUSTER) -	0125
		0126
		0127
		0128
		0120
		0130
		0121
		0132
	PRONNED –	0132
		0133
		0134
		0135
	NAME (NNNNNNNN SNARIZ.RMF.DATA) -	0130
	$\frac{\text{Records}_{12}(24, 4034)}{12} = \frac{1}{2}$	0137
		0130
	INDEX (0139
/	NAME (NNNNNNNN, SNARIZ, RMF, INDEX))	0140
/* + +		0141
/ *	DEFINE TRANSMISSION CONTROL FILE	0142
/* + +	+ + + + + + + + + + + + + + + + + + + +	0143
DEFINE	CLUSTER (-	0144
	NAME (NNNNNNN, SNAR12.TCF.CLUSTER) -	0145
	VOLUMES (VVVVV) –	0146
	FREESPACE(20) –	0147
	INDEXED -	0148
	OWNER('HIS') -	0149
	UN IQUE –	0150
	SHAREOPTIONS(2) –	0151
	SPANNED –	0152
	RECORDS(100 100) –	0153
	TO(99365)) –	0154
1. A.	DATA (–	0155
	NAME (NNNNNNN. SNARL2. TCF. DATA) -	0156
	RECORDSIZE(392 392) -	0157
	(KEYS(19, 0)) -	0158
		0159
	NAME (NNNNNNNN SNARL? TOF INDEX))	0160
/* + +	+ + + + + + + + + + + + + + + + + + +	0161
/* ' '	DEFINE TRANSMISSION STATUS FILE */	0162
/* + +	+ + + + + + + + + + + + + + + + + + +	0163
DEETNE		0164
DEFINE		0165
	NAME (NNNNNNN, SNARIZ, ISF. CLOSIER) -	0165
		0167
		0107
		0108
		0170
		0170
	OWNER("HIS") -	0171
		01/2
	SHAREOPTIONS(Z) –	0173
1.	NONSPANNED -	0174
	CYLINDER(5 5) -	01/5
1	TU(202666))	01/6

Figure F-1 (cont). Sample SFT Job SFTVSAMU

		01	.77
		01	70
	NAME (NNNNNNNN. SNARL 2. TSF. DATA) –	01	./0
	$RECORDSIZE(342 \ 342) \qquad -$	01	.79
	CIST(F(2048)) = -	01	79
	C1512E(2046)	01	
	KEYS(17 0)) -	01	.80
	TNDEX (01	.81
		01	02
	NAME (NNNNNNNN, SNARI 2, TSF, INDEX) -	01	.02
	CISIZE(512))	01	.82
/* + +	· · · · · · · · · · · · · · · · · · ·	*/ 01	83
/* + +	* * * * * * * * * * * * * * * * * * * *	-/ 01	.0.5
/*	DEFINE DEFAULTI STAGING FILE	*/ 01	.84
· / *	DEFEDDED TO WITH DO NAME OF DELL	*/ 01	85
	REPERRED TO WITH DD RAME OF DELL		00
/*	(DEFAULTI)	*/ 01	.80
/* + +	• • • • • • • • • • • • • • • • • • •	*/ 01	87
/ / /		/ 01	00
DEFINE	CLUSTER (–	01	00
	NAME (NNNNNNNN, SNAR12, DFL1, CLUSTER) -	01	89
		01	90
		01	01
	FREESPACE(50) -	01	191
	INDEXED -	01	92
		01	03
	OWNER("HIS") -	01	
	UNIQUE -	01	.94
		01	05
	SHAREOPTIONS(2) –	10	195
	SPANNED -	01	96
		01	07
	10(99365)) –	10	- 51
	DATA (–	01	198
	NAME (NNNNNNN SNAP 2 DEL DATA) -	01	99
	MARLE (MAMMANA, SMARLZ, DFLL, DALA)	01	
	CYLINDER(3 3) -	02	200
	RECORDSIZE(256, 32767) -	02	201
		02	002
	$\operatorname{REYS}(28 \ 0)$) –	. 02	202
	INDEX (–	02	203
	NAME (NUMUNUM CUADIO DELI TUDEV))	0.2	204
	NAME (NNNNNNN, SNARIZ, DFEI, INDEX))	02	
/* + +	+ + + + + + + + + + + + + + + + + + + +	*/ 02	205
·/+	DEETNE DEENII MO CHACINC ETLE	*/ 02	206
/"	DEFINE DEFAULTZ STAGING FILL		
/*	REFERRED TO WITH DD NAME OF DFL2	*/ 02	207
1/*	(DEFAIL.T2)	*/ 02	208
·		+/	000
/* + +	+ + + + + + + + + + + + + + + + + + + +	*/ 02	209
DEFINE	CLUSTER (02	210
		0.5	211
	NAME (NUMNNUMN, SNARTZ, DELZ, CLOSIER) -	02	<u></u>
	VOLUMES(VVVVV) -	02	ZT 2
	FREESPACE(50) -	0.2	213
	INDEXED -	02	614
	OWNER('HTS')	02	215
		0.0	214
1	0M TÕOR –	02	610
	SHAREOPTIONS(2) -	02	217
	CDANNED	0.2	21 8
	SFAMINED -	02	
	TO(99365)) -	02	219
	рата (02	220
		0.0	101
	NAME (NNNNNNN. SNAR12.DFL2.DATA) -	02	621
	CVLINDER(3,3) -	02	222
		0.0	222
	RECORDSIZE(250 32/6/) -	02	663
	KEYS(28 0)) -	02	224
		0.2	225
1	TNDEV (02	220
	NAME (NNNNNNNN. SNARl 2.DFL2.INDEX))	02	226

Figure F-l (cont). Sample SFT Job SFTVSAMU

/* + + + + + + + + + + + + + + + + + + +	0227 0228 0229
/* DEFINE SORT FILE USED TO CREATE */ /* HISTORY FILE EXCEPTION REPORT */	0228 0229
/* HISTORY FILE EXCEPTION REPORT */	0229
/* REFERRED TO WITH DD NAME OF FTSFIN1 */	0230
/* + + + + + + + + + + + + + + + + + + +	0231
DEFINE CLUSTER (-	0232
NAME (NNNNNNN. SNAR12.DFL9.CLUSTER) -	0233
VOLUMES (VVVVVV) –	0234
FREESPACE (50) –	0235
INDEXED –	0236
OWNER('HIS') -	0237
UNIQUE –	0238
SHAREOPTIONS(2) -	0239
SPANNED –	0240
TO(99365)) -	0241
DATA (–	0242
NAME (NNNNNNN. SNAR12.DFL9.DATA) -	0243
CYLINDER(5 5) -	0244
RECORDSIZE(256 32767) -	0245
KEYS(28 0)) -	0246
INDEX (-	0247
NAME (NNNNNNNN. SNARL 2. DFL 9. INDEX))	0248
/*	0249
//LOADVSAM.SYSIN DD *	0250
REPRO OUTFILE(ACBHST) INFILE(HSTPROTO)	0251
REPRO OUTFILE (ACBRMF) INFILE (RMFPROTO)	0252
REPRO OUTFILE(ACBTSF) INFILE(TSFPROTO)	0253
REPRO OUTFILE (ACBTCF) INFILE (TCFPROTO)	0254
REPRO OUTFILE(FTSFOUT) INFILE(STFPROTO)	0255
REPRO OUTFILE(FTSFIN) INFILE(STFPROTO)	0256
REPRO OUTFILE(FTSFINI) INFILE(STFPROTO)	0257
/*	0258
//LISTCAT.SYSIN DD *	0259
LISTCAT –	0260
ENTRY (–	0261
NNNNNNNN.SNAR12.HST.CLUSTER -	0262
NNNNNNN, SNAR12.RMF.CLUSTER -	0263
NNNNNNN.SNARl2.TCF.CLUSTER -	0264
NNNNNNN.SNARl2.TSF.CLUSTER -	0265
NNNNNNN.SNAR12.DFL1.CLUSTER -	0266
NNNNNNN.SNAR12.DFL2.CLUSTER -	0267
NNNNNNN.SNAR12.DFL9.CLUSTER) -	0268
ALL	0269
	0270
	0271

Figure F-1 (cont). Sample SFT Job SFTVSAMU

THE JOB STEP SFTVSAMU

Line 001 is the job card, which should be edited to conform to installation standards. Lines 002 through 0089 are an instream procedure to clear the VSAM files. Lines 0020 through 0040 contain symbolic parameters that you must edit to supply installation-specific values:

- USERCAT='VSAMCAT' is the installation VSAM user catalog.
- USERPEX is the high-order qualifier of the names of all VSAM clusters other than the message cluster.
- PRT is the output SYSOUT queue; the default is A.

Lines 0033 through 0080 clear VSAM files. The IBM Access Method Services program IDCAMS is invoked in each step with a virtual storage region of 512K. Lines 0082 through 0088 invoke IDCAMS to produce a catalog list report of the files created in the prior steps. Line 0091 invokes the instream procedure (SFTVSAM).

Lines 0093 through 0102 are IDCAMS utility control statements deleting the VSAM clusters. Replace NNNNNNN with the high-order qualifier of the names of the VSAM clusters.

Lines 0105 through 0248 are IDCAMS Data Definition Statements that allocate the VSAM clusters used by SFT-H. Replace VVVVVV with the volume serial number of the disk pack these files will reside on.

Lines 0251 through 0257 are the IDCAMS utility control statements that load each VSAM cluster with a dummy record. The OUTFILE (DDNAME) references the output DD statement and the INFILE (DDNAME) references the input DD statement.

Lines 0261 through 0269 are the IDCAMS utility control statements that produce the catalog list report.

	0001
// MCCDEV-MMMMMM	0002
	0000
// USERCAT= VSAMCAT,	0000
// MEMB=UNIQEALL,	0004
// PRT=A	0005
//*************************************	0006
//*** USE THIS PROCEDURE TO VERIFY AND INITIALIZE THE VSAM CLUSTERS *	0007
//***	8000
//*** IT IS RECOMMENDED THAT YOU PLACE THIS PROCEDURE IN A *	0009
//*** CATALOGED PROCEDURE LIBRARY FOR FUTURE EXECUTION. *	0010
//***	0011
//*** DDOC 'SETTDCAM' USES TEM IDCAMS UTILITY EITHER VERTEY OR *	0012
//*** DE DE DE DE DE DE CHICADO DE DI TITI DI TITI DA VICE ON MICH DI MANY *	0013
//*** DELETE/DEFINE THE CLOSTERS THEN INITIALIZE THEM WITH DOMMI	0014
//*** RECORDS USING THE REPRO COMMAND.	0014
//*** ANY OR ALL VSAM CLUSTERS COULD BE AFFECTED DEPENDING ON THE	0015
//*** IDCAMS PARAMETERS ENTERED FOR THE SYSIN DATASET.	0010
//***	0017
//*** FILE &USERPFXSFTVSDEF.DATA IS A PDS THAT CAN CONTAIN *	0018
//*** THE VARIOUS IDCAMS PARAMETERS AS MEMBERS. THERE ARE *	0019
//*** SOME MEMBERS SUPPLIED WITH THE INSTALLATION MAINLY FOR *	0020
//*** THE INITIALIZING OF ALL VSAM FILES. *	0021
//*** *	0022
//*** NOTE: VSAM CLUSTERS DEFINED USING THE 'UNIQUE' OPTION SHOULD *	0023
//*** HAVE REPRO COMMAND FILE MEMBERS WITHOUT THE 'REUSE' *	0024
//*** OPTION ON THE ALL ALL ALL ALL ALL ALL ALL ALL ALL AL	0025
//*** ***	0025
	0020
//*** SIMBOLIC PARAMETERS ARE USED FOR THE DATASET NAMES FOR	0027
//*** SFT-H FILES AND FOR THE SYSOUT PRINT CLASS. THESE SHOULD	0028
//*** BE EDITED TO CONFORM TO THE INSTALLATION STANDARD.	0029
//***	0030
//*** THE SYMBOLIC PARAMETERS ARE: *	0031
//*** MSGPFX= (MESSAGE LIBRARY PREFIX) *	0032
//*** USERPFX= (USER LIBRARY PREFIX) *	0033
//*** USERCAT= (USER VSAM CATALOG) *	0034
//*** MEMB= (IDCAMS SYSIN COMMAND FILE MEMBER) *	0035
//*** DPT= (SVSOUT DETUT OUTILE - 'A' IS DEFAULT'*	0036
//*** FRI- (SISOUT FRINT QUEUE A IS DEFRUIT)	0037
//***	0038
//*** NOTE: IF THE FILES ARE EMPTI ANI VERIFI WILL END WITH A	0030
CONDITION CODE OF 12.	0039
//***	0040
//*************************************	0041
//VFLDVSAM EXEC PGM=IDCAMS,REGION=512K	0042
//STEPCAT DD DSN=&USERCAT, DISP=SHR	0043
//SYSPRINT DD SYSOUT=&PRT	0044
//ACBMSG DD DSN=&MSGPFXHSNAR12.MSG.CLUSTER,DISP=OLD	0045
//ACBHST DD DSN=&USERPFXHSNARl2.HST.CLUSTER,DISP=OLD	0046
//ACBRMF DD DSN=&USERPFXHSNAR12.RMF.CLUSTER,DISP=OLD	0047
//ACBTCF DD DSN=&USERPFXHSNARl2.TCF.CLUSTER,DISP=OLD	0048
//ACBTSF DD DSN=&USERPFXHSNAR12.TSF.CLUSTER.DISP=OLD	0049
//FTSFOUT DD DSN=&USERPFX, HSNAR12, DFL2, CLUSTER, DISP=OLD	0050
	0051
	0052
//TISFINI DD DON-GUSERFFA HONARL2.DFL3.CLUSIER, DISF-ULD	0052
//TSFPROTO DD DSN=&USERPFXHSNAR12.PROTO(TSF),DISP=SHR	0053
//TCFPRUTU DD DSN=&USERPFXHSNARL2.PROTO(TCF),DISP=SHR	0054
//RMFPROTO DD DSN=&USERPFXHSNAR12.PROTO(RMF),DISP=SHR	0055
//HSTPROTO DD DSN=&USERPFXHSNAR12.PROTO(HST), DISP=SHR	0056
//STFPROTO DD DSN=&USERPFXHSNAR12.PROTO(SF),DISP=SHR	0057
//SYSIN DD DSN=&USERPFXSFTVSDEF.DATA(&MEMB),DISP=SHR	0058
//**** END OF PROC SFTIDCAM *****	0059

Figure F-2. Sample SFT Inline Procedure SFTIDCAM

THE INLINE PROCEDURE SFTIDCAM

This procedure is used in the SETCOMM1 and SFTCOMM2 jobs for running IDCAMS to clear the transmission status file. It can also be used by either job to clear some or all of the VSAM clusters. Symbolic parameters are used for identifying common elements; you should edit them to supply installation defaults.

Lines 0001 through 0005 contain the symbolic parameters to be changed:

- USERPFX=NNNNNNNN is the high-order qualifier of the names of all VSAM clusters other than the MESSAGE cluster.
- MSGPFX=MMMMMMMM is the high-order qualifier of the name of the MESSAGE file.
- USERCAT='VSAMCAT' is the installation VSAM user catalog.
- MEMB=UNIQUEALL is the member of a PDS that contains various VSAM control statements that will be called into the IDCAMS utility; it defaults to UNIQUEALL.
- PRT=A is the default SYSOUT value for the IDCAMS report.

NOTE

The sample jobs assume that this procedure has been placed in an executable procedure library (such as SYS1.PROCLIB). Check with your systems programming section to see if this is true; otherwise, this procedure would have to be brought in line with the various jobs.

Lines 0006 through 0041 are comments containing instructions for modifying and running this procedure.

Line 0042 invokes IDCAMS with a region of 512K.

Line 0043 specifies the installation VSAM catalog under which all clusters reside. It is defined by the USERCAT symbolic parameter.

Line 0044 defines the output report file.

Lines 0045 through 0052 define the SFT-H VSAM clusters that can be modified when executing this procedure.

Lines 0053 through 0057 define the SFT-H PDS that contains the various dummy records to be loaded into a VSAM cluster when being initialized. Line 0058 defines the PDS that contain IDCAMS control statements in various members.

Line 0059 indicates the end of this procedure.

NOTE

When reallocating the MESSAGE file you must supply the JCL for the sequential file that contains the messages to be loaded into the VSAM file. The control statement would point to this file. The message file should be backed up to tape or disk prior to reallocating it.

//SETH	PROC USERPFX=NNNNNNN.		0001
//			0002
11,			0002
11	LOADLIB= · LILLILL',		0003
11	MSGPFX=MMMMMMMM,		0004
11	PROG = SFTBATCH		0005
11			0006
11.			0000
11	R=512K,		0007
11	P='DEBUG=NO',		0008
<i>'i</i>			0009
11			0010
11	PRIREPI-A		0010
//****	* * * * * * * * * * * * * * * * * * * *	**	0011
//***	THIS IS THE HOST PROCEDURE FOR RUNNING THE SFT-H PRODUCT	*	0012
//***		*	0013
11+++	TH TO DECOMMENDED WINN YOU DUE WITO TH & CAMALOGED DECOEDINE	+	0014
// ***	IT IS RECOMMENDED THAT YOU PUT THIS IN A CATALOGED PROCEDURE	•	0014
//***	LIBRARY FOR EXECUTION. OTHER PROCEDURES CAN BE CREATED WITH	*	0015
//***	VARIOUS OPTIONS INSTEAD OF USING THE SYMBOLIC PARAMETERS AS	*	0016
11	A NEW AN ANA RACE AND AND AN ANA ANA ANA ANA ANA ANA ANA		0017
//***	GIVEN IN THIS PROC.	î.	001/
//***		*	0018
//***	SYMBOLIC PARAMETERS ARE USED TO IDENTIFY FILES. LIBRARIES.	*	0019
11+++	LAD NOULES THE DECIME OF THE OPEN IT THE DECIMENTED	*	0020
	LOAD MODULES, TIME, REGION, EXECUTE OPTION PARAMETERS,		0020
//***	DUMP/DEBUG OUTPUT OPTION, AND PRINT OUTPUT QUEUE.	*	0021
//***		*	0022
·//***	THE FILF/LIBDARY SYMBOLICS SHOULD BE EDITED TO CONFORM TO	*	0023
11	THE FIRE DEPART STRUCTURE SHOULD BE EDITED TO CONFORM TO		0025
//***	YOUR INSTALLATION STANDARD.	*	0024
//***		*	0025
//***	THE PROGRAM LOAD MODULES WOULD BE SUPPLIED BASED ON WHAT	*	0026
1/+++	PUNCTION YOU ARE MOVING TO REPRODE	+	0027
//	FUNCTION IOU ARE IRIING IO PERFORM:		0027
//***		*	0028
//***	PROG=SFTBATCH (SFT FILE MAINT. UTILITY - DEFAULT)	*	0029
//***		*	0030
	PROG-BETTCP (BET TRANSPORT CONTROL PROGRAM)		0030
//***		×	0031
//***	FILE/LIBRARY SYMBOLICS:	*	0032
//***	ISEPDEY = (HEEP DEFETY FOR MEAN CHICTEDS)	*	0033
11++++			0033
//	USERCAT= (USER VSAM CATALOG)	•	0034
//***	LOADLIB= (SFT-H LOAD LIBRARY)	*	0035
/ / * * *	MSGPFX= (MESSAGE VSAM FILE PREFIX)	*	0036
1/***		*	0037
			0037
//***	PRINT OUTPUT SYMBOLICS:	*	0038
//***	PRTDUMP= (SYSOUT QUEUE FOR DUMP/DEBUG)	*	0039
//***	PRTREPT= (SYSOUT OUTLE FOR REPORT /MESSAGES)	*	0040
11++++	**************************************	**	0041
//			0041
//FILE	TRAN EXEC PGM=&PROG,PARM='&P',TIME=&T,REGION=&R		0042
//STEP	LIB DD DSN=&LOADLIB, DISP=SHR		0043
//STED	CAT DD DSN= & USERCAT, DISP=SHR		0044
//01000			0045
//0019	JI DD SISUUT=&PRTREPT		0045
//REPOI	RT DD SYSOUT=& PRTREPT		0046
//PASSI	DATA DD SYSOUT=& PRTREPT		0047
//GNIADI			0049
// SINAPI	DOMP DD SISOUI-&PRIDOMP		0040
//51201	DUMP DD SYSOUT=&PRTDUMP		0049
//ACBM	SG DD DSN=&MSGPFXHSNAR12.MSG.CLUSTER,DISP=SHR		0050
//ACBH	ST DD DSN=&USERPFY HSNAR12 HST CLUSTER DISP=OLD		0051
///	B = D = D = C = C = C = C = C = C = C = C		0051
//ACBRI	TE DD DON= & USERPEX., HONARIZ. RMF. CLUSTER, DISP= OLD		0052
//ACBT	CF DD DSN=&USERPFXHSNAR12.TCF.CLUSTER,DISP=OLD		0053
//ACBTS	SF DD DSN=&USERPFX, HSNAR12, TSF, CLUSTER, DISP=OLD		0054
//Fmen			0055
//	John Borne College Francisco College Club Ster, DISP=OLD		0000
//FTSF	IN DD DSN=&USERPFXHSNAR12.DFL1.CLUSTER,DISP=OLD		0056
//FTSF	IN1 DD DSN=&USERPFXHSNAR12.DFL9.CLUSTER.DISP=OLD		0057
//TNDI			0058
//***			0050
//	END OF FRUC SFIR SAMAN		0059
		_	

Figure F-3. Sample SFT Inline Procedure SFTH

THE INLINE PROCEDURE SFTH

This procedure is used in the SFTUTL1, SFTUTL2, SFTUTL3, SFTCOMM1, and SFTCOMM2 jobs for running the SFT-H product. Symbolic parameters identify common elements and set run-time defaults; you should edit them to supply installation defaults.

Lines 0001 through 0010 contain the symbolic parameters to be changed:

- USERPFX=NNNNNNN is the high-order qualifier of the names of all VSAM clusters other than the MESSAGE cluster.
- USERCAT='VSAMCAT' is the installation VSAM user catalog.
- LOADLIB='LLLLLLL' is the fully qualified name of the SFT-H load library where all executable modules reside.
- MSGPFX=MMMMMMMM is the high-order qualifier of the name of the MESSAGE file.
- PROG=SFTBATCH is the name of the SFT-H program to be invoked; it defaults to the File Maintenance Utility (SFTBATCH).
- T=2 is the CPU time restriction for the step; it is set to 2 minutes.
- R=512K is the region size parameter for the step; it is set to the minimum of 512K.
- P='DEBUG=NO' is the parameter list to be passed to the executing program; the default turns off diagnostic mode which keeps diagnostic printouts from being generated on exception conditions.
- PRTDUMP=A is the default SYSOUT value for SNAPDUMP and system dump printouts.
- PRTREPT=A is the default SYSOUT value for the SFT-H reports that can be generated in any run.

NOTE

The sample jobs assume that this procedure has been placed in an executable procedure library (e.g., SYS1.PROC LIB). Check with your systems programming section to see if this is true; otherwise, this procedure would have to be brought in line with the various jobs. Lines 0011 through 0041 are comments containing instructions for modifying the procedure.

Line 0042 invokes an SFT-H program with TIME, REGION, and PARAMETER keywords.

Line 0043 specifies the data set defined by the LOADLIB symbolic parameter to be used when searching for programs or tables (such as the default values table and the translate table).

Line 0044 specifies the installation VSAM catalog under which all clusters reside. It is defined by the USERCAT symbolic parameter.

Lines 0045 and 0046 define the log and report data sets as system output data sets. These definitions are used by SFTBATCH only.

Line 0047 defines PASSDATA, a data set that is used only by SFTTCP. If a session is deleted after use or a staging file is to be deleted after transmission, this file contains the SFTBATCH control statement images for the requested operation. This file is not used by this sample program.

Lines 0048 and 0049 define diagnostic output data sets. The SNAPDUMP data set is used when an exception condition is encountered and 'DEBUG=YES' is specified in the PARM value of an EXEC statement. The SYSUDUMP data set is used when a program terminates abnormally. The symbolic parameter default value effectively inhibits all output to these data sets.

Lines 0050 through 0057 identify VSAM clusters for use with this program.

Line 0058 is a dummy DD statement to identify the input DD used for supplying the UCL control statements.

Line 0059 is a comment indicating the end of the SFT-H procedure.

//JOBNAME JOB ACCOUNTINFO, 'USER INFORMATION', CLASS=A, MSGCLASS=A 0001 //**** * 0003 //*** THIS IS THE FIRST JOB TO BE RUN TO TEST THE INSTALLATION //*** * 0004 OF THE HONEYWELL SFT PRODUCT. //*** * 0005 ·/′/*** * 0006 (HOST AND LEVEL 6 SIDES MUST BE INSTALLED) //*** * 0007 EDIT JOBNAME, ACCOUNT INFO., USER INFORMATION, JOB CLASS AND * 0008 /*** //*** MSGCLASS PRIOR TO RUNNING THE JOB. * 0009 //*** * 0010 //*** THIS JOB WILL RUN THE SFT-H BATCH UTILITY PROGRAM (SFTBATCH) * 0011 //*** //*** DOING THE FOLLOWING: * 0012 0013 1. ADD RESOURCES (LU-GROUPS) TO RMF //*** 2. ADD RECORDS TO TCF FOR INTERACTIVE * 0014 //*** AND FILE-TRANSFER SESSIONS * 0015 //*** 3. ADD ACTION RECORDS TO TCF FOR OPERATOR * 0016 A. TO RECEIVE FILES FROM LEVEL6 * 0017 //*** //*** B. DYNAMICALLY ALLOCATE AND SEND AN IBM * 0018 `//******* JCL FILE TO LEVEL6 C. LIST RMF AND TCF FILES * 0019 //*** 0020 //*** * 0021 //*** YOU SHOULD EDIT THE UCL STATEMENTS TO SUPPLY THE LU NAMES * 0022 //*** AND LOGMODE NAME(S) YOUR INSTALLAION HAS SETUP FOR THESE * 0023 //*** * SESSIONS. (SEE YOUR NETWORK SYSTEMS PROGRAMMER) 0024 //*** * 0025 //*** YOU SHOULD EDIT THE UCL STATEMENTS TO SUPPLY THE HIS LEVEL6 * 0026 //*** * 0027 . * 0028 FILES YOU WANT TO TRANSFER TO THE IBM AND THE IBM HOST //*** FILE YOU WANT TO TRANSFER TO THE HIS LEVEL6 FOR THIS TEST. //UTL1 EXEC SFTH 0030 //FILETRAN.INPUT DD * 0031 ** ADD SESSION AND ACTION RECORDS TO TCF FOR INTERACTIVE SESSION * 0033 ADDSES ADDSES SESSID=OPERATOR, X0035 GROUP=OPERATOR, X0036 PRIORITY=25 0037 ADDACT SESSID=OPERATOR, X0038 GROUP=OPERATOR, X0039 ACTION=OPER 0040 0041 ** ADD RESOURCES FOR INTERACTIVE SESSION TO RMF 0042 ** * 0043 * 0044 ** NOTE: LU AND LOGMODE VALUES SHOULD CONFORM TO YOUR NETWORK **** X0046 LUl ADDLU LU=A411, LOGMODE=D4A32782 0047 ADDLU LU=A413, X0048 LU2 LOGMODE=D4A32782 0049 LU3 ADDLU LU=A414, X0050 LOGMODE=D4A32782 0051 *************** 0052 ** ADD GROUP * 0053 0054 * * ** NOTE: LU VALUES SHOULD CONFORM TO YOUR NETWORK * 0055 ADDGRP GROUP=OPERATOR, X0057 ADDLU=(A411,A412,A413) 0058

Figure F-4. Sample SFT Job SFTUTL1

0059 ** ADD SESSION RECORD TO TCF AND LU-NAME TO RMF FOR TRANSFER SESSION * 0060 * 0061 ** ** NOTE: LU AND LOGMODE VALUES SHOULD CONFORM TO YOUR NETWORK * 0062 X0064 LUBATCH ADDLU LU=A461, LOGMODE=FTFMODE4 0065 0066 ** ADD SESSION * 0067 ** * 0068 ** NOTE: LU VALUE SHOULD CONFORM TO YOUR NETWORK * 0069 0070 TESTI ADDSES SESSID=TESTI, X0071 X0072 LU=A461, PRIORITY=199, X0073 0074 ERROPT=IGNORE ** NOW DO RECEIVES OF VARIOUS FILE TYPES * 0076 ** RECEIVE SEQUENTIAL VARIABLE LENGTH RECORD BLOCKED FILE * 0078 ** * 0079 ** NOTE: FILE IN FILEID SHOULD EXIST ON THE LEVEL6 SYSTEM * 0080 TEST1 ADDACT SESSID=TEST1, X0082 LU=A461, X0083 ACTION=RECEIVE, X0084 ERROPT=IGNORE, X0085 OUTDD=FTSFOUT, X0086 X0087 SOURCE=L6, X0088 NAME=L6FILE1, FILEID=>SID>CLM_USER 0089 ** RECEIVE FIXED RELATIVE NON-UFAS TYPE LEVEL6 BOUND-UNIT * 0091 * 0092 ** ** NOTE. OUTDD IS FTSFOUT AGAIN BECAUSE IT IS DEFINED IN DEFAULT TABLE* 0093 * 0094 ** ** NOTE: FILE IN FILEID SHOULD EXIST ON THE LEVEL6 SYSTEM * 0095 TEST1 ADDACT SESSID=TEST1, X0097 LU=A461. X0098 ACTION=RECEIVE, X0099 ERROPT=IGNORE, X0100 X0101 SOURCE=L6, X0102 NAME=L6FILE2, FILEID=>DEBUGDB 0103 ** 0104 ** RECEIVE AN INDEXED FILE INTO DEFAULT TABLE DEFINED FTSFOUT * 0105 * 0106 ** * 0107 ** NOTE: FILE IN FILEID SHOULD EXIST ON THE LEVEL6 SYSTEM ADDACT SESSID=TEST1, X0109 TEST1 X0110 LU=A461. ACTION=RECEIVE, X0111 ERROPT=IGNORE, X0112 SOURCE=L6, X0113 NAME=L6FILE3 X0114 FILEID=>ML>VIDEO.ML 0115

Figure F-4 (cont). Sample SFT Job SFTUTL1
	The subscription of the su
***************************************	0116
** DYNAMICALLY ALLOCATE AND SEND AN IBM HOST FILE TO LEVEL6 *	0117
**	0118
** NOTE . FILETD SHOULD BE EDITED TO SUDDLY AN HIS LEVELG FILE NAME *	0119
** NOTE: FINELD SHOULD BE EDITED TO SUPPLY AN THE HOVER DATASET *	0120
	0121
	20122
	0123
	10124
	0125
	0126
	0127
	0128
	0120
	20120
	10121
DSNAME=SFTH.IBFJCL.FILE,	10133
CONVERTERSCIT, 2	0133
FILEID=>HIS>TESTIBM	0124
	0125
** LIST THE RMF AND TCF FILES	0132
	0130
TESTI LISTLU	013/
TESTI LISTSES	0138
	0139
	U⊥4⊥

Figure F-4 (cont). Sample SFT Job SFTUTL1

THE JOB STEP SFTUTL1

This job will invoke SFTBATCH (the default value in SFTH) to run the batch utilities function of SFT-H.

Line 0001 contains the JOB information you must edit to supply installation-specific values.

Lines 0002 through 0029 are comments and instructions for running this job.

Line 0030 invokes the procedure SFTH.

Line 0031 indicates that the utility control language statements for SFTBATCH follow (in lines 0032 through 0139).

Lines 0035 through 0040 define the online operator interface session to SFT-H. Terminals that are members of the group OPERATOR are allowed to use this session.

Lines 0046 through 0051 define a session between SFT-H and the terminals that are member of the group OPERATOR (such terminals support the online operator interface). The LU names are A411, A413, and A414.

NOTE

You should modify LU and LOGMODE values in all UCL statements to conform to installation definitions. Contact your systems programming section.

Lines 0057 and 0058 define the members of the group OPERATOR.

Lines 0064 and 0065 define the LU A461. This LU corresponds, in this example, to an SFT-6 system.

Lines 0071 through 0074 define a session between SFT-H and LU A461. If any exception conditions occur, document them and attempt to continue.

Lines 0082 through 0089 define a Receive action within the SFT-H/A461 session. The DPS 6 file >SID>CLM_USER is received. The file is written into the staging file with the FTSOUT DDNAME. The combination of the SOURCE and NAME keywords differentiates this received data from other received data.

Lines 0097 through 0103 define another Receive action. This file will also reside in FTSOUT. Using a different SOURCE and NAME combination for identification, the job moves the bound unit >DEBUGDB to the host system. Lines 0109 through 0115 define a third Receive action. The indexed file >ML>VIDEO.ML is brought to the host system.

Lines 0122 through 0126 delete the file >HIS>TESTIBM on the DPS 6. (If this example was executed previously, the file might already exist.)

Lines 0127 through 0133 define the Send action that dynamically allocates and sends a file. DSNAME is the IBM file name; >HIS>TESTIBM is the MOD 400 full pathname.

Line 0137: requests a report of all LUs defined.

Line 0138 requests a report of the SFT-H/SFT-6 session; the report summarizes the actions and parameters.

Lines 0140 and 0141 denote the end of the control statements and the JOB JCL statements.

//JOBNAME JOB ACCOUNTINFO, USER INFORMATION', CLASS=A, MSGCLASS=A 0001 ******* 0002 * 0003 //*** THIS JOB IS TO TEST THE COMMUNICATION RUNS THAT WERE SETUP //*** * 0004 IN THE UTL1 JOB. * 0005 //*** * 0006 (HOST AND LEVEL 6 SIDES MUST BE INSTALLED) ·//*** * 0007 //*** EDIT JOBNAME, ACCOUNT INFO., USER INFORMATION, JOB CLASS AND * 0008 //*** * 0009 MSGCLASS PRIOR TO RUNNING THE JOB. //*** * 0010 //*** REPLACE 'NNNNNNNN' WITH HIGH LEVEL INDEX NAME * 0011 //*** REPLACE 'VVVVVV' WITH VOLUME SERIAL NUMBER FILE RESIDES ON * 0012 ·//*** * 0013 1/*** THIS JOB WILL RUN THE SFT-H COMMUNICATION PROGRAM (SFTTCP) * 0014 //*** TO SEND AND RECEIVE FILES FROM THE LEVEL6. THE SESSIONS * 0015 //*** WERE SETUP IN THE UTL1 JOB. * 0016 //*** * 0017 //*** THIS JOB WILL ALSO TEST THE INTERACTIVE FACILITY BY DOING * 0018 //*** A LOGON TO THE FILETRAN APPLID. + 0019 //*** * 0020 //*** THIS JOB WILL THEN EMPTY THE TSF FILE SETTING IT UP FOR 0021 //*** ANOTHER BATCH SESSION. * 0022 //*** * 0023 0024 //EMPTYTSF EXEC SFTIDCAM 0025 0026 //** RESET ONLY TSF FILE (UNIQUE OPTION) * 0027 //** * 0028 //** USE MEMBER 'TSFREUSE' IF FILE WAS DEFINED * 0029 //** WITH THE 'REUSE' OPTION: * 0030 //** 0031 0032 //COMM1 EXEC SFTH, 0033 // PROG=SFTTCP, // R=768K. 0034 R=768K, 0035 // P='MODE=START, MAXFILES=5, OPERSES=ENABLE, OPERATOR=A411' 0036 //****** 0037 //VFLDVSAM.SYSIN DD * 0038 DELETE (0039 NNNNNNN.TSF.CLUSTER) -0040 CLUSTER 0041 PURGE 0042 0043 `*′/ 0044 0045 DEFINE CLUSTER (----0046 NAME (NNNNNNN. TSF. CLUSTER) 0047 VOLUMES(VVVVV) 0048 FREESPACE(20) 0049 ----INDEXED 0050 OWNER('HIS') -0051 _ UNIQUE 0052 IMBED -0053 REPLICATE _ 0054 ----SHAREOPTIONS(2) 0055 NONSPANNED -0056 -CYLINDERS(2 1) 0057 TO(99365)) 0058 DATA (-0059 NAME (NNNNNNN. TSF. DATA) 0060 RECORDSIZE(342 342) _ 0061 CISZ(2048) 0062 KEYS(17 0)) _ 0063 INDEX (0064 • -NAME(NNNNNNN.TSF.INDEX) 0065 CISZ(512)) 0066 0067 0068 0069 0070 /* 0071 11 0072

Figure F-5. Sample SFT Job SFTCOMM1

THE JOB STEP SFTCOMML

This job will invoke SFTTCP to run the communications between SFT-H and SFT-6, and execute the Receive, Delete, and Send actions specified in job SFTUTL1.

Line 0001 contains the JOB information you must edit to supply installation-specific values.

Lines 0002 through 0024 are comments and instructions for running this job.

Line 0025 invokes the procedure SFTIDCAM, used for clearing VSAM clusters, and supplies a PARMLIB member (CRTFUNQ) that contains the IDCAMS utility control statements used to reallocate the TSF cluster. It refers to a member of the PDS dataset found in the SFTIDCAM procedure pointed to by the SYSIN DD statement.

Lines 0026 through 0032 are comments pertaining to this step in the job.

Line 0033 invokes the procedure SFTH.

Line 0034 provides the symbolic parameter PROG to override the default value with SFTTCP.

Line 0035 provides the symbolic parameter R to override the default value with 768K.

Line 0036 provides the symbolic parameter P that supplies the parameters for SFTTCP:

- MODE=START indicates that the transmission status file is empty and that no attempt to recover from any previous executions need be made.
- MAXFILES=5 indicates that up to five files can be concurrently, dynamically allocated.
- OPERSES=ENABLE indicates that online operator interface sessions are allowed.
- OPERATOR=A411 indicates that the system should attempt to use LU A411 as an operator terminal at startup time.

This execution of SFTTCP results in two sessions:

- An SFT-H/A411 operator session
- An SFT-H/A461 session consisting of three Receive actions, one Delete action, and one dynamic file allocation (and Send action).

Lines 0048 through 0068 are IDCAMS utility control statements used to define the TSF cluster. You must replace VVVVV with the VOLUME SERIAL number of the pack on which this file resides.

Line 0072 is the IDCAMS utility control statement to initialize the TSF cluster (that is, load a dummy record into the file).

Lines 0073 and 0074 indicate the end of the control statements and the end of the JOB JCL statements.

//JOBNAME JUB ACCUUNTINFU, USER INFURMATION', CLASS=A, MSGCLASS=A 0001 //**** ************** 0002 //*** THIS IS THE SECOND JOB TO BE RUN TO TEST THE INSTALLATION * 0003 //*** 0004 OF THE HONEYWELL SFT PRODUCT. //*** * 0005 //*** * 0006 (HOST AND LEVEL 6 SIDES MUST BE INSTALLED) * 0007 `/**/***** * //*** EDIT JOBNAME, ACCOUNT INFO., USER INFORMATION, JOB CLASS AND 0008 `//******* 0009 MSGCLASS PRIOR TO RUNNING THE JOB. //*** * 0010 //*** * 0011 THIS JOB WILL RUN THE SFT-H BATCH UTILITY PROGRAM (SFTBATCH) //*** * DOING THE FOLLOWING: 0012 1. USE 'ERASE' OPTION FOR DELETING LSF. //*** * 0013 * 0014 //*** 2. UNSTAGE FILES RECEIVED FROM LEVEL6 //*** * 0015 3. STAGE THE SAME FILES TO SEND BACK.* 00154. WRITE ACTION RECORDS TO TCF FOR RECEIVING * 0016 //*** IBM JCL AND SENDING ACTION RECORDS FOR * 0017 USING LEVEL6 'DELETE, RENAME AND * 0018 ·/*** * 0018 ·/*** //*** EXECUTE.EC' COMMANDS. * 0019 //*** * 0020 * 0021 *.* //*** YOU SHOULD EDIT THE UCL STATEMENTS TO SUPPLY THE LU NAMES * AND LOGMODE NAME(S) YOUR INSTALLATION HAS SETUP FOR THESE * SESSIONS. (REFER TO FIRST TEST RUN) * //*** 0022 //*** * 0023 //*** + 0024 //*** YOU SHOULD EDIT THE UCL STATEMENTS TO SUPPLY THE HIS LEVEL6 * 0025 //*** AND THE IBM HOST FILE NAMES TO BE USED IN THE FILE TRANSFER * 0026 //*** SESSIONS. YOU SHOULD USE THE SAME FILES AS IN JOB 1. * * 0027 0028 //UTL2 EXEC SFTH 0029 //FILETRAN.INPUT DD * 0030 * DELETE PREVIOUS FILE TRANSFER (RECEIVES) SESSION & ACTION RECORDS * 0032 *234567890123456789012345678901234567890123456789012345678901234567890120034 DELSES DELSES SESSID=TEST1, X0035 LU=A461 0036 PRTSES LISTSES 0037 * CREATE A NEW SESSION RECORD TO RECEIVE AND SEND FILES TO LEVEL6 * 0039 TEST2 ADDSES SESSID=TEST2, X0041 LU=A461, X0042 ERROPT=IGNORE, X0043 PRIORTTY=2000044 ERASE SOURCE=L6,NAME=IBMFILE,INDD=FTSFOUT 0049 ERASE SOURCE=L6, NAME=L6FILE1, INDD=FTSFIN 0050 ERASE SOURCE=L6, NAME=L6FILE2, INDD=FTSFIN 0051 ERASE SOURCE=L6, NAME=L6FILE3, INDD=FTSFIN 0052

Figure F-6. Sample SFT Job SFTUTL2

* UNSTAGE PREVIOUSLY RECEIVED L6 FILES INTO TEMPORARY WORK-AREAS * 0055 UNSTAGE DDNAME=TWEWK1, X0055 NAME+L6FILE1, X0057 SOURCE=L6, X0059 CONVERT=ESCDIC, 0061 UNSTAGE DDNAME=TWEWK2, X0065 SOURCE=L6, X0066 NAME+L6FILE2, X0065 SOURCE=L6, X0066 CONVERT=ESCDIC, 0067 UNSTAGE DDNAME=TWEWK2, X0065 CONVERT=ESCDIC, X0066 UNSTAGE DDNAME=TWEWK2, X0065 SOURCE=L6, X0066 UNSTAGE DDNAME=TREAS, X0066 SOURCE=L6, X0066 SOURCE=L6, X0066 CONVERT=ESCDIC, X0066 SOURCE=L6, X0066 SOURCE=L6, X0066 SOURCE=L6, X0067 UNSTAGE DDNAME=TREAS, X0066 SOURCE=L6, X0070 DECOMFR=YES, X0070 CONVERT=ESCDIC, X0070 CONVERT=ESCDIC, X0070 CONVERT=ESCDIC, X0070 STAGE RECEIVED FILES INTO NEW STAGE FILE FOR SENDING TO LEVEL6 * 0076 *** NOTE: FILE NAME IN FILEID WILL BE PATHNAME OF FILE RECEIVED BY * 0077 *** NOTE: FILE NAME IN FILEID WILL BE PATHNAME OF FILE RECEIVED BY * 0076 STAGE DDNAME=TMEWK1, X0080 SOURCE=L6, X0080 CONVERT=SCI, X0080 SOURCE=L6, X0080 CONVERT=SCI, X0080 SOURCE=L6, X0080 SOURCE=L6, X0080 CONVERT=ASCI1, X0080 SOURCE=L6, X0080 RECEM=-V, X0080 SOURCE=L6, X0080 RECEM=V, X0080 SOURCE=L6, X0080 CONVERT=ASCI1, X0080 SOURCE=L6, X0090 STAGE DDNAME=TMEWK1, X0080 SOURCE=L6, X0090 STAGE DDNAME=TMEWK1, X0080 SOURCE=L6, X0080 RECEM=-V, X0080 STAGE DDNAME=TMEWK1, X0080 SOURCE=L6, X0080 SOURCE=L6, X0080 RECEM=-V, X0080 STAGE DDNAME=TMEWK2, X0080 STAGE DDNAME=TMEWK2, X0080 STAGE DDNAME=TMEWK2, X0080 CONVERT=ASCI1, X0080 STAGE DDNAME=TMEWK2, X0080 RECEM=V, X0090 STAGE DDNAME=TMEWK2, X0090 STAGE DDNAME=TMEWK2, X0090 STAGE DDNAME=TMEWK2, X0080 RECEM=-V, X0090 STAGE DDNAME=TMEWK2, X0090 STAGE DDNAME=TMEWK2, X0090 STAGE DDNAME=TMEWK2, X0090 RECEM=-F, X0090 STAGE DDNAME=TMEWK2, X0090 RECEM=-F, X0090 RECEM=F, X0090 RECEM=F, X0090 STAGE DDNAME=TMEWK2, X0090 RECEM=F, X0090 STAGE DDNAME=TMEWK2, X0090 RECEM=F, X0090 STAGE DDNAME=TMEWK2, X0090 RECEM=F, X0090 RECEM=F, X0090 RECEM=F, X0090 RECEM=F, X0090 RECEM=F, X0090 RECEM=F, X0090 RECEM=F, X0090 RECEM=F, X0090 RECEM=F, X0090 RECEM	********	***** 0053
UNSTAGE DDNAME=TMFWR1, X0056 NAME=L6FILE, X0057 SOURCE-L6, X0056 DECOMPR-YES, X0059 CONVERT-EECIC, X0060 INDD-FTSPOUT 0061 UNSTAGE DDNAME=TMFWR2, X0063 SOURCE-L6, X0066 DECOMPR-YES, X0066 INDD-FTSPOUT 0067 UNSTAGE DDNAME=TMFWR3, X0068 SOURCE-L6, X0070 DECOMPR-YES, X0070 DECOMPR-YES, X0070 DECOMPR-YES, X0070 DECOMPR-YES, X0070 DECOMPR-YES, X0070 SOURCE-L6, X0077 INDD-FTSPOUT 0073 ** STAGE DENAME=TMFWR3, X0068 SOURCE-L6, X0070 DECOMPR-YES, X0070 DECOMPR-YES, X0070 DECOMPR-YES, X0070 SOURCE-L6, X0070 THE LEVEL6 X0070 ** OTTAE DECOLC, X0071 STAGE DDNAME=TMFWR3, X0080 SOURCE-L6, X0070 STAGE DDNAME=TMFWR3, X0080 SOURCE-L6, X0070 STAGE DDNAME=TMFWR1, X0080 SOURCE-L6, X0080 CONVERT-ESCII, X0080 SOURCE-L6, X0080 CONVERT-ESCII, X0080 SOURCE-L6, X0080 CONVERT-ESCII, X0080 SOURCE-L6, X0080 CONVERT-ESCII, X0080 SOURCE-L6, X0080 CONVERT-ESCII, X0090 CONVERT-ESCII, X0090 C	* UNSTAGE PREVIOUSLY RECEIVED L6 FILES INTO TEMPORARY WORK-AREAS	* 0054
UNSTAGE DUARMETMENNI, X0056 NAME_DEFILEJ, X0056 SOURCE-LG, X0056 DECOMPRETSECLC, X0060 INDETSFOUT 0061 UNSTAGE DDNAME-TMENN2, X0056 SOURCE-LG, X0066 DECOMPRETSFOUT X0066 DECOMPRETSFOUT X0066 UNSTAGE DDNAME-TMENNES, X0066 DECOMPRETSFOUT X0067 UNSTAGE DDNAME-TMENNES, X0066 NAME-L6FILES, X0067 UNSTAGE DDNAME-TMENNES, X0067 DECOMPRETESC, X0070 CONVERT=BECICC, X0071 CONVERT=BECICC, X0072 INDD=FTSFOUT 0073 *** STAGE RECEIVEL FILES INTO NEW STAGE FILE FOR SENDING TO LEVEL6 * 0076 ************************************	***************************************	×××××× 0055
SOURCE-L6, X0059 DECOMPR-YES, X0059 CONVERT-BECDIC, X0060 INDD-FTSFOUT 0061 UNSTAGE DDNAME-TMEWK2, X0062 SOURCE-L6, X0065 DONAME-TSFOUT 0067 UNSTAGE DDNAME-TMEWK3, X0066 SOURCE-L6, X0066 INDD-FTSFOUT 0067 UNSTAGE DDNAME-TMEWK3, X0069 SOURCE-L6, X0070 DECOMPR-YES, X0070 DECOMPR-YES, X0070 SOURCE-L6, X0071 CONVERT-BECDIC, X0077 INDD-FTSFOUT 0073 ** STAGE RECEIVEJ FILES INTO NEW STAGE FILE FOR SENDING TO LEVEL6 * 0075 ** OTE: FILE NAME IN FILEID WILL BE PATHNAME OF FILE RECEIVED BY * 0077 ** TTE LEVEL6 STAGE DDNAME-TMFWK1, X0080 CONVERT-SCII, X0090 STAGE DDNAME-TMENKS, X0090 STAGE DDNAME-TMENKS, X0090 STAGE DDNAME-TMENKS, X0090 STAGE DDNAME-TMENKS, X0090 STAGE DDNAME-THENKS, X0090 STAGE DDNAME-THENKS, X0090 STAGE DDNAME-THENKS, X0090 STAGE DDNAME-THENKS, X0090 STAGE DDNAME-THENKS, X0090 STAGE DDNAME-THENKS, X0090 STAGE DDNAME-THE	UNSTAGE DDNAME=TMPWK1, NAME=IGETLE]	x0050
DECOMPR-TESCIC, X0050 INDE-FTSFOUT 0061 UNSTAGE DDNAME-TWFW2, X0062 NAME-L6FLE2, X0063 SOURCE-L6, X0064 DECOMPR-TES, X0066 INDE-FTSFOUT 0067 UNSTAGE DDNAME-TWFW3, X0066 SOURCE-L6, X0066 SOURCE-L6, X0072 INDE-FTSFOUT 0071 *** STAGE RECEIVED FLES INTO NEW STAGE FILE FOR SENDING TO LEVEL6 * 0074 ** STAGE RECEIVED FLES INTO NEW STAGE FILE FOR SENDING TO LEVEL6 * 0075 *** NOTE: FILE NAME IN FILEID WILL BE PATHNAME OF FILE RECEIVED BY * 0077 *** TTE LEVEL6 * X0081 SOURCE-L6, X0081 SOURCE-L6, X0081 SOURCE-L6, X0081 SOURCE-L6, X0081 SOURCE-L6, X0081 SOURCE-L6, X0081 SOURCE-L6, X0083 CONVERT-ASCII, X0084 CONVERT-SCLU, X0085 DSORG-FS, X0085 DSORG-FS, X0085 CONVERT-SCLU, X0085 CONVERT-SCL	SOURCE=L6,	X0058
CONVERT=BECDIC, X0061 INDD=FTSFOUT 0061 UNSTAGE DDNAME=TMFWK2, X0062 NAME-L6FILE2, X0063 SOURCB=L6, X0065 CONVERT=BECDIC, X0065 CONVERT=BECDIC, X0065 UNSTAGE DDNAME=TMFWK3, X0068 NAME-L6FILE3, X0069 SOURCB=L6, X0071 CONVERT=BECDIC, X0071 CONVERT=BECDIC, X0071 THDD=FTSFOUT 0073 ** STAGE RECEIVED FILES, X0071 CONVERT=BECDIC, X0072 THDD=FTSFOUT 0073 ** STAGE RECEIVED FILES INTO NEW STAGE FILE FOR SENDING TO LEVEL6 0076 ** NOTE: FILE NAME IN FILEID WILL BE PATHNAME OF FILE RECEIVED BY * 0077 ** TTE LEVEL6 X0082 CONVERT=ABCIL, X0080 SOURCB=L6, X0080 CONVERT=ABCIL, X0090 CONVERT=ABCIL, X0090 CONV	DECOMPR=YES,	X0059
IND-FTSPOUT 0061 UNSTAGE DDNAME=THFWRX2, X0062 NAME=L6FILE2, X0063 SOURCE=L6, X0066 DECOMPREYES, X0066 CONVERT=EBCDIC, X0066 IND-FTSFOUT 0067 UNSTAGE DDNAME=THFWK3, X0068 NAME=L6FILE3, X0071 DECOMPREYES, X0071 CONVERT=EBCDIC, X0071 IND-FTSFOUT 0073 ************************************	CONVERT = EBCDIC,	X0060
UNSTRACE LDMARE=TMPMA2, X0062 NAME=L6FILE2, X0063 SOURCE=L6, X0064 DECOMPREYES, X0066 UNSTACE DDNAME=TMPMK3, X0066 NAME=L6FILE3, X0070 DECOMPREYES, X0071 CONVERT=EBCDIC, X0071 DECOMPREYES, X0071 CONVERT=EBCDIC, X0072 INDD=FTSFOUT 0073 *** STAGE RECEIVED FILES INTO NEW STAGE FILE FOR SENDING TO LEVEL6 * 0075 *** THE LEVEL6 * 00076 *** THE LEVEL6 * 0076 *** THE LEVEL6 * 0077 *** THE LEVEL6 * 0078 STAGE DNAME=TMFMK1, X0080 SOURCE=L6, X0081 SOURCE=L6, X0083 CONVERT=ASCII, X0084 OUTDD=FTSFIN, X0085 DSOGE=PS, X0086 RECFM=V, X0087 RECFM=V, X0088 CISIZE=56, X0088 CONVERT=ASCII, X0089	INDD=FTSFOUT	0061
NUME DOI 1022, SUGRE=16, X0065 DECOMPR=VES, X0065 CONVERT=EBCDIC, X0066 INDD=FTSFOUT 0067 UNSTAGE DDNAME=THFWK3, X0068 NAME=L6FILE3, X0071 CONVERT=EBCDIC, X0077 INDD=FTSFOUT 0073 *** STAGE RECEIVED FILES INTO NEW STAGE FILE FOR SENDING TO LEVEL6 * 0076 *** NOTE: FILE NAME IN FILEID WILL BE PATHNAME OF FILE RECEIVED BY * 0077 **** THE LEVEL6 * 0078 **** THE LEVEL6 * 0078 ************************************	UNSTAGE DDNAME=TMPWKZ, NAME=IGETIF2	X0062 X0063
DECOMPREYES X0065 CONVERT-BECDIC, X0066 INDD-FTSPOT 0067 UNSTAGE DDNAME-TMFWK3, X0068 NAME-L6FILB3, X0070 SOURCE-L6, X0071 DECOMPREYES, X0071 CONVERT-BECDIC, X0071 IND-FTSFOUT 0073 *** STAGE RECEIVEL FILES INTO NEW STAGE FILE FOR SENDING TO LEVEL6 * 0075 *** THE LFVELF *** *** THE LFVEL6 * 0075 *** THE LFVEL6 * 0077 *** STAGE DDNAME-TMFWK1, X0080 SOURCE-L6, X0081 X0081 SOURCE-L6, X0082 X0082 CONVERT-SCII, X0081 X0081 SOURCE-L6, X0082 X0082 CONVERT-SCII, X0083 X0083 SOURCE-L6, X0084 X0086 SOURCE-L6, X0085 X0086 CONVERT-SCII, X0086 X0086 CONVERT-SCII, X0085 X0086 <t< td=""><td>SOURCE=1.6.</td><td>X0064</td></t<>	SOURCE= 1.6 .	X0064
CONVERT=EBCDIC, X0066 INDD=FTSFOUT 0067 UNSTAGE DDNAME=TMFWK3, X0068 NAME=L6FLES, X0070 DECOMPR=L6, X0071 CONVERT=EBCDIC, X0071 INDD=FTSFOUT 0073 *** STAGE RECEIVE, FILES INTO NEW STAGE FILE FOR SENDING TO LEVEL6 * 0075 *** * 0076 *** * 0077 *** * 0076 *** * 0076 *** * 0076 *** * 0077 *** * 0078 *** * 0078 *** * 0078 *** * 0078 *** * 0078 **** * 0078 **** * 0078 STAGE DDNAME=TMFWK1, X0080 NAME=L6FILE1, X0081 SOURCE=L6, X0082 CONVERT=ASCII, X0082 OUND=FTSFIN, X0086 DSORG=PS, X0086 CILED=>HIS>CLMU 0090 STAGE DDNAME=TMFWK2,	DECOMPR=YES,	X0065
IND=FTSFOUT 0067 UNSTAGE DDNAME=TMFWK3, X0068 NAME=L6FILE3, X0070 SOURCE=L6, X0071 CONVERT=EBCDIC, X0072 IND=FTSFOUT 0073 **** STAGE RECEIVED FILES INTO NEW STAGE FILE FOR SENDING TO LEVEL6 * 0075 *** STAGE DENAME=TMFWK1, X0080 *** THE LEVEL6 * 0077 *** THE LEVEL6 X0080 SCARGE DDNAME=TMFWK1, X0080 SOURCE=L6, X0082 CONVERT=ASCII, X0083 CONVERT=ASCII, X0086 NORS RECL=256, X0087 RECL=256, X0088 GONZE=L6, X0093 CONVERT=ASCII, X0095 OUTDD=FTSFIN, X0086 SOURCE=L6, X0089 CONVERT=ASCII, X0093 <td>CONVERT=EBCDIC,</td> <td>X0066</td>	CONVERT=EBCDIC,	X0066
UNSTAGE DUNAME=TMPWK3, X0069 NAME=L6F1LE3, X0071 SOURCE=L6, X0071 CONVERT=EBCDIC, X0071 CONVERT=EBCDIC, X0071 Yourdestand 0073 *** STAGE RECEIVED FILES INTO NEW STAGE FILE FOR SENDING TO LEVEL6 *0075 *** NOTE: FILE NAME IN FILEID WILL BE PATHNAME OF FILE RECEIVED BY *0077 *** THE LEVEL6 *0078 *0078 *** STAGE DDNAME=TMFWK1, X0080 NAME=L6FILE1, X0080 N0082 SOURCE=L6, X0081 SOURCE=L6, CONVERT=ASCII, X0081 SOURCE OUTD=TSFIN, X0082 SOURCE DSORG=FS, X0083 CONVERT=ASCII, X0084 CONVERT=ASCII, X0081 SOURCE SOURCE NAME=L6FILE2, X0083 SOURCE=L6, X0082 SOURCE=L6, X0083 SOURCE SOURCE OCONVERT=ASCII, X0084 SOURCE SOURCE OURTD=FISFIN, X0091 NAME=L6F	INDD=FTSFOUT	0067
NNN= 1011LL, X0070 SOURCE=16, X0071 DECOMPRTES, X0071 INDD=FTSFOUT 0073 *** STAGE RECEIVED FILES INTO NEW STAGE FILE FOR SENDING TO LEVEL6 * 0076 *** NOTE: FILE NAME IN FILEID WILL BE PATHNAME OF FILE RECEIVED BY * 0077 *** THE LEVEL6 * 0076 *** NOTE: FILE NAME IN FILEID WILL BE PATHNAME OF FILE RECEIVED BY * 0078 *** NOTE: FILE NAME IN FILEID, X0081 SURCE=16, X0081 SOURCE=16, X0083 COMPRESS=YES, X0084 OUTDD=FTSFIN, X0086 RECFM=V, X0087 RECFM=V, X0088 CISIZ=5512, X0089 PILEID=>HIS>CLMU 0090 STAGE DNAME=TMPMKZ, X0081 NAME=L6FILE2, X0089 COVERT=ASCIT, X0081 NAME=L6FILE2, X0082 COVERT=ASCIT, X0081 COWERT=ASCIT, X0091 NAME=L6FILE2, X0091 SURCE=L6, X0092 OUTD=FTSFIN, X0091	UNSTAGE DDNAMETTMPWK3,	x0068
DECOMPREYES, X0071 CONVERT=BECDIC, X0072 INDEFTSFOUT 0073 *** STAGE RECEIVED FILES INTO NEW STAGE FILE POR SENDING TO LEVEL6 * 0076 *** NOTE: FILE NAME IN FILEID WILL BE PATHNAME OF FILE RECEIVED BY * 0077 THE LEVEL6 * 0078 STAGE DDNAME=TMFWK1, X0080 NAME=L6FILE1, X0080 NAME=L6FILE1, X0081 COMPRESS=YES, X0083 CONVERT=ASCII, X0088 DESORG=PS, X0088 CISIZE=512, X0089 STAGE DDNAME=TMFWK2, X0089 RECL=256, X0088 CISIZE=512, X0089 SURCE=L6, X0089 SURCE=L6, X0089 SURCE=L6, X0089 COMPRESS=YES, X0089 COMPRESS=YES, X0089 COMPRESS=YES, X0089 COMPRESS=YES, X0089 SURCE=L6, X0089 SURCE=L6, X0089 SURCE=L6, X0099 STAGE DDNAME=TMFWK2, X0099 SURCE=L6, X0099 SURCE=L6, X0099 SURCE=L6, X0099 RECL=256, X0009 RECL=256, X	SOURCE=L6.	X0070
CONVERT-EBCDIC, X0073 INDD-FTSFPUT 0073 *** STAGE RECEIVED FILES INTO NEW STAGE FILE FOR SENDING TO LEVEL6 * 0075 ** *** *** STAGE RECEIVED FILES INTO NEW STAGE FILE FOR SENDING TO LEVEL6 * 0076 *** THE LEVEL6 * 0077 *** THE LEVEL6 * 0078 STAGE DDNAME-TMFWK1, X0080 NAME-L6FILE1, X0081 SURCE-L6, X0083 CONVERT-SSCIT, X0086 OUTDD-FTSFIN, X0086 CONVERT-SSCIT, X0086 CONVERT-SCIT, X0087 RECL=256, X0086 CISIZE-S12, X0087 RECL=256, X0088 CISIZE-S12, X0087 RECL=256, X0088 CONVERT-ASCIT, X0089 SURCE-16, X0081 CONVERT-ASCIT, X0092 SURCE-16, X0093 CONVERT-ASCIT, X0094 OUTDD-FTSFIN, X0095 OUTDD-FTSFIN, X0096	DECOMPR=YES,	X0071
INDD=FTSF0UT 0073 *** STAGE RECEIVED FILES INTO NEW STAGE FILE FOR SENDING TO LEVEL6 * 0075 *** *** *** NOTE: FILE NAME IN FILEID WILL BE PATHNAME OF FILE RECEIVED BY * 0076 *** THE LEVEL6 * 0078 *** STAGE DDNAME=TMFWKI, X0080 NAME=L6FILEI, X0081 SOURCE=L6, X0082 COMVERT=ASCII, X0084 OUTDD=FTSFIN, X0085 DSORG=PS, X0086 RECC=256, X0087 RECL=256, X0088 CISIZE=512, X0087 RECL=256, X0088 CISIZE=512, X0089 FILEID=>HIS>CLMU 0090 STAGE DDNAME=TMFWK2, X0091 NAME=L6FILE2, X0092 SOURCE=L6, X0093 COMPRESS=YES, X0093 CONVERT=ASCII, X0095 OUTD=FTSFIN, X0095 OUTD=FTSFIN, X0096 DSORG=PR, X0097 DELATTR=NO, X0096 RECEPM=	CONVERT=EBCDIC,	X0072
<pre>*** STAGE RECEIVED FILES INTO NEW STAGE FILE FOR SENDING TO LEVEL6 * 0075 *** NOTE: FILE NAME IN FILEID WILL BE PATHNAME OF FILE RECEIVED BY * 0077 *** THE LEVEL6 * 0075 STAGE DDNAME=TMFWK1, * 0078 STAGE DDNAME=TMFWK1, * 0078 COMPRESS=YES, * 00082 COMPRESS=YES, * 00082 COMPRESS=YES, * 00082 COMPRESS=YES, * 00084 COUTD=FTSFIN, * 00087 RECCH=256, * 00087 RECCH=256, * 00087 STAGE DDNAME=TMFWK2, * 00090 STAGE DDNAME=TMFWK2, * 00091 NAME=L6FILE2, * 00092 SOURCE=L6, * 00092 COMPRESS=YES, * 00094 CONVERT-ASCII, * 00990 COMPRESS=YES, * 00092 COMPRESS=YES, * 00092 COMPRESS=YES, * 00094 CONVERT-ASCII, * 00095 COMPRESS=YES, * 00096 RECCM=F, * 00097 RECL=256, * 01010 STAGE DDNAME=TMFWK3, * 00096 RECCM=F, * 00097 RECL=256, * 0100 STAGE DDNAME=TMFWK3, * 01096 CONVERT-ASCII, * 00096 RECCM=F, * 00097 RECL=256, * 0100 STAGE DDNAME=TMFWK3, * 0109 RECL=256, * 0100 STAGE DDNAME=TMFWK3, * 0109 RECL=256, * 0100 STAGE DDNAME=TMFWK3, * 01096 CONVERT-ASCII, * 00097 RECL=256, * 0100 STAGE DDNAME=TMFWK3, * 0109 RECL=25, * 0000 STAGE DDNAME=TMFWK3, * 0100 STAGE DDNAME=TMFWK3, * 0100 RECL=252, * 0000 RECL=252, * 0000 STAGE DDNAME=TMFWK3, * 01005 CONVERT-ASCII, * 00098 RECFM=F, * 00098 RECF</pre>	INDD=FTSFOUT	0073
** ** ** *****************************		* 0075
<pre>** NOTE: FILE NAME IN FILEID WILL BE PATHNAME OF FILE RECEIVED BY * 0077 ** THE LEVEL6 * 0078 STAGE DDNAME=TMFWK1, X0080 NAME=L6FILE1, X0080 NAME=L6FILE1, X0081 SURCE=L6, X0082 COMPRES=YES, X0083 CONVERF=ASCII, X0084 OUTDD=FTSFIN, X0085 DSORG=PS, X0085 DSORG=PS, X0086 CISIZE=512, X0088 CISIZE=512, X0089 FILEID=>HIS>CLMU 0090 STAGE DDNAME=TMFWK2, X0091 NAME=L6FILE2, X0092 SURCE=L6, X0093 COMPRES=YES, X0096 DSORG=FR, X0097 DELATTR=N0, X0097 DELATTR=N0, X0099 RECC=256, X0100 FILEID=>HIS>DBUG 0101 STAGE DDNAME=TMFWK3, X0102 NAME=L6FILE2, X0099 RECC=256, X0100 FILEID=>HIS>DBUG 0101 STAGE DDNAME=TMFWK3, X0102 NAME=L6FILE2, X0099 RECC=256, X0104 COMPRES=N0, X0102 NAME=L6FILE3, X0104 COMPRES=N0, X0104 COMPRES=N0, X0104 COMPRES=N0, X0104 RECCM=7, X0107 DSORG=IS, X0104 RECCM=7, X0107 RECC=252, X0111 KEYLEN=5, X0112 KEYOFF=0, X0112 KEYOFF=0, X0113 FILEID=>HIS>MLEN 0114</pre>	** SIAGE RECEIVED FILES INTO NEW SIAGE FILE FOR SENDING TO LEVELO	* 0075
*** THE LEVEL6 * 0078 ************************************	** NOTE: FILE NAME IN FILEID WILL BE PATHNAME OF FILE RECEIVED BY	* 0077
STAGE DDNAME=TMPWK1, X0080 NAME=L6FILE1, X0081 SOURCE=L6, X0082 COMPRESS=YES, X0083 CONVERT=ASCII, X0084 OUTDD=FTSFIN, X0085 DSORG=PS, X0086 RECFM=V, X0087 RECI=256, X0088 CISIZE=512, X0089 FILEID=>HIS>CLMU 0090 STAGE DDNAME=TMPWK2, X0091 NAME=L6FILE2, X0092 SOURCE=L6, X0093 CONVERT=ASCII, X0095 OUTDD=FTSFIN, X0095 OUTDD=FTSFIN, X0095 OUTDD=FTSFIN, X0096 DSORCE=L6, X0093 CONVERT=ASCII, X0095 OUTDD=FTSFIN, X0096 DSORCE=FR, X0097 DELATTR=NO, X0098 RECFM=F, X0099 RECL=256, X0100 FILEID=>HIS>DBUG 0101 SOURCE=L6, X0102 NAME=L6FILE3, X0103 <td< td=""><td>** THE LEVEL6</td><td>* 0078</td></td<>	** THE LEVEL6	* 0078
STAGE DDNAME=LFIMPWRI, X0080 NAME=L6FILE1, X0081 SOURCE=L6, X0082 COMPRESS=YES, X0083 CONVERT=ASCII, X0084 OUTDD=FTSFIN, X0085 DSORG=PS, X0086 RECCM=V, X0087 RECL=256, X0088 CISIZE=512, X0089 FILEID=>HIS>CLMU 0090 STAGE DNAME=L6FILE2, X0091 NAME=L6FILE2, X0092 SOURCE=L6, X0093 COMPRESS=YES, X0094 CONVERT=ASCII, X0095 OUTDE=FTSFIN, X0096 DSORG=FR, X0097 DELATTR=NO, X0098 RECCM=F, X0099 RECCM=F, X00100 FILEID=>HIS>DBUG 0101 STAGE DNAME=EMPWK3, X0102 NAME=L6FILE3, X0103 SOURCE=L6, X0104 COMPRESS=NO, X0105 CONVERT=ASCII, X0106 OUTDD=FTSFIN, <t< td=""><td>***************************************</td><td>***** 0079</td></t<>	***************************************	***** 0079
NAME-DFILI, X0001 SOURCE-L6, X0002 COMPRESS=YES, X0003 CONVERT=ASCII, X0084 OUTDD=FTSFIN, X0085 DSORG=PS, X0086 RECFM=V, X0087 RECL=256, X0088 CISIZE=512, X0089 FILEID=>HIS>CLMU 0090 STAGE DDNAME=TMPWK2, X0091 NAME=L6FILE2, X0092 SOURCE=L6, X0093 COMPRESS=YES, X0094 CONVERT=ASCII, X0095 OUTDD=FTSFIN, X0096 DSORG=FR, X0097 DELATTR=NO, X0098 RECFM=F, X0099 RECFM=F, X0099 RECFM=F, X0100 FILEID=>HIS>DBUG 0101 STAGE DNAME=TMFWK3, X0102 NAME=L6FILE3, X0103 SOURCE=L6, X0104 COMPRESS=NO, X0103 SOURCE=L6, X0104 COMPRESS=NO, X0105 CONVERT=ASCI	STAGE DDNAME=TMPWK1,	X0080
COMPRESS=YES, X0083 CONVERT=ASCII, X0084 OUTDD=FTSFIN, X0085 DSORG=PS, X0086 RECL=256, X0087 RECL=256, X0088 CISIZE=512, X0089 FILEID=>HIS>CLMU 0090 STAGE DDNAME=TMPWK2, X0091 NAME=L6FILE2, X0092 SOURCE=L6, X0093 CONVERT=ASCII, X0095 OUTD=FTSFIN, X0096 DSORG=FR, X0097 DELATTR=NO, X0097 DELATTR=NO, X0097 RECFM=F, X0099 RECFM=F, X0099 RECFM=F, X0100 FILEID=>HIS>DBUG 0101 STAGE DDNAME=TMPWK3, X0102 NAME=L6FILE3, X0103 SOURCE=L6, X0104 COMPRESS=NO, X0102 NAME=L6FILE3, X0103 SOURCE=L6, X0104 COMPRESS=NO, X0105 CONVERT=ASCII, X0106 OUTD=FT	SOURCE=L6	X0081 X0082
CONVERT=ASCII, X0084 OUTDD=FTSFIN, X0085 DSORG=PS, X0086 RECFM=V, X0087 RECL=256, X0088 CISIZ =512, X0089 FILEID=>HIS>CLMU 0090 STAGE DDNAME=TMPWK2, X0091 NAME=L6FILE2, X0092 SOURCE=L6, X0093 COMPRESS=YES, X0094 CONVERT=ASCII, X0095 OUTDD=FTSFIN, X0096 DSORG=FR, X0097 DELATTR=NO, X0098 RECT=256, X0100 FILEID=>HIS>DBUG 0101 STAGE DDNAME=TMFWK3, X0102 NAME=L6FILE3, X0102 NAME=L6FILE3, X0102 NAME=L6FILE3, X0104 CONVERT=ASCII, X0105 OUTDD=FTSFIN, X0107 DSORG=IS, X0108 RECT=252, X0110 CISIZE=S12, X0110 CISIZE=S12, X0111 KEYLEN=5, X0112 KE	COMPRESS=YES,	X0083
OUTDD=FTSFIN, X0085 DSORG=PS, X0086 RECFM=V, X0087 RECL=256, X0088 CISIZE=512, X0089 FILEID=>HIS>CLMU 0090 STAGE DDNAME=TMPWK2, X0091 NAME=L6FILE2, X0092 SOURCE=L6, X0093 COMPRESS=YES, X0094 CONVERT=ASCII, X0095 OUTDD=FTSFIN, X0096 DSORG=FR, X0097 DELATTR=NO, X0098 RECFM=F, X0099 RECL=256, X0100 FILEID=>HIS>DBUG 0101 STAGE DDNAME=TMPWK3, X0102 NAME=L6FILE3, X0103 SOURCE=L6, X0104 COMPRESS=NO, X0103 SOURCE=L6, X0104 COMPRESS=NO, X0105 CONVERT=ASCII, X0106 OUTDD=FTSFIN, X0107 DSORG=IS, X0108 RECFM=F, X0109 RECL=252, X0110 CISIZE=512, </td <td>CONVERT=ASCII,</td> <td>X0084</td>	CONVERT=ASCII,	X0084
DSORG=PS, X0086 RECFM=V, X0087 RECL=256, X0088 CISIZE=512, X0089 FILEID=>HIS>CLMU 0090 STAGE DDNAME=TMPWK2, X0091 NAME=L6FILE2, X0092 SOURCE=L6, X0093 COMPRESS=YES, X0094 CONVERT=ASCII, X0095 OUTDD=FTSFIN, X0096 DSORG=FR, X0097 DELATTR=NO, X0098 RECFM=F, X0099 RECL=256, X0100 FILEID=>HIS>DBUG 0101 STAGE DDNAME=TMPWK3, X0102 NAME=L6FILE3, X0103 SOURCE=L6, X0103 SOURCE=L6, X0103 SOURCE=L6, X0104 COMPRESS=NO, X0105 CONVERT=ASCII, X0106 OUTDD=FTSFIN, X0106 OUTDD=FTSFIN, X0106 OUTDD=FTSFIN, X0106 CONVERT=ASCII, X0107 DSORG=IS, X0108 RECFM	OUTDD=FTSFIN,	X0085
RECL=256, X0089 FILETD=>HIS>CLMU 0090 STAGE DDNAME=TMPWK2, X0091 NAME=L6FILE2, X0092 SOURCE=L6, X0093 COMPRESS=YES, X0094 CONVERT=ASCII, X0095 OUTDD=FTSFIN, X0096 DSORG=FR, X0097 DELATTR=NO, X0098 RECL=256, X0100 FILETD=>HIS>DBUG 0101 STAGE DDNAME=TMPK3, X0102 NAME=L6FILE3, X0103 SOURCE=L6, X0104 COMPRESS=NO, X0105 CONVERT=ASCII, X0104 COMPRESS=NO, X0105 CONVERT=ASCII, X0106 OUTDD=FTSFIN, X0107 DSORG=IS, X0108 RECFM=F, X0108 RECFM=F, X0108 RECFM=F, X0106 OUTDD=FTSFIN, X0107 DSORG=IS, X0108 RECFM=F, X0108 RECFM=F, X0108 RECFM=F, X01010 CISIZE=512, X0111 <	DSORG=PS,	X0086
CISIZES12, X0089 FILEID=>HIS>CLMU 0090 STAGE DDNAME=TMEWK2, X0091 NAME=L6FILE2, X0092 SOURCE=L6, X0093 CONVERT=ASCII, X0095 OUTDD=FTSFIN, X0096 DSCRG=FR, X0097 DELATTR=NO, X0098 RECFM=F, X0099 RECL=256, X0101 FILEID=>HIS>DBUG 0101 SOURCE=L6, X0103 SOURCE=L6, X0102 NAME=L6FILE3, X0103 SOURCE=L6, X0104 CONVERT=ASCII, X0103 SOURCE=L6, X0104 CONVERT=ASCII, X0105 CONVERT=ASCII, X0105 CONVERT=ASCII, X0106 OUTDD=FTSFIN, X0107 DSORG=IS, X0108 RECFM=F, X0109 RECL=252, X0110 CISIZE=512, X0111 KEYLEN=5, X0112 KEYLEN=5, X0113 FILEID=>HIS>MLEN 0114	RECT = 256	x0087
FILETD=>HIS>CLMU 0090 STAGE DDNAME=TMPWK2, X0091 NAME=L6FILE2, X0092 SOURCE=L6, X0093 COMPRESS=YES, X0094 CONVERT=ASCII, X0095 OUTDD=FTSFIN, X0096 DSORG=FR, X0097 DELATTR=NO, X0098 RECFM=F, X0099 RECL=256, X0100 FILETD=>HIS>DBUG 0101 STAGE DNAME=TMPWK3, NAME=L6FILE3, X0102 NAME=L6FILE3, X0103 SOURCE=L6, X0104 CONVERT=ASCII, X0103 SOURCE=L6, X0104 CONVERT=ASCII, X0105 CONVERT=ASCII, X0106 OUTDD=FTSFIN, X0107 DSORG=IS, X0108 RECFM=F, X0109 RECL=252, X0110 CISIZE=512, X0111 KEYLEN=5, X0112 KEYCFF=0, X0113 FILEID=>HIS>MLEN 0114	CISIZE=512.	X0089
STAGE DDNAME=TMPWK2, X0091 NAME=L6FILE2, X0092 SOURCE=L6, X0093 COMPRESS=YES, X0094 CONVERT=ASCII, X0095 OUTDD=FTSFIN, X0096 DSORG=FR, X0097 DELATTR=NO, X0098 RECFM=F, X0099 RECL=256, X0100 FILEID=>HIS>DBUG 0101 STAGE DDNAME=TMPWK3, NAME=L6FILE3, X0103 SOURCE=L6, X0104 COMPRESS=NO, X0105 CONVERT=ASCII, X0106 OUTDD=FTSFIN, X0107 DSORG=IS, X0109 RECL=252, X0109 RECL=252, X0110 CISIZE=512, X0111 KEYLEN=5, X0112 KEYOFF=0, X0113 FILEID=>HIS>MLEN 0114	FILEID=>HIS>CLMU	0090
NAME=L6FILE2, X0092 SOURCE=L6, X0093 COMPRESS=YES, X0094 CONVERT=ASCII, X0095 OUTDD=FTSFIN, X0096 DSORG=FR, X0097 DELATTR=NO, X0098 RECFM=F, X0100 FILEID=>HIS>DBUG 0101 STAGE DDNAME=TMPWK3, X0102 NAME=L6FILE3, X0103 SOURCE=L6, X0104 CONVERT=ASCII, X0106 OUTDD=FTSFIN, X0107 DSRG=IS, X0108 RECFM=F, X0109 RECFM=F, X0103 SOURCE=L6, X0104 CONVERT=ASCII, X0105 CONVERT=ASCII, X0107 DSORG=IS, X0107 RECFM=F, X0109 RECL=252, X0110 CISIZE=512, X0111 KEYUEN=5, X0112 KEYUEN=5, X0113 FILEID=>HIS>MLEN 0114	STAGE DDNAME=TMPWK2,	X0091
SOURCE=L6, X0093 COMPRESS=YES, X0094 CONVERT=ASCII, X0095 OUTDD=FTSFIN, X0096 DSORG=FR, X0097 DELATTR=NO, X0098 RECFM=F, X0009 RECL=256, X0100 FILEID=>HIS>DBUG 0101 STAGE DDNAME=TMPWK3, X0102 NAME=L6FILE3, X0103 SOURCE=L6, X0104 COMPRESS=NO, X0105 CONVERT=ASCII, X0106 OUTDD=FTSFIN, X0107 DSORG=IS, X0108 RECFM=F, X0109 RECF=512, X0110 CISIZE=512, X0111 KEYOPF=0, X0113 FILEID=>HIS>MLEN 0114	NAME=L6FILE2,	X0092
CONTRESS ACII, X0095 OUTDD=FTSFIN, X0096 DSORG=FR, X0097 DELATTR=NO, X0098 RECFM=F, X0009 RECL=256, X0100 FILEID=>HIS>DBUG 0101 STAGE DDNAME=TMPWK3, X0102 NAME=L6FILE3, X0103 SOURCE=L6, X0104 COMPRESS=NO, X0106 OUTDD=FTSFIN, X0107 DSORG=IS, X0108 RECFM=F, X0109 RECFM=F, X0108 RECFM=F, X0109 RECFM=F, X0108 RECFM=F, X0108 RECFM=F, X0109 RECF=252, X0110 CISIZE=512, X0110 KEYDEF=0, X0113 FILEID=>HIS>MLEN 0114	SOURCE=LO, COMDRESS-VES	X0093 X0094
OUTDD=FTSFIN, X0096 DSORG=FR, X0097 DELATTR=NO, X0098 RECFM=F, X0099 RECL=256, X0100 FILEID=>HIS>DBUG 0101 STAGE DDNAME=TMPWK3, X0102 NAME=L6FILE3, X0103 SOURCE=L6, X0104 COMPRESS=NO, X0105 CONVERT=ASCII, X0106 OUTDD=FTSFIN, X0107 DSORG=IS, X0108 RECFM=F, X0109 RECF=512, X0110 CISIZE=512, X0111 KEYOFF=0, X0113 FILEID=>HIS>MLEN 0114	CONVERT=ASCII.	x0094
DSORG=FR, X0097 DELATTR=NO, X0098 RECFM=F, X0099 RECL=256, X0100 FILEID=>HIS>DBUG 0101 STAGE DDNAME=TMPWK3, X0102 NAME=L6FILE3, X0103 SOURCE=L6, X0104 COMPRESS=NO, X0105 CONVERT=ASCII, X0106 OUTDD=FTSFIN, X0107 DSORG=IS, X0108 RECFM=F, X0109 RECF=512, X0110 CISIZE=512, X0111 KEYOFF=0, X0113 FILEID=>HIS>MLEN 0114	OUTDD=FTSFIN,	X0096
DELATTR=NO, X0098 RECFM=F, X0099 RECL=256, X0100 FILEID=>HIS>DBUG 0101 STAGE DDNAME=TMPWK3, X0102 NAME=L6FILE3, X0103 SOURCE=L6, X0104 COMPRESS=NO, X0105 CONVERT=ASCII, X0106 OUTDD=FTSFIN, X0107 DSORG=IS, X0108 RECFM=F, X0109 RECL=252, X0110 CISIZE=512, X0111 KEYOPF=0, X0113 FILEID=>HIS>MLEN 0114	DSORG=FR,	X0097
RECFM=F, X0099 RECL=256, X0100 FILEID=>HIS>DBUG 0101 STAGE DDNAME=TMPWK3, X0102 NAME=L6FILE3, X0103 SOURCE=L6, X0104 COMPRESS=NO, X0105 CONVERT=ASCII, X0106 OUTDD=FTSFIN, X0107 DSORG=IS, X0108 RECFM=F, X0109 RECL=252, X0110 CISIZE=512, X0111 KEYOFF=0, X0113 FILEID=>HIS>MLEN 0114	DELATTR=NO,	X0098
FILEID=>HIS>DBUG 0101 STAGE DDNAME=TMFWK3, X0103 NAME=L6FILE3, X0103 SOURCE=L6, X0104 COMPRESS=NO, X0105 CONVERT=ASCII, X0106 OUTDD=FTSFIN, X0107 DSORG=IS, X0108 RECFM=F, X0109 RECL=252, X0110 CISIZE=512, X0111 KEYLEN=5, X0112 KEYOFF=0, X0113 FILEID=>HIS>MLEN 0114	RECFM=F,	X0099 X0100
STAGE DDNAME=TMFWK3, X0102 NAME=L6FILE3, X0103 SOURCE=L6, X0104 COMPRESS=NO, X0105 CONVERT=ASCII, X0106 OUTDD=FTSFIN, X0107 DSORG=IS, X0108 RECFM=F, X0109 RECL=252, X0110 CISIZE=512, X0111 KEYOFF=0, X0113 FILEID=>HIS>MLEN 0114	FILED=>HIS>DBUG	0101
NAME=L6FILE3, X0103 SOURCE=L6, X0104 COMPRESS=NO, X0105 CONVERT=ASCII, X0106 OUTDD=FTSFIN, X0107 DSORG=IS, X0108 RECFM=F, X0109 RECL=252, X0110 CISIZE=512, X0111 KEYLEN=5, X0112 KEYOFF=0, X0113 FILEID=>HIS>MLEN 0114	STAGE DDNAME=TMPWK3,	X0102
SOURCE=L6, X0104 COMPRESS=NO, X0105 CONVERT=ASCII, X0106 OUTDD=FTSFIN, X0107 DSORG=IS, X0108 RECFM=F, X0109 RECL=252, X0110 CISIZE=512, X0111 KEYLEN=5, X0112 KEYOFF=0, X0113 FILEID=>HIS>MLEN 0114	NAME=L6FILE3,	X0103
COMPRESS=NO, X0105 CONVERT=ASCII, X0106 OUTDD=FTSFIN, X0107 DSORG=IS, X0108 RECFM=F, X0109 RECL=252, X0110 CISIZE=512, X0111 KEYOFF=0, X0112 FILEID=>HIS>MLEN 0114	SOURCE=L6,	X0104
CONVERTANCI, X0106 OUTDD=FTSFIN, X0107 DSORG=IS, X0108 RECFM=F, X0109 RECL=252, X0110 CISIZE=512, X0111 KEYOFF=0, X0113 FILEID=>HIS>MLEN 0114	COMPRESS=NO,	X0105
DSORG=IS, X0108 RECFM=F, X0109 RECL=252, X0110 CISIZE=512, X0111 KEYOFF=0, X0112 FILEID=>HIS>MLEN 0114	OUTDD=FTSFIN.	X0107
RECFM=F, X0109 RECL=252, X0110 CISIZE=512, X0111 KEYLEN=5, X0112 KEYOFF=0, X0113 FILEID=>HIS>MLEN 0114	DSORG=IS,	X0108
RECL=252, X0110 CISIZE=512, X0111 KEYLEN=5, X0112 KEYOFF=0, X0113 FILEID=>HIS>MLEN 0114	RECFM=F,	X0109
CISIZE=512, X0111 KEYLEN=5, X012 KEYOFF=0, X013 FILEID=>HIS>MLEN 0114	RECL=252,	X0110
KEYOFF=0, X0112 FILEID=>HIS>MLEN 0114	CISIZE=512, KEVLEN=5	X0111 V0112
FILEID=>HIS>MLEN 0114	KEYOFF=0,	X0112
	FILEID=>HIS>MLEN	0114

Figure F-6 (cont). Sample SFT Job SFTUTL2

**	*****	***	*****	*****	****	*****	****	* * * :	******	***	****	*****	***	*****	*** 0115
**															* 0116
**	ENSUI	RE	FILES	WHICH	ARE	BEING	SENT	TO	LEVEL6	DO	NOT	EXIST	ΑT	LEVEL	6 * 0117
**															* 0118
:	***	***	****	*****	****	*****	****	* * * :	******	***	* * * *	*****	* * *	*****	*** 0119
*23	345678	390	12345	678901	23456	578901	23456	7890	0123456	789	01234	456789	0123	345678	90120120
		A	DDACT	SESSI	D=TES	БТ2,									X0121
				LU=A46	1,										X0122
				ACTION	=DELI	ETE,									X0123
				FILEID	=>HIS	S>CLMU									0124
		Α	DDACT	SESSI	D=TES	БТ2,									X0125
				LU=A46	1.	•									X0126
				ACTION	=DELI	ETE.									X0127
				FILEID	=>HIS	S>DBUG									0128
1		Α	DDACT	SESST	D=TES	ST2 .									X0129
				LU=A46	1.	,									X0130
				ACTION	=DELH	TE.									X0131
				FILEID	=>HIS	S>MLEN									0132
		Α	DDACT	SESSI	D=TES	БТ2.									X0133
				LU=A46	l,	,									X0134
				ACTION	-DELE	ETE,									X0135
				FILEID	=>HIS	S>CLM_U	JSER								0136
		Α	DDACT	SESSI	D=TES	БТ2,									X0137
				LU=A46	1.	•									X0138
				ACTION	DEL	ETE,									X0139
				FILETD	=>HTS		DB								0140
		А	DDACT	SESST	D = T E S	ST2 .									X0141
				LU = A46	1.	,									X0142
				ACTION	=DELI	ETE.									X0143
				FILETD	=>HTS	S>VT DE	D.ML								0144
***	* * * * * *	***	****	*****	****	*****	****	* * * *	******	***	****	*****	***	* * * * * *	*** 0145
*	ACTIC	DN	RECOR	DS FOR	SENI	DING L	EVEL6	FII	LES						* 0146
**															* 0147
**	NOTE	F	ILE N	AME IN	FILE	ID WI	L BE	PA?	THNAME	OF 1	FILE	RECEI	VED	ВҮ	* 0148
**		Т	HE LE	VEL6.											* 0149
***	*****	**	****	*****	* * * * *	*****	* * * * *	* * * *	******	***	* * * * *	* * * * * *	* * * *	*****	*** 0150
		A	DDACT	SESSI	D=TES	бΤ2,									X0151
				LU=A46	ι,										X0152
				ACTION:	= SENI),									X0153
				SOURCE	=Lб,										X0154
				NAME=L	5FILH	El,									X0155
				DISP=(1	NEW, I	KEEP),									X0156
				RECL=2	56,										X0157
				CISIZE	=512,										X0158
				FILEID=	=>HIS	S>CLMU									0159
		A	DDACT	SESSI	D=TES	бΤ2,									X0160
				LU=A46	l,										X0161
				ACT ION=	SENI=) ,									X0162
				NAME=L(SFILE	52 ,									X0163
				SOURCE=	=L6,										X0164
				DISP=()	NEW, I	(EEP),									X0165
				DSORG=1	FR,	••									X0166
				RECL=2	56,										X0167
				FILEID	=>HIS	S>DBUG									0168

Figure F-6 (cont). Sample SFT Job SFTUTL2

ADDACT SESSID=TEST2,	X0169
LU=A461,	X0170
ACTION=SEND,	X0171
NAME = 1.6 FILE3.	X0172
	X0173
	V0174
DSOKG=15,	AU1/4
KEYLEN=5,	XUI/5
KEYOFF=0,	XU176
RECL=252,	X0177
CISIZE=512,	X0178
DISP=(NEW, KEEP),	X0179
FILETD=>HIS>MLEN	0180
***************************************	** 0181
* DENAME FILES RECEIVED AT LEVELS TO NEW-NAMES	* 0182
· ALMAND FILLS RECEIVED AT LEVELS IS NEW-NAMES	++ 0102
	0103
ADDACT SESSID=TEST2,	XU184
LU=A461,	X0185
ACTION=RENAME,	X0186
NEWNAME=CLM USER.	X0187
FILEID=>HIS>CLMU	0188
	¥0180
LI=2AG1	X0103
	X0170
ACTION= RENAME,	XUTAT
NEWNAME=DEBUGDB,	X0192
FILEID=>HIS>DBUG	0193
ADDACT SESSID=TEST2,	X0194
LU=A461.	X0195
$\lambda = 0$	X0196
	X0107
NEWNAME=VIDEO.ML,	X019/
FILEID=>HIS>MLEN	0198
***************************************	** 0199
* EXECUTE A LEVEL6 EC TO COMPARE FILES RECEIVED TO THOSE SENT	* 0200
**	* 0201
** THIS ACTION IS COMMENTED OUT FOR THE INSTALL. IF YOU WISH TO RUN	* 0202
** IT YOU MUST HAVE A BATCH GROUP (\$B) RUNNING ON THE DPS/6 FIRST.	* 0203
** ALSO, YOU MAY NEED A DIRECTORY SNETSAO WITHOUT A START UP FC IN	* 0204
** ODED TO SEE TE THE FOR MORE DECEDING ANTIMOUT A START OF BC IN	* 0205
**	+ 0205
	- UZU6
ENSURE THAT AN EC FILE EXISTS ON THE LEVEL6 THAT WILL COMPARE	▼ 0207
** THE FILES SENT IN JOB 1 TO THOSE RECEIVED IN THIS JOB. THE FILEID	* 0208
** SHOULD BE EDITED TO SUPPLY THE EC FULL PATHNAME.	* 0209
**	* 0210
** REMOVE THE '*' IN COLUMN 1 OF THE FOLLOWING ADDACT PARAMETERS IN	* 0211
** ORDER TO GET THIS ACTION ADDED TO THE TCF FILE.	* 0212
**	* 0212
*****	** 0214
	0214
ADDACT SESSID=TESTZ,	X0215
LU=A461,	X0216
* ACTION=EXECUTE,	X0217
* FILEID=>HIS>COMPARECP.EC	0218

Figure F-6 (cont). Sample SFT Job SFTUTL2

*******	0219
** RECEIVE IBM-JCL FILE SENT IN PREVIOUS SESSION TO LEVEL6 *	0220
***************************************	0221
ADDACT SESSID=TEST2,	X0222
LU=A461,	X0223
ACTION=RECEIVE,	X0224
ERROPT=IGNORE,	X0225
SOURCE=L6,	X0226
NAME=IBMFILE,	X0227
FILEID=>HIS>TESTIBM	0228
	0229
^ LIST THE STAGE FILE	0230
	0231
	0232
* DRODUCE SUMMARY REDORTS *	0234
***************************************	0235
SUMSTAT TYPE=NOTRAN	0236
SUMSTAT TYPE=NOSTART	0237
SUMSTAT TYPE=COMP	0238
SUMSTAT TYPE=INCOMP	0239
/*	0240
//*************************************	0241
//** STAGE TEMPORARY FILE(S) DD STATEMENTS FOLLOW HERE *	0242
//*************************************	0243
//FILETRAN.TMPWK1 DD DSN=&&TMP1,	0244
// UNIT=SYSDA,	0245
// DISP=(NEW, PASS),	0246
// SPACE=(CYL, 1),	0247
// DCB= (RECFM=VB,BLKS12 E=4000)	0248
//riberran.impwrz DD DSn=&&TMP2,	0249
// DISDE/NEW DASS)	0250
// SPACE= $(CYI, 1)$	0252
// DCB= (RECFM=VB, BLKSTZ E=4000)	0253
//FILETRAN.TMPWK3 DD DSN=&&TMP3.	0254
// UNIT=SYSDA.	0255
// DISP=(NEW, PASS),	0256
// SPACE=(CYL, 1),	0257
// DCB=(RECFM=VB,BLKSIZE=4000)	0258
	0259

Figure F-6 (cont). Sample SFT Job SFTUTL2

THE JOB STEP SFTUTL2

This job invokes SFTBATCH (the default value in SFTH) to run the second set of batch utility UCL control statements.

Line 0001 contains the JOB information you must edit to supply installation-specific values.

Lines 0002 through 0028 are comments and instructions for running this job.

Line 0029 invokes the procedure SFTH.

Line 0030 indicates that control statements follow.

Lines 0035 and 0036 deletes the old SFT-H/A461 session definition.

Line 0037: lists all sessions currently defined. Only one session, the operator session, should be defined at this point.

Lines 0041 through 0044 begins the definition of a new SFT-H/A461 session.

Lines 0049 through 0052 ensure that the staging files do not contain records for the indicated NAME and SOURCE combinations. All of the erasures should fail.

Lines 0056 through 0073 unstage the files received in SOFTCOMM1. The files are copied into one of the sequential files defined in this step. All files are decompressed and translated to EBCDIC.

Lines 0080 through 0114 stage the received files for transmission back to a DPS 6. The files are copied into different staging files and translated into ASCII. The third file (L6FILE3) is compressed; the others are not. MOD 400 file attributes are specified for the files.

Lines 0120 through 0144 continue the definition of the SFT-H/A461 session started in line 0035. In these lines, all of the files that are later sent or renamed are deleted. The deletes of DBUG, MLEN, and CLMU normally fail.

Lines 0151 through 0180 specify three Send operations, one for each of the files staged in lines 0080 through 0113. The MOD 400 pathnames for each file are different from the pathnames used in SFTUTL1.

Lines 0184 through 0198 rename CLMU, DBUG, and MLEN after they are sent to the DPS 6.

Lines 0199 through 0218 are comments and UCL statements that are commented out in the install. The UCL statements request the execution of a DPS 6 EC file that compares the received files to the original files. Follow the instructions in the comments section if you wish the EC to run.

Lines 0222 through 0228 specify a Receive action to retrieve the IBM JCL file that was sent to SFT-6 in the SETCOMM1 step.

Line 0232 requests a summary of the contents of FTSFIN.

Lines 0236-0239 request that the various summary reports be produced.

Line 0240 indicates the end of the control statements.

Lines 0244 through 0258 define three files in addition to those defined by SFT-H. Each file contains variable-length sequential records with a block size of 4000.

Line 0259 denotes the end of JOB JCL statements.

//JOBNAME JOB ACCOUNTINFOR, 'USER INFORMATION', CLASS=A, MSGCLASS=A 0001 0002 THIS JOB IS TO TEST THE COMMUNICATION RUNS THAT WERE SETUP * //*** 0003 //*** * 0004 IN THE UTL2 JOB. * 0005 · / / * * * //*** (HOST AND LEVEL 6 SIDES MUST BE INSTALLED) * 0006 0007 ′/*** //*** EDIT JOBNAME, ACCOUNT INFO., USER INFORMATION, JOB CLASS AND * 0008 /*** 0009 MSGCLASS PRIOR TO RUNNING THE JOB. 1/*** * 0010 //*** REPLACE 'NNNNNNN' WITH HIGH LEVEL INDEX NAME * 0011 //*** REPLACE 'VVVVVV' WITH VOLUME SERIAL NUMBER FILE RESIDES ON * 0012 //*** * 0013 //*** THIS JOB WILL RUN THE SFT-H COMMUNICATION PROGRAM (SFTTCP) * 0014 //*** TO RECEIVE AND SEND FILES TO THE LEVEL6 AND TRANSMIT DELETE, * 0015 //*** RENAME AND EXECUTE COMMANDS AS WELL. 0016 //*** * 0017 0018 //EMPTYTSF EXEC SFTIDCAM, MEMB=CRTSFUNQ 0019 0020 //** RESET ONLY TSF FILE (UNIQUE OPTION) * 0021 //** * 0022 //** USE MEMBER 'TSFREUSE' IF FILE WAS * 0023 //** DEFINED WITH THE 'REUSE' OPTION: + 0024 //** * 0025 0026 //COMM2 EXEC PROC=SFTH, 0027 || || PROG=SFTTCP, 0028 R=768K, 0029 P= 'MODE=START, MAXFILES=5, OPERSES=ENABLE, OPERATOR=A411' 0030 0031 0032 11 //VFLDVSAM.SYSIN DD * 0033 DELETE (0034 NNNNNNN.TSF.CLUSTER) ----0035 CLUSTER 0036 0037 PURGE 0038 /* */ DEFINE TRANSMISSION STATUS FILE 0039 0040 DEFINE CLUSTER (0041 NAME (NNNNNNNN. TSF. CLUSTER) 0042 ----VOLUMES (VVVVVV) 0043 FREESPACE(20) 0044 INDEXED 0045 OWNER('HIS') -0046 UNIQUE 0047 IMBED 0048 0049 REPLICATE SHAREOPTIONS(2) 0050 NONSPANNED ----0051 _ CYLINDERS(2 1) 0052 TO(99365)) 0053 0054 DATA (NAME (NNNNNNN. TSF. DATA) 0055 RECORDSIZE(342 342) 0056 CISZ(2048) 0057 0058 KEYS(17 0)) INDEX (NAME (NNNNNNNN.TSF. INDEX) 0059 0060 0061 CISZ(512)) 0062 PUT DUMMY RECORD IN FILE /* */ 0063 0064 REPRO OUTFILE(ACBTSF) INFILE(TSFPROTO) 0065 /* 0066 11 0067

Figure F-7. Sample SFT Job SFTCOMM2

THE JOB STEP SFTCOMM2

This job invokes SFTTCP to run the communications between SFT-H and SFT-6. This job executes the Delete, Send, Rename, optional Execute, and Receive actions in job SFTUTL2.

Line 0001 contains the JOB information you must edit to supply installation-specific values.

Lines 0002 through 0018 are comments and instructions for running this job.

Line 0019 invokes the procedure SFTIDCAM used for clearing VSAM clusters, and supplies a PARMLIB member (CRTSFUNQ) that contains the IDCAMS utility control statements used to reallocate the TSF cluster. It refers to a member of the PDS data set found in the SFTIDCAM procedure pointed to by the SYSIN DD statement.

Lines 0020-0026 are comments pertaining to this step in the job.

Line 0027 invokes the procedure SFTH.

Line 0028 provides the symbolic parameter PROG to override the default value with SFTTCP.

Line 0029 provides the symbolic parameters R to override the default value with 768K.

Line 0030 provides the symbolic parameter P that supplies the following parameters for SFTTCP:

- MODE=START indicates that the transmission status file is empty and that no attempt to recover from any previous executions need be made.
- MAXFILES=5 indicates that up to five files can be concurrently dynamically allocated.
- OPERSES=ENABLE indicates that online operator interface sessions are allowed.
- OPERATOR=A411 indicates that the system should attempt to use LU A413 as an operator terminal at startup time.

This execution of SFTTCP results in two sessions:

- An SFT-H/A411 operator session
- An SFT-H/A461 session consisting of five Delete actions, three Send actions, two Rename actions, one Execute action, and one Receive action.

Line 0066 is the IDCAMS utility control statement to initialize the TSF cluster (that is, load a dummy record into the file).

Lines 0067 and 0068 indicate the end of the control statements and the end of the JOB JCL statements.

//JOBNAME JOB ACCOUNTINFO, 'USER INFORMATION', CLASS=A, MSGCLASS=A 0001 0002 ***** //******* //*** THIS IS THE THIRD JOB TO BE RUN TO TEST THE INSTALLATION * 0003 //*** 0004 OF THE HONEYWELL SFT PRODUCT. * ´//*** 0005 //*** (HOST AND LEVEL 6 SIDES MUST BE INSTALLED) * 0006 ´//*** * 0007 //*** EDIT JOBNAME, ACCOUNT INFO., USER INFORMATION, JOB CLASS AND * 0008 //*** 0009 MSGCLASS PRIOR TO RUNNING THE JOB. //*** 0010 //*** THIS JOB WILL RUN THE SFT-H BATCH UTILITY PROGRAM (SFTBATCH) 0011 //*** DOING THE FOLLOWING: 0012 //*** 1. UNSTAGE IBM JCL FILE 0013 * //*** 2. LIST HISTORY OPTIONS 0014 3. LIST BOTH STAGING FILES 4. COMPARE FILE SENT TO FILE RECEIVED *_*//*** * 0015 //*** 0016 //*** FROM THE LEVEL6 0017 //*** 0018 0019 //UTL3 EXEC SFTH 0020 //FILETRAN.INPUT DD * 0021 UNSTAGE DDNAME=TMPWK4, X0023 NAME=IBMFILE, X0024 SOURCE=L6, X0025 DECOMPR=YES, X0026 CONVERT=EBCDIC, X0027 INDD=FTSFOUT 0028 SUMSTAT 0029 LISTHST TYPE=DETAIL LISTHST TYPE=EXCEPTION 0030 0031 0032 LISTHST TYPE=SUMMARY 0033 LISTSF INDD=FTSFIN LISTSF INDD=FTSFOUT 0034 /* 0035 //*** UNSTAGE TEMPORARY FILE(S) DD STATEMENTS SHOULD FOLLOW HERE * 0037 //*********************** ** 0038 //FILETRAN.TMPWK4 DD DSN=&&TMP4, 0039 UNIT=SYSDA, 0040 'i / 0041 DISP=(NEW, PASS), // SPACE=(CYL,1), 0042 11 DCB=(RECFM=FB,BLKSIZE=4000,LRECL=80) 0043 0044 //* COMPARE IBM-JCL FILE SENT TO AND RECEIVED FROM LEVEL6 0045 0046 //COMPJCL5 EXEC PGM=IEBCOMPR 0047 0048 //SYSPRINT DD SYSOUT=X //SYSUT1 DD DSN=SFTH.IBMJCL.FILE,DISP=(OLD,KEEP) 0049 //SYSUT2 DD DSN=&&TMP4, DISP=(OLD, DELETE) 0050 0051 //SYSIN DD DUMMY 0052 11

Figure F-8. Sample SFT Job SFTUTL3

THE JOB STEP SFTUTL3

This job will invoke SFTBATCH (the default value in SFTH) to run the final set of batch utility UCL statements. It will also execute the IBM compare utility IEBCOMPR.

Line 0001 contains the JOB information you must edit to supply installation-specific values.

Lines 0002 through 0019 are comments and instructions for running this job.

Line 0020 invokes the procedure SFTH.

Line 0021 indicates that control statements follow.

Lines 0023 through 0028 unstage the file retrieved in the job step SFTCOMM2. The file is copied into TMPWK4 (defined in lines 0039 through 0043).

Line 0029 requests the transmission status file summary statistics report.

Lines 0030 through 0032 request the History File reports:

- TYPE=DETAIL for a log of all communications activity
- TYPE=EXCEPTION for a detailed listing of all sessions with an error condition
- TYPE=SUMMARY for summary information only.

Lines 0033 and 0034 request summaries of the contents of both staging files.

Line 0035 indicates the end of UCL statements.

Lines 0039 through 0043 allocate an empty sequential file that will contain fixed length 80-character records.

Lines 0047 through 0051 contain the job step COMPJCL5.

Line 0047 invokes the IBM Compare File Utility.

Line 0048 defines the report data set.

Lines 0049 and 0050 point to the files to be compared; the file sent in job SFTCOMM1 and the file received and copied in job step SFTCOMM2 and step UTL3 of this job.

Line 0051 indicates that there are no additional control statements.

Line 0052 indicates the end of this JOB JCL.

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