

HONEYWELL

SNA HOST SYSTEM
PROGRAMMER'S
GUIDE

SOFTWARE

SNA HOST SYSTEM PROGRAMMER'S GUIDE

SUBJECT

Configuration of the IBM Host for the DPS 6/SNA Program Product

SPECIAL INSTRUCTIONS

This is the first revision to GB88-00, dated April 1983. Sections 7 and 8 are new; in other sections, change bars in the margin indicate new and changed information, while asterisks denote deletions.

SOFTWARE SUPPORTED

This manual supports Release 1.2 of DPS 6 SNA.

ORDER NUMBER

GB88-01

March 1985

Honeywell

PREFACE

This manual is written for those who configure an IBM host to support connection with the DPS 6 Systems Network Architecture (SNA) program products:

- SNA Interactive Terminal Facility (ITF)
- SNA Remote Job Entry (RJE) Facility
- SNA File Transfer Facility (SFT)
- SNA Application Interface Facility (AIF).

The main topics discussed in this manual are:

- Introduction (Section 1)
- Network considerations (Section 2)
- ACF/NCP generation (Section 3)
- ACF/VTAM definition (Section 4)
- Defining ITF to interactive systems (Section 5)
- Defining the RJE Facility to JES2 (Section 6)
- Installing SFT on the host (Section 7)
- Defining AIF to interactive systems (Section 8)
- Use of SNA with NCCF and NPDA (Section 9)
- Configuration worksheets (Appendix A).

This manual does not discuss configuring the host system beyond SNA considerations. This manual does not discuss the configuration of SNA networks in general; it only discusses those characteristics required by DPS 6 SNA on the host system.

This manual assumes that the IBM host operating system is MVS. For information concerning DOS, contact your Honeywell representative.

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.

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This manual does not contain configuration information for the DPS 6; the DPS 6/SNA Administrator's Guide contains that configuration information.

In this manual, the term "DPS 6" refers to DPS 6, disk-based microSystem 6/10, or microSystem 6/20 systems, unless otherwise noted.

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.
- Braces {} enclose items from which you must make a choice. The valid choices are on separate lines.

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

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

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SNA MANUALS

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
CR58	SNA Interactive Terminal Facility User's Guide
CR59	SNA Remote Job Entry Facility User's Guide
CR60	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:

<u>Order Number</u>	<u>SRB Title</u>
GR12-00	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 MOD 400 Guide to Software Documentation 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 MOD 400 Guide to Software Documentation.

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 DPS 6 is a general-purpose computer that can run a variety of applications--word processing, data entry, transaction processing, program development, etc.--and, at the same time, communicate with an IBM host computer.

DPS 6 COMMUNICATIONS WITH IBM HOST PROCESSORS

GCOS 6 MOD 400, the operating system for the DPS 6, supports a number of Systems Network Architecture (SNA) communications software products. It also supports software products that emulate widely used IBM Binary Synchronous Communication (BSC) communications devices. Both SNA and BSC facilities can operate concurrently on the DPS 6 if desired.

The SNA products are:

- SNA Transport Facility (prerequisite for other SNA products)
- SNA Interactive Terminal Facility (SNA 3270 emulation)
- SNA Remote Job Entry Facility
- SNA File Transfer Facility
- SNA Application Interface Facility.

For more information on the DPS 6 SNA products, see these manuals:

IBM Distributed Data Processing Overview
DPS 6 SNA Administrator's Guide
SNA Interactive Terminal Facility User's Guide
SNA Remote Job Entry Facility User's Guide
SNA File Transfer Facility User's Guide
SNA Application Programmer's Guide

The BSC products are:

- BSC Transport Facility (prerequisite for other BSC products)
- 2780/3780 Workstation Facility
- HASP Workstation Facility
- Programmable Facility/3271 (BSC 3270 emulation)

For more information on the DPS 6 BSC products, see these manuals:

2780/3780 File Transmission Facility User's Guide
2780/3780 Workstation Facility User's Guide
HASP Workstation Facility User's Guide
Programmable Facility/3271 User's Guide

PURPOSE AND STRUCTURE OF THIS MANUAL

This manual is intended to provide all of the information that a systems programmer needs to configure the IBM host hardware and software correctly for the DPS 6 SNA products.

This manual consists of the following sections:

1. Introduction--Overview and contents of this manual.
2. Network Considerations--This section discusses general characteristics of the DPS 6 SNA products to consider when designing an SNA network to include DPS 6 systems.
3. ACF/NCP Generation--This section describes the Advanced Communications Function/Network Control Program (ACF/NCP) generation statements required for the DPS 6 SNA products.
4. ACF/VTAM Definition--This section describes the Advanced Communications Function/Virtual Telecommunications Access Method (ACF/VTAM) definition statements required for the DPS 6 SNA products.

5. Defining the ITF to Interactive Systems--This section describes the IBM 3270 features supported by ITF and discusses how to define ITF to the IBM subsystems Customer Information Control System (CICS) and Information Management System (IMS).
6. Defining the RJE Facility to Job Entry Subsystems--This section discusses how to define the RJE Facility for the IBM Job Entry Subsystem JES2.
7. Installing the SFT on the Host--This section lists the Job Control Language (JCL) needed to install the SFT (as reference only; JCL is included on the SFT installation tape).
8. Defining the AIF to Interactive Systems--This section discusses how to define the AIF to the IBM subsystems CICS and IMS.
9. Use with NCCF and NPDA--This section describes how the IBM network problem determination products NCCF and NPDA can be used to analyze SNA statistics from the DPS 6 SNA products.
10. Configuration Worksheets--The appendix provides Configuration Worksheets that highlight the configuration parameters that are common to both the IBM host generation and the DPS 6 SNA product configuration.

The network administrator or network designer should use this manual to fill out the Configuration Worksheets in Appendix A and give the worksheets to those responsible for configuring the DPS 6 system and generating the IBM host software. The Configuration Worksheets ensure that all relevant parameters have been considered and that the configuration of the DPS 6 SNA products and the host software agree.

Section 2

NETWORK CONSIDERATIONS

This section discusses general characteristics of the DPS 6 SNA products to consider when designing an SNA network to include DPS 6 systems.

Later sections discuss in detail how to customize the SNA software for the DPS 6.

HOW SNA PROGRAM PRODUCTS ARE VIEWED BY THE HOST

The DPS 6 SNA Interactive Terminal Facility (ITF) appears to the host as an IBM 3274-1C (or -51C) Terminal Controller. The DPS 6 terminals supported by the ITF appear to be IBM 3278 Model 2 Display Stations. The Honeywell printers supported by the ITF appear to be IBM 3287 Model 2 Printers.

The DPS 6 SNA Remote Job Entry (RJE) Facility appears to the host as an IBM 3777 Model 3 Remote Job Entry Workstation with attached readers, printers, punches, and diskettes.

The DPS 6 SNA File Transfer Facility (SFT-6) and SNA Application Interface Facility (AIF) products do not emulate IBM products, but instead appear to the host as general SNA devices.

The number of devices that one copy of the ITF or the RJE Facility can support cannot be greater than the number supported by the IBM product it emulates. Even though the SFT-6 and the AIF do not emulate IBM products, there is still a limit on the number of concurrent file transfers or application sessions. The limits for one copy of each of the SNA products are:

ITF: 32 displays and printers (combined)
RJE Facility: 6 input and output devices (combined)
SFT-6: 6 file transfers
AIF: 33 LU Type 0 sessions.

However, this limitation on the number of devices that one copy of an SNA product can support does not limit the number of devices the DPS 6 can support. You can execute several copies of each of the SNA products at once, with each copy supporting the maximum number of devices. The number of copies of the SNA products that you can run concurrently is limited only by SNA limits and DPS 6 resources (CPU, memory, etc.).

In SNA terminology each of the SNA products acts as a Physical Unit Type 2 (PU.T2) or Cluster Controller. Each copy of the ITF, the RJE Facility, the SFT-6, or the AIF appears to the host as a separate physical unit. For example, a DPS 6 running two copies of the ITF, one copy of the RJE Facility, one copy of the AIF, and one copy of the SFT-6 would appear to the host as five SNA physical units.

No matter how many SNA devices a DPS 6 appears to be to the host, the DPS 6 needs only one communications line connection (with only one modem). If necessary, however, the SNA products can support up to four communications lines. One copy of the ITF, the RJE Facility, the SFT-6, or the AIF supports a single communications line, so that multiple lines would require multiple copies.

The DPS 6 SNA products can communicate with multiple hosts, either by means of separate communications lines to the different hosts or through the MultiSystem Networking Feature (MSNF) of ACF/NCP and ACF/VTAM.

COMMUNICATIONS LINE CHARACTERISTICS

The DPS 6 SNA products support the following types of SDLC communications lines:

- Half-duplex and full-duplex
- Point-to-point and multipoint
- Switched and nonswitched.

If your modems and communication line will support it, it can be beneficial to define a multipoint line as full-duplex even though the DPS 6 SNA products, like all similar IBM products, can only run in half-duplex mode. On a full-duplex line, one half-duplex device can be sending while other half-duplex devices are receiving. This type of line operation is sometimes called multimultipoint.

The DPS 6 supports all standard (RS-232C interface) modems at line speeds up to 56K bits per second. If it has the appropriate communications hardware, the DPS 6 will support NRZI.

Section 3

ACF/NCP GENERATION

This section discusses how to code the ACF/NCP generation macros for the DPS 6 SNA products. The discussion covers only the macros needed for the DPS 6 (GROUP, LINE, LUPOOL or LUDRPOOL, PU, and LU). Further, not all macro operands are discussed-- only those that depend on the characteristics of the DPS 6 SNA products or the way those products are configured. See the appropriate IBM documentation for a discussion of the other aspects of ACF/NCP generation.

The DPS 6 configuration and ACF/NCP generation must agree about certain characteristics of the communications connection between them. The Configuration Worksheets in the appendix should be used to ensure that the same values are given to both.

At the end of this section are samples of the relevant parts of ACF/NCP generations for nonswitched and switched line configurations. The related ACF/VTAM switched line definition statements are discussed in the next section.

ACF/NCP generation macro-operands are discussed with the lowest level macro to which they apply. See the ACF/NCP installation documentation for information on which operands can be specified on higher level macros.

The ACF/NCP generation macros are discussed in the order they would be coded for a new line group for SNA DPS 6 systems:

```
{LUPPOOL }
{LUDRPOOL}
GROUP
  LINE
    PU
      LU
      LU
      .
      .
    PU
      LU
      .
      .
      .
```

Figure 3-1 contains a partial sample NCP generation for DPS 6 SNA for a nonswitched line; Figure 3-2 contains a partial sample NCP generation for DPS 6 SNA for a switched line.

```

*****
*
*       SAMPLE NCP GENERATION (PARTIAL) FOR DPS 6 SNA
*
*       NON-SWITCHED LINE EXAMPLE
*
*****
*
LGRP      GROUP  DIAL=NO,                NON-SWITCHED LINE           X
          DISCNT=NO,                   DON'T DISC. WHEN NO SESSIONS X
          ISTATUS=INACTIVE,            DON'T ACTIVATE WHEN ACT VTAM X
          LNCTL=SDLC,                  SDLC LINE GROUP             X
          MODETAB=ISTINCLM,            DEFAULT LOGON MODE TABLE    X
          NRZI=NO,                     DON'T USE NRZI              X
          REPLYTO=1.2,                 TIMEOUT IF NO REPLY IN 1.2 SEC X
          SSCPFM=USSSCS,               CHARACTER CODED LOGONS       X
          TYPE=NCP,                    NETWORK CONTROL MODE         X
          USSTAB=ISTINCDT,             USE IBM-SUPPLIED USS TABLE X
          VPACING=2                    DEFAULT VTAM-TO-NCP PACING
*
LLINE     LINE  ADDRESS=(020),          INTERFACE ADDRESS           X
          CLOCKNG=EXT,                MODEM PROVIDES CLOCKING     X
          DUPLEX=FULL,                FULL DUPLEX LINE            X
          SPEED=9600,                 9600 BITS PER SECOND        X
          INTPRI=2,                   INTERRUPT PRIORITY          X
          NEWSYNC=NO,                 DON'T SUPPLY NEWSYNC        X
          PAUSE=0.2,                  AVERAGE POLLING CYCLE      X
          POLLED=YES,                 POLL STATIONS ON LINK       X
          RETRIES=5,                  5 RETRIES IN SEQUENCE      X
          SERVLIM=5,                  MAXIMUM REGULAR SCANS       X
          TRANSFR=9                    9 BUFFERS TO ONE STATION
*
LSRVC     SERVICE ORDER=(L3274PU,L3277PU,LSFTPU)
*
*       DEFINITION OF INTERACTIVE TERMINAL FACILITY
*
L3274PU   PU    ADDR=01,                PU ADDRESS                  X
          DLOGMOD=H3278,              SET DEFAULT LOGON MODE(DISPLAY) X
          IRETRY=YES,                  RETRY POLLING AFTER IDLE T.O.   X
          MAXDATA=265,                 MAXIMUM PIU SIZE                X
          MAXOUT=7,                    MAXIMUM PIU'S BEFORE RESPONSE   X
          PACING=1,                    NCP-TO-LU PACING                X
          PASSLIM=11,                  MAXIMUM CONSECUTIVE PIU'S       X
          PUTYPE=2,                     PU TYPE 2 (CLUSTER CONTROLLER) X
          RETRIES=(,1,4),              M=64, T=1 SEC., N=4 SEC.        X
          VPACING=1                    VTAM-TO-NCP PACING
*

```

Figure 3-1. Sample NCP Generation for a Nonswitched Line

INTLU1	LU	LOCADDR=2	DISPLAY 1 LOCAL ADDRESS	
INTLU2	LU	LOCADDR=3	DISPLAY 2 LOCAL ADDRESS	
INTLU3	LU	LOCADDR=4	DISPLAY 3 LOCAL ADDRESS	
INTLU4	LU	LOCADDR=5	DISPLAY 4 LOCAL ADDRESS	
INTLU5	LU	LOCADDR=6,	3270 PRINTER LOCAL ADDRESS	X
		DLOGMOD=H3287	SET PRINTER LOGON MODE DEFAULT	
INTLU6	LU	LOCADDR=7,	SCS PRINTER LOCAL ADDRESS	X
		DLOGMOD=HSCS	SET PRINTER LOGON MODE DEFAULT	
*				
*		DEFINITION OF REMOTE JOB ENTRY FACILITY 3777		
*				
L3777PU	PU	ADDR=02,	PU ADDRESS	X
		BATCH=YES,	USE BATCH PRIORITY	X
		DLOGMOD=BATCH,	DEFAULT LOGON MODE (RJE FAC)	X
		IRETRY=YES,	RETRY POLLING AFTER IDLE T.O.	X
		MAXDATA=521,	MAXIMUM PIU SIZE	X
		MAXOUT=7,	MAXIMUM PIU'S BEFORE RESPONSE	X
		PACING=(1,1),	NCP-TO-LU PACING	X
		PASSLIM=7,	MAXIMUM CONSECUTIVE PIU'S	X
		PUTYPE=2,	PU TYPE 2 (CLUSTER CONTROLLER)	X
		RETRIES=(,1,5),	M=64, T=1 SEC., N=5 SEC.	X
		VPACING=2	VTAM-TO-NCP PACING	
*				
RJELU1	LU	LOCADDR=1		
RJELU2	LU	LOCADDR=2		
RJELU3	LU	LOCADDR=3		
RJELU4	LU	LOCADDR=4		
RJELU5	LU	LOCADDR=5		
RJELU6	LU	LOCADDR=6		
*				
*		DEFINITION OF FILE TRANSFER		
*				
LSFTPU	PU	ADDR=03,	PU ADDRESS	X
		BATCH=YES,	USE BATCH PRIORITY	X
		DLOGMOD=FILETRAN,	SET DEFAULT LOGON MODE	X
		IRETRY=YES,	RETRY POLLING AFTER IDLE T.O.	X
		MAXDATA=265,	MAXIMUM PIU SIZE	X
		MAXOUT=7,	MAXIMUM PIU'S BEFORE RESPONSE	X
		PACING=(4,1),	NCP-TO-LU PACING	X
		PASSLIM=7,	MAXIMUM CONSECUTIVE PIU'S	X
		PUTYPE=2,	PU TYPE 2 (CLUSTER CONTROLLER)	X
		RETRIES=(,1,5),	M=64, T=1 SEC., N=5 SEC.	X
		VPACING=8	VTAM-TO-NCP PACING	
*				
FTLU1	LU	LOCADDR=1		
FTLU2	LU	LOCADDR=2		

Figure 3-1 (cont). Sample NCP Generation for a Nonswitched Line

```

*****
*
*          SAMPLE NCP GENERATION (PARTIAL) FOR DPS 6 SNA
*
*          SWITCHED LINE EXAMPLE
*
*****
*
SWLUPOOL LUPOOL
*
SWGRP      GROUP DIAL=YES,           SWITCHED LINE           X
           ANSWER=ON,              REMOTES CAN DIAL IN    X
           CALL=INOUT,             DIAL-IN AND DIAL-OUT  X
           ISTATUS=INACTIVE,       DON'T ACTIVATE WHEN ACT VTAM X
           LNCTL=SDLC,             SDLC LINE GROUP       X
           MODETAB=ISTINCLM,       DEFAULT LOGON MODE TABLE X
           NRZI=NO,               DON'T USE NRZI        X
           REPLYTO=NONE,          DON'T TIMEOUT         X
           SPEED=2400,            2400 BITS PER SECOND  X
           SSCPFM=USSSCS,         CHARACTER CODED LOGONS X
           TYPE=NCP,              NETWORK CONTROL MODE   X
           USSTAB=ISTINCDT        USE IBM-SUPPLIED USS TABLE
*
SWLINE     LINE ADDRESS=(030),        INTERFACE ADDRESS      X
           CLOCKNG=EXT,          MODEM PROVIDES CLOCKING X
           DUPLEX=HALF,         HALF DUPLEX LINE      X
           INTPRI=2,           INTERRUPT PRIORITY    X
           PAUSE=0.2,          AVERAGE POLLING CYCLE X
           POLLED=YES,         POLL STATIONS ON LINK X
           RETRIES=5,          5 RETRIES IN SEQUENCE X
           SERVLIM=5,         MAXIMUM REGULAR SCANS X
           TRANSFR=9          9 BUFFERS TO ONE STATION
*
SWPU       PU      PUTYPE=2,        PU TYPE 2              X
           MAXLU=6            ALLOW UP TO 6 LU'S

```

Figure 3-2. Sample NCP Generation for a Switched Line

LUPOOL OR LUDRPOOL MACRO

One of these macros is required for switched lines. If the host system supports the Request Network Address Assignment command, then the LUDRPOOL macro is required. If the host system does not support the command, then the LUPOOL macro is required.

The format of the LUDRPOOL macro is:

LUDRPOOL NUMTYP2=n

NUMTYP2=n This is the number of logical units (type 2) in the pool.

For the LUPOOL macro, the operand that must be coded for the DPS 6 SNA products is:

LUPOOL NUMBER=n

NUMBER=n This is the number of logical units in the pool.

GROUP MACRO

The GROUP macro is the start of the definition of a group of lines and devices that have common characteristics.

The operands that must be coded on the GROUP macro used to begin definition of a line group that includes DPS 6 systems are:

```
GROUP      DIAL= {YES}
              {NO} ,
            LNCTL=SDLC,
            TYPE=NCP,
            .
            .
            .
```

You will probably need other operands, but these are the ones that are most important for the DPS 6.

DIAL={YES} The DPS 6 supports both switched and nonswitched
{NO} lines. This value is referred to as LINE in the
Configuration Worksheets. This operand must agree
with a corresponding operand in the DPS 6
configuration.

LNCTL=SDLC The DPS 6 SNA products support only SDLC lines.

TYPE=NCP SDLC lines must be in Network Control Mode.

LINE MACRO

The LINE macro describes the characteristics of a communications line.

The operands that must be coded for a line that supports DPS 6 systems are:

```
LINE DUPLEX= {HALF}
              {FULL} ,
NRZI= {YES}
      {NO } ,
POLLED=YES,
      .
      .
      .
```

You will probably need other operands, but these are the ones that are most important for the DPS 6.

DUPLEX= {HALF} The DPS 6 supports both half-duplex and
 {FULL} full-duplex lines.

NRZI= {YES} The DPS 6, when equipped with the
 {NO } appropriate communications controller,
 supports NRZI.

POLLED=YES The SDLC line must be polled and addressed
 by the host.

PU MACRO (FOR NONSWITCHED LINES)

The PU macro defines the characteristics of the DPS 6 SNA Interactive Terminal Facility (ITF), SNA Remote Job Entry (RJE) Facility, SNA File Transfer Facility (SFT-6), or SNA Application Interface Facility (AIF) physical unit. This ACF/NCP macro is used only for DPS 6 systems attached to nonswitched lines. For switched lines, see the PU statement under "ACF/VTAM Definition."

The operands that must be coded for the DPS 6 SNA products are:

```
PU ADDR=nn,  
  MAXDATA= {265}  
           {521} ,  
  PUTYPE=2,  
  .  
  .  
  .
```

You will probably need other operands, but these are the ones that are most important for the DPS 6.

ADDR=nn	The station address is a hexadecimal number in the range X'01'-X'FE'. It must agree with a corresponding parameter in the ITF, RJE Facility, SFT-6, or AIF configuration.
MAXDATA= {265} {521}	This is the largest SDLC frame that can be sent to the DPS 6 is the size of the largest buffer (256 or 512 bytes) plus 9 bytes of SNA header information. This value is referred to as MAX FRAME SIZE in the Configuration Worksheets. This operand <u>must</u> agree with a corresponding parameter in the ITF, RJE, SFT-6, or AIF configuration. The values that you code depend on the product: ITF: 265 RJE Facility: 265 or 521 AIF: 265 or 521 SFT-6: 265 or 521
PUTYPE=2	All of the DPS 6 SNA products are SNA physical units type 2.

LU MACRO

The Logical Unit (LU) macro describes the characteristics of an ITF, RJE Facility, SFT-6, or AIF logical unit.

The operands that must be coded for the DPS 6 SNA products are:

```
LU  LOCADDR=n,  
    SSCPFM=USSCS,      (VTAM-only)  
    .  
    .  
    .
```

Operands that are not required but for which recommendations can be made are:

```
DLOGMOD=logmode      (VTAM-only)  
PACING=n              (VTAM-only)  
VPACING=n            (VTAM-only)
```

You will probably need other operands, but these are the ones that are most important for the DPS 6.

The VTAM-only operands are discussed under "ACF/VTAM Definition."

LOCADDR=n The local address of the ITF, RJE Facility, AIF, or SFT-6 logical unit must agree with a corresponding parameter in the ITF, RJE, AIF, or SFT-6 configuration. This value is referred to as LU ADDRESS in the Configuration Worksheets. The values allowed depend on the product:

```
ITF: 2 to 33  
RJE Facility: 1 to 6  
AIF: 2 to 33  
SFT-6: 1 to 6
```

Section 4

ACF/VTAM DEFINITION

This section discusses how to code the Advanced Communications Function/Virtual Telecommunications Access Method (ACF/VTAM) generation statements for the DPS 6 SNA products. Four aspects of ACF/VTAM generation are relevant to the DPS 6:

- VTAM-only operands of Network Control Program (NCP) Network Configuration macros
- ACF/VTAM statements for SNA devices connected by switched lines
- ACF/VTAM statement for SNA applications
- Logon mode table entries for the SNA Logical Units.

VTAM-ONLY OPERANDS IN NCP GENERATION MACROS

The ACF/NCP generation macros are also interpreted by ACF/VTAM so that it knows the structure of the SNA network. For convenience, the ACF/NCP network configuration macro-instructions GROUP, LINE, PU, and LU can have VTAM-only operands that are checked but not used by NCP. This section discusses how to code these operands.

The sample ACF/NCP generations at the end of Section 3 contain examples of the coding of these operands.

The only operand that must be coded for the DPS 6 SNA products is:

SSCPFM=USSSCS

Operands that are not required but for which recommendations can be made are:

DLOGMOD=logmode
PACING=n
VPACING=n

You will probably need other operands, but these are the ones that are most important for the DPS 6.

SSCPFM=USSSCS The DPS 6 SNA products only support character-coded logons.

DLOGMOD=logmode Depends on the product; see "Logon Mode Table Definitions" in this section.

PACING=n The SNA products will adapt to the PACING parameters specified in the VTAM generation. Some things to take into account when deciding on the NCP-to-LU pacing are:

ITF: Because a 3270 can only accept one screen's worth of information at a time, the host software will never send more than that before waiting for a response. Nevertheless, an ITF LU should be coded with:

PACING=1

which means that every request unit sent to the LU is confirmed with a pacing response.

For ITF printer LUs, use a pacing value higher than 1. A pacing value of 4 is common.

RJE Facility, SFT-6, and AIF:

Because LUs for these products typically receive long streams of data, they can benefit from large pacing values. The determining factor is how much space you wish to devote to buffered data on the DPS 6.

VPACING=n

The main thing to take into account when deciding on the VTAM-to-NCP pacing parameter is its affect on the VTAM and NCP buffer pools:

ITF: Because a 3270 can only accept one screen's worth of information at a time, the host software will never send more than that before waiting for a response. Nevertheless, an ITF LU should be coded with:

VPACING=1

which means that VTAM will send NCP any information for the LU and then receive a pacing response.

RJE Facility, SFT-6, and AIF:

Because LUs for these products typically receive long streams of data, they can benefit from large pacing values. The determining factor is how much space you wish to devote to buffered data on the NCP.

DEFINING STATIONS ON SWITCHED SNA CONNECTIONS

The physical and logical units of SNA stations connected by switched lines are defined in both ACF/VTAM and ACF/NCP. This section discusses how to code the necessary generation statements for ACF/VTAM (ACF/NCP generation is discussed in Section 3). The discussion covers only the statements needed for the DPS 6 (PU and LU). Further, not all macro-operands are discussed--only those that depend on the characteristics of the DPS 6 SNA products or the way those products are configured. See the appropriate IBM documentation for a discussion of the other aspects of ACF/VTAM generation.

The DPS 6 configuration and ACF/VTAM generation must agree about certain characteristics of the communications connection between them. The Configuration Worksheets in the appendix should be used to ensure that the same values are given to both.

Figure 4-1 is a sample ACF/VTAM Generation (partial) for a DPS 6 attached by a switched line.

```

*****
*
*       SAMPLE VTAM DEFINITION (PARTIAL) FOR DPS 6 SNA
*
*       SWITCHED LINE EXAMPLE
*
*****
*
SWVGRP  VBUILD TYPE=SWNET                SWITCHED NETWORK DEFINITION
*
*       DEFINITION OF INTERACTIVE TERMINAL FACILITY 3274
*
S3274PU  PU      ADDR=01,                PU ADDRESS                X
          IDBLK=017,                    I.D. BLOCK                 X
          IDNUM=00001,                   I.D. NUMBER                X
          DLOGMOD=H3278,                 SET DEFAULT LOGON MODE(DISPLAY) X
          IRETRY=YES,                    RETRY POLLING AFTER IDLE T.O. X
          MAXDATA=265,                   MAXIMUM PIU SIZE           X
          MAXOUT=7,                       MAXIMUM PIU'S BEFORE RESPONSE X
          PACING=1,                       NCP-TO-LU PACING           X
          PASSLIM=11,                     MAXIMUM CONSECUTIVE PIU'S   X
          PUTYPE=2,                        PU TYPE 2 (CLUSTER CONTROLLER) X
          SSCPFM=USSSCS,                  CHARACTER CODED LOGONS      X
          RETRIES=(,1,4)                  M=64, T=1 SEC., N=4 SEC.   X
          VPACING=1                       VTAM-TO-NCP PACING
*
SPATH1   PATH    DIALNO=5551212*,        NUMBER TO DIAL              X
          GID=1,                          GROUP I.D.                  X
          GRPNM=SGRP,                      POINT TO NCP GROUP NAME    X
          PID=1                            FIRST PATH FOR THIS PU
*
INTLU1   LU      LOCADDR=2              DISPLAY 1 LOCAL ADDRESS
INTLU2   LU      LOCADDR=3              DISPLAY 2 LOCAL ADDRESS
INTLU3   LU      LOCADDR=4              DISPLAY 3 LOCAL ADDRESS
INTLU4   LU      LOCADDR=5              DISPLAY 4 LOCAL ADDRESS
INTLU5   LU      LOCADDR=6,             PRINTER LOCAL ADDRESS      X
          DLOGMOD=H3287                  3270 PRINTER LOGON MODE
INTLU6   LU      LOCADDR=7,             PRINTER LOCAL ADDRESS      X
          DLOGMOD=HSCS                    SCS PRINTER LOGON MODE

```

Figure 4-1. Sample VTAM Definition for a Switched Line

```

*
*      DEFINITION OF REMOTE JOB ENTRY FACILITY 3777
*
S3777PU  PU      ADDR=02,          PU ADDRESS          X
          IDBLK=013,          I.D. BLOCK          X
          IDNUM=00002,        I.D. NUMBER         X
          BATCH=YES,          USE BATCH PRIORITY   X
          DLOGMOD=BATCH,      DEFAULT LOGON MODE (RJE FAC) X
          IRETRY=YES,         RETRY POLLING AFTER IDLE T.O. X
          MAXDATA=521,        MAXIMUM PIU SIZE     X
          MAXOUT=7,           MAXIMUM PIU'S BEFORE RESPONSE X
          PACING=(1,1),       NCP-TO-LU PACING     X
          PASSLIM=7,          MAXIMUM CONSECUTIVE PIU'S     X
          SSCPFM=USSSCS,      CHARACTER CODED LOGONS        X
          PUTYPE=2,           PU TYPE 2 (CLUSTER CONTROLLER) X
          RETRIES=(,1,5)      M=64, T=1 SEC., N=5 SEC.
*
SPATH2   PATH    DIALNO=5551212*,  NUMBER TO DIAL        X
          GID=2,             GROUP I.D.            X
          GRPNM=SGRP,        POINT TO NCP GROUP NAME   X
          PID=1              FIRST PATH FOR THIS PU
*
RJELU1   LU      LOCADDR=1
RJELU2   LU      LOCADDR=2
RJELU3   LU      LOCADDR=3
RJELU4   LU      LOCADDR=4
RJELU5   LU      LOCADDR=5
RJELU6   LU      LOCADDR=6
*
*      DEFINITION OF FILE TRANSFER
*
SSFTPU   PU      ADDR=03,          PU ADDRESS          X
          IDBLK=013,          I.D. BLOCK          X
          IDNUM=00003,        I.D. NUMBER         X
          BATCH=YES,          USE BATCH PRIORITY   X
          DLOGMOD=FILETRAN,   SET DEFAULT LOGON MODE   X
          IRETRY=YES,         RETRY POLLING AFTER IDLE T.O. X
          MAXDATA=521,        MAXIMUM PIU SIZE     X
          MAXOUT=7,           MAXIMUM PIU'S BEFORE RESPONSE X
          PACING=(4,1),       NCP-TO-LU PACING     X
          PASSLIM=7,          MAXIMUM CONSECUTIVE PIU'S     X
          SSCPFM=USSSCS,      CHARACTER CODED LOGONS        X
          PUTYPE=2,           PU TYPE 2 (CLUSTER CONTROLLER) X
          RETRIES=(,1,5)      M=64, T=1 SEC., N=5 SEC.
*
SPATH3   PATH    DIALNO=5551212*,  NUMBER TO DIAL        X
          GID=3,             GROUP I.D.            X
          GRPNM=SGRP,        POINT TO NCP GROUP NAME   X
          PID=1              FIRST PATH FOR THIS PU
*
FTLU1    LU      LOCADDR=1
FTLU2    LU      LOCADDR=2

```

Figure 4-1 (cont). Sample VTAM Definition for a Switched Line

```

*
*      DEFINITION OF SNA PROGRAM INTERFACE
*
SPIPU  PU      ADDR=04,          PU ADDRESS          X
        IDBLK=013,            I.D. BLOCK          X
        IDNUM=00001,          I.D. NUMBER         X
        USSTAB=HIS3270        X
        DLOGMOD=H3278,        SET DEFAULT LOGON MODE(DISPLAY) X
        MAXDATA=265,          MAXIMUM PIU SIZE    X
        PACING=1,             NCP-TO-LU PACING    X
        PASSLIM=33,           MAXIMUM CONSECUTIVE PIU'S X
        PUTYPE=2,             PU TYPE 2 (CLUSTER CONTROLLER) X
        SSCPFM=USSSCS,        CHARACTER CODED LOGONS X
        VPACING=1             VTAM-TO-NCP PACING

SPILU1 LU      LOCADDR=2        SPI LU 01 LOCAL ADDRESS
SPILU2 LU      LOCADDR=3        SPI LU 02 LOCAL ADDRESS
SPILU3 LU      LOCADDR=4        SPI LU 03 LOCAL ADDRESS
SPILU4 LU      LOCADDR=5        SPI LU 04 LOCAL ADDRESS
SPILU5 LU      LOCADDR=6        SPI LU 05 LOCAL ADDRESS
SPILU6 LU      LOCADDR=7        SPI LU 06 LOCAL ADDRESS
SPILU7 LU      LOCADDR=8        SPI LU 07 LOCAL ADDRESS
SPILU8 LU      LOCADDR=9        SPI LU 08 LOCAL ADDRESS
SPILU9 LU      LOCADDR=10       SPI LU 09 LOCAL ADDRESS
SPILUA LU      LOCADDR=11       SPI LU 10 LOCAL ADDRESS
SPILUB LU      LOCADDR=12       SPI LU 11 LOCAL ADDRESS
SPILUC LU      LOCADDR=13       SPI LU 12 LOCAL ADDRESS
SPILUD LU      LOCADDR=14       SPI LU 13 LOCAL ADDRESS
SPILUE LU      LOCADDR=15       SPI LU 14 LOCAL ADDRESS
SPILUF LU      LOCADDR=16       SPI LU 15 LOCAL ADDRESS
SPILUG LU      LOCADDR=17       SPI LU 16 LOCAL ADDRESS
SPILUH LU      LOCADDR=18       SPI LU 17 LOCAL ADDRESS
SPILUI LU      LOCADDR=19       SPI LU 18 LOCAL ADDRESS
SPILUJ LU      LOCADDR=20       SPI LU 19 LOCAL ADDRESS
SPILUK LU      LOCADDR=21       SPI LU 20 LOCAL ADDRESS
SPILUL LU      LOCADDR=22       SPI LU 21 LOCAL ADDRESS
SPILUM LU      LOCADDR=23       SPI LU 22 LOCAL ADDRESS
SPILUN LU      LOCADDR=24       SPI LU 23 LOCAL ADDRESS
SPILUO LU      LOCADDR=25       SPI LU 24 LOCAL ADDRESS
SPILUP LU      LOCADDR=26       SPI LU 25 LOCAL ADDRESS
SPILUQ LU      LOCADDR=27       SPI LU 26 LOCAL ADDRESS
SPILUR LU      LOCADDR=28       SPI LU 27 LOCAL ADDRESS
SPILUS LU      LOCADDR=29       SPI LU 28 LOCAL ADDRESS
SPILUT LU      LOCADDR=30       SPI LU 29 LOCAL ADDRESS
SPILUU LU      LOCADDR=31       SPI LU 30 LOCAL ADDRESS
SPILUV LU      LOCADDR=32       SPI LU 31 LOCAL ADDRESS
SPILUW LU      LOCADDR=33       SPI LU 32 LOCAL ADDRESS

```

Figure 4-1 (cont). Sample VTAM Definition for a Switched Line

PU (Switched) Statement

The VTAM PU statement defines the characteristics of the DPS 6 SNA Interactive Terminal Facility (ITF), SNA Remote Job Entry (RJE) Facility, SNA File Transfer (SFT-6), or SNA Application Interface Facility (AIF) physical unit on a switched connection.

The operands that must be coded for the DPS 6 SNA products are:

```
PU ADDR=nn,  
  IDBLK= {017}  
         {013} ,  
  IDNUM=mmmnn,  
  MAXDATA= {265}  
           {521} ,  
  PUTYPE=2,  
  PASSLIM=33  
  .  
  .  
  .
```

You will probably need other operands, but these are the ones that are most important for the DPS 6.

ADDR=nn The station address is a hexadecimal number in the range X'01'-X'FE'. This value is referred to as PU ADDRESS in the Configuration Worksheets. It must agree with a corresponding parameter in the ITF, RJE Facility, SFT-6, or AIF configuration.

IDBLK= {017}
 {013} A three-digit hexadecimal block number that depends on the product and is:

```
                  ITF:  017  
RJE Facility:    013  
                  AIF:  013  
                  SFT-6: 013
```

IDNUM=mmmnn The five-digit hexadecimal identification number as assigned by the network designer. This value is referred to as XID in the Configuration Worksheets. It must agree with a corresponding parameter in the ITF, RJE Facility, SFT-6, or AIF configuration. The last two characters must be the same as the ADDR parameter.

MAXDATA= {265}
 {521}

The size of the largest SDLC frame that can be sent to the DPS 6 is the size of the largest buffer (256 or 512 bytes) plus 9 bytes of SNA header information. This value is referred to as MAXIMUM FRAME SIZE in the Configuration Worksheets. This operand must agree with a corresponding parameter in the ITF, RJE Facility, SFT-6, or AIF configuration. The value of FRAME_SIZE for the ITF should be MAXDATA - 9. The values that you code depend on the product:

 ITF: 265
 RJE Facility: 265 or 521
 AIF: 265 or 521
 SFT-6: 265 or 521

PUTYPE=2 All of the SNA products are SNA physical units type 2.

PASSLIM=33 For the AIF only, the maximum number of consecutive Path Information Units (PIUs). This is the maximum number of information frames that can be sent before the host asks for a response.

LU (Switched) Statement

The LU statement describes the characteristics of an ITF, RJE Facility, SFT-6, or AIF logical unit.

The operands that must be coded for the DPS 6 SNA products are:

```
LU   LOCADDR=n,  
      SSCPFM=USSSCS,  
      .  
      .  
      .
```

Operands that are not required but for which recommendations can be made are:

```
DLOGMOD=logmode  
PACING=n  
VPACING=n
```

You will probably need other operands, but these are the ones that are most important for the DPS 6.

LOCADDR=n The local address of the ITF, RJE Facility, SFT-6, or AIF logical unit must agree with a corresponding parameter in the ITF, RJE Facility, SFT-6, or AIF configuration. This value is referred to as LU ADDRESS in the Configuration Worksheets. The values allowed depend on the product:

```
                  ITF: 2 to 33  
          RJE Facility: 1 to 6  
                  AIF: 2 to 33  
                  SFT-6: 1 to 6
```

SSCPFM=USSSCS The DPS 6 SNA products only support character-coded logons.

DLOGMOD=logmode See "Logon Mode Table Definitions," later in this section.

PACING=n

The SNA products adapt to the PACING parameters specified in the VTAM generation. Some things to take into account when deciding on the NCP-to-LU pacing are:

ITF: Because a 3270 can only accept one screen of information at a time, the host software never sends more than that before waiting for a response. Nevertheless, an ITF LU should be coded with:

PACING=1

which means that every request unit sent to the LU is confirmed with a pacing response.

For ITF printer LUs, use a pacing value higher than 1. A pacing value of 4 is common.

RJE Facility, SFT-6, and AIF:

Because LUs for these products typically receive long streams of data, they can benefit from large pacing values. The determining factor is how much space you wish to devote to buffered data on the DPS 6.

VPACING=n

The main thing to take into account when deciding on the VTAM-to-NCP pacing parameter is its affect on the VTAM and NCP buffer pools:

ITF: Because a 3270 can only accept one screen of information at a time, the host software never sends more than that before waiting for a response. Nevertheless, an ITF LU should be coded with:

VPACING=1

which means that VTAM sends NCP any information for the LU and then receive a pacing response.

RJE Facility, SFT-6, and AIF:

Because LUs for these products typically receive long streams of data, they can benefit from large pacing values. The determining factor is how much space you wish to devote to buffered data on the NCP.

ACF/VTAM APPLICATION PROGRAM DEFINITION FOR SFT-H

The host software for the SNA File Transfer includes a VTAM communications application called the Transmission Control Program. Like all other ACF/VTAM applications, the Transmission Control Program must provide an Application Identifier (APPLID) when opening the connection to ACF/VTAM. When creating the SFT-H default values table you can specify one or more application identifiers for the Transmission Control Program to use. You use the APPL statement to define these Application Identifiers to ACF/VTAM. This section discusses how to code the operands for the APPL statements.

Figure 4-2 contains a sample APPL statement for SFT-H.

```
FTF1      APPL  ACBNAME=FTF1,          APPLID OF APPLICATION      X
          AUTH=(ACQ,NOCNM,NOPASS,NOPO,NOTSO), ALLOW ACQUIRE LU    X
          EAS=199,                UP TO 199 LU'S                    X
          MAXPVT=0,                                                         X
          SRBEXIT=NO,                                                       X
          VPACING=4
```

Figure 4-2. Sample APPL Statement for SFT-H

The operands that must be coded for each SFT-H APPLID are:

```
name APPL  ACBNAME=acbname,
          AUTH=(ACQ[,NOCNM][,NOPASS][,NOPO][,NOTSO][,VPACE]),
          EAS=nnn,
          .
          .
          .
```

You will probably need other operands, but these are the ones that are most important for the DPS 6.

name or acbname The application name should agree with one of the VTAM APPLIDs in the SFT default values table.

AUTH=(ACQ [,NOCNM] [,NOPASS] [,NOPO] [,NOTSO] [,VPACE]),

The operand ACQ is required so that the application can connect to the SFT-6 logical units. The other operands are the VTAM defaults but may be coded as shown, if desired.

EAS=nnn The maximum number of sessions that can be active concurrently. This value should be greater than or equal to the MAXSESS parameter for the Transmission Control Program. SFT-H can support up to 199 concurrent sessions.

LOGON MODE TABLE DEFINITIONS

When VTAM establishes a session between two logical units (such as between an ITF display and Customer Information Control System (CICS)), it needs more information about the characteristics of the session than is available from the ACF/NCP generation. It gets this additional information from one of two sources:

1. From the host application
2. From a LOGMODE entry in a VTAM logon mode table.

Certain host systems, such as the CICS and Information Management System (IMS), always supply the necessary information. For example, the CICS uses the information in its Terminal Control Table (TCT) to set the characteristics of the session. When the host system supplies the session parameters, a LOGMODE entry is not needed.

Host systems like TSO and NCCF, however, do not supply the session parameters for the devices they support. For these and similar systems, VTAM gets the session parameters from the logon mode table. The entry in the logon mode table that VTAM uses is specified either explicitly in the user logon or by default from the DLOGMOD parameter in the NCP or VTAM generation.

The IBM-supplied logon mode table ISTINCLM has a LOGMODE entry named "BATCH" that is suitable for RJE Facility logical units. You must code additional entries, however, for the other SNA products.

The sample logon mode table entries in Figure 4-3 give examples of LOGMODE definitions for all of the SNA products. For completeness, the LOGMODE entry for the RJE Facility is also included.

```

*****
*
*          SAMPLE LOGON MODE TABLE ENTRIES FOR HIS SNA PRODUCTS          *
*
*****
*
*          INTERACTIVE TERMINAL FACILITY
*
HDISPLAY MODEENT LOGMODE=H3278,          VIP DISPLAY AS 3278 DISPLAY          X
          FMPROF=X'03',          FUNCTION MANAGEMENT PROFILE 3          X
          TSPROF=X'03',          TRANSMISSION SERVICES PROFILE 3          X
          PRIPROT=X'B1',          PRIMARY LU PROTOCOLS          X
          SECPROT=X'B0',          SECONDARY LU PROTOCOLS          X
          COMPROT=X'3080',          COMMON LU PROTOCOLS          X
          RUSIZES=C'8787',          RU SIZES UP TO 1024          X
          PSERVIC=X'020000000000185018507F00' PS PROTOCOLS
*
HDSPRINT MODEENT LOGMODE=H3287,          3270 DATA STREAM PRINTER          X
          FMPROF=X'03',          FUNCTION MANAGEMENT PROFILE 3          X
          TSPROF=X'03',          TRANSMISSION SERVICES PROFILE 3          X
          PRIPROT=X'B1',          PRIMARY LU PROTOCOLS          X
          SECPROT=X'B0',          SECONDARY LU PROTOCOLS          X
          COMPROT=X'3080',          COMMON LU PROTOCOLS          X
          RUSIZES=X'8787',          RU SIZES UP TO 1024          X
          PSERVIC=X'030000000000185018507F00' PS PROTOCOLS
*
HSCSPRT  MODEENT LOGMODE=HSCS,          SNA CHARACTER STRING PRINTER          X
          FMPROF=X'03',          FUNCTION MANAGEMENT PROFILE 3          X
          TSPROF=X'03',          TRANSMISSION SERVICES PROFILE 3          X
          PRIPROT=X'B1',          PRIMARY LU PROTOCOLS          X
          SECPROT=X'B0',          SECONDARY LU PROTOCOLS          X
          COMPROT=X'3080',          COMMON LU PROTOCOLS          X
          RUSIZES=X'8787',          RU SIZES UP TO 1024          X
          PSERVIC=X'01000000FB00000000FB0000' PS PROTOCOLS
*
*          REMOTE JOB ENTRY FACILITY
*
HRJE     MODEENT LOGMODE=BATCH,          REMOTE JOB ENTRY WORKSTATION          X
          FMPROF=X'03',          FUNCTION MANAGEMENT PROFILE 3          X
          TSPROF=X'03',          TRANSMISSION SERVICES PROFILE 3          X
          PRIPROT=X'A3',          PRIMARY LU PROTOCOLS          X
          SECPROT=X'A3',          SECONDARY LU PROTOCOLS          X
          COMPROT=X'7080',          COMMON LU PROTOCOLS          X
          RUSIZES=X'4747',          RU SIZES UP TO 512          X
          PSERVIC=X'011000000000000000000000' PS PROTOCOLS

```

Figure 4-3. Sample Logon Mode Table Entries for DPS 6 SNA Products

```

*
* FILE TRANSFER FACILITY
*
HFTF MODEENT LOGMODE=FILETRAN, SNA FILE TRANSFER X
      FMPROF=X'03', FUNCTION MANAGEMENT PROFILE 3 X
      TSPROF=X'03', TRANSMISSION SERVICES PROFILE 3 X
      PRIPROT=X'91', PRIMARY LU PROTOCOLS X
      SECPROT=X'90', SECONDARY LU PROTOCOLS X
      COMPROT=X'3080', COMMON LU PROTOCOLS X
      RUSIZES=X'8787', RU SIZES UP TO 1024 X
      PSERVIC=X'0100000000000000000000000000' PS PROTOCOLS

*
* SNA PROGRAM INTERFACE
*
MODELU0 MODEENT LOGMODE=MODELU0, SNA PROGRAM INTERFACE X
        FMPROF=X'04', FUNCTION MANAGEMENT PROFILE 4 X
        TSPROF=X'04', TRANSMISSION SERVICES PROFILE 4 X
        PRIPROT=X'B1', PRIMARY LU PROTOCOLS X
        SECPROT=X'B0', SECONDARY LU PROTOCOLS X
        COMPROT=X'3080', COMMON LU PROTOCOLS X
        RUSIZES=X'8787', RU SIZES UP TO 1024 X
        PSERVIC=X'0100000000000000000000000000' 24X80 DEFAULT

*
*
*
CICSLU0 MODEENT LOGMODE=CICSLU0, SNA PROGRAM INTERFACE X
        FMPROF=X'04', FUNCTION MANAGEMENT PROFILE 4 X
        TSPROF=X'04', TRANSMISSION SERVICES PROFILE 4 X
        PRIPROT=X'B1', PRIMARY LU PROTOCOLS X
        SECPROT=X'B0', SECONDARY LU PROTOCOLS X
        COMPROT=X'7480', COMMON LU PROTOCOLS X
        RUSIZES=X'8585', X
        PSERVIC=X'0100000000000000000000000000' 24X80 DEFAULT

```

Figure 4-3 (cont). Sample Logon Mode Table Entries for DPS 6 SNA Products

PACING VALUES

Host pacing values can be defined in one of two ways:

- On the ACF/VTAM statement that defines the logical unit
- On the LOGMODE table entry statement used to derive the BIND parameters.

Table 4-1 summarizes the statements that control pacing.

Table 4-1. Pacing-Related Keywords

ACF/VTAM Statement	Keyword	Meaning
APPL	VPACING=	Secondary to Primary (i.e., from SFT-6 to SFT-H).
MODEENT	PSNDPAC=	Primary to Boundary Function Node (i.e. SFT-H to 3705 connected to SFT-6).
LU	VPACING=	Primary to Boundary Function Node if PSNDPAC=0.
PU	VPACING=	Primary to Boundary Function Node if PSNDPAC=0 and LU VPACING=0.
MODEENT	SRCVPAC=	Boundary Function Node to SFT-6.
LU	PACING=	Boundary Function Node to SFT-6 if SRCVPAC=0.
PU	PACING=	Boundary Function Node to SFT-6 if SRCVPAC=0 and LU/PACING=0.

NOTE

VPACING/PACING can be specified on LU, PU, LINE, or GROUP statements.

An SFT-H selection of a LOGMODE table entry is controlled via the Utility Control Language ADDLU LOGMODE keyword. If specified, the indicated entry will be used. If not specified, ACF/VTAM will select a default entry. (A logon mode table and/or default entry name may be specified on ACF/VTAM generation statements. The macros are: LU, PU, LINE, or GROUP; the keywords are: MODETAB or DLOGMOD).

An SFT-H selection of an application identity (APPLID) is controlled by customer-supplied values in the SFT-H default values table.

You can specify up to four APPLID values. During the transmission program initialization, the application identities are used in turn until a nonbusy application ID is found. You can control application identities, and thus VPACING or inbound pacing counts, by having several load libraries, each with a default value table containing different application identities.

For cross domain sessions, inbound pacing can occur in two stages:

- SFT-6 to Boundary function pacing is controlled by the MODEENT keyword SSNDPAC.
- Boundary function to SFT-H pacing is controlled by the APPLID keyword VPACING.

Outbound pacing (SFT-H to SFT-6) is unchanged.

Section 5

DEFINING ITF TO INTERACTIVE SYSTEMS

This section provides information about the DPS 6 SNA Interactive Terminal Facility (ITF) that may be needed by host systems programmers and application designers. The first subsection describes which features of the IBM 3270 terminal family ITF emulates and which features it does not. The information is useful for analysts who must design host applications. The rest of this section discusses how to code the terminal definition statements for the Customer Information Control System (CICS) and the Information Management System (IMS).

3270 FEATURE SUPPORT

The Interactive Terminal Facility (ITF) emulates an IBM 3274-1C Terminal Controller. The Honeywell terminals supported by the ITF appear to the host as IBM 3278 Model 2 Display Stations with typewriter keyboards. The Honeywell printers supported by ITF appear as IBM 3287 Model 2 Printers.

The ITF emulates the standard features of the IBM 3278, including:

- 1920-character screen
- 25th line status display
- Field attributes (alpha/numeric, protected, etc.)
- Extended attributes (blink, reverse video, underscore)
- PF1-PF24
- PA1-PA3.

Printers attached to the ITF can be used as 3270 Data Stream printers or SNA Character String (SCS) printers.

The ITF does not support these features of the IBM 3278/3287:

- Programmed symbols
- Screen sizes other than 1920 characters
- Badge reader
- Light pen (although you can use light-pen-detectable fields with the CURSOR SEL key).

CICS DEFINITION OF ITF DEVICES

This subsection discusses how to code the CICS terminal control table generation macro DFHTCT for the ITF. Not all the DFHTCT operands are discussed--only those that depend on the characteristics of the ITF or the way the ITF is configured. See the appropriate IBM documentation for a discussion of the other aspects of CICS generation.

The ITF configuration and CICS generation must agree about certain characteristics of the ITF devices. Use the Configuration Worksheets in the appendix to ensure that the same values are given to both.

DFHTCT Macro

The DFHTCT macro defines the characteristics of terminals and printers to the CICS Terminal Control Program.

The operands that must be coded for all ITF devices are:

```
DFHTCT TYPE=TERMINAL,  
        ACCMETH=VTAM,  
        BRACKET=YES,  
        NETNAME=luname,  
        RUSIZE= { 256  
                { 512 } ,  
                { 768  
                { 1024 }
```

In addition, other operands must be coded depending on the specific types of ITF devices, as follows:

For displays:

```
TRMTYPE=LUTYPE2,  
TRMMODL=2,  
FEATURE=(DCKYBD,SELCTPEN,AUDALARM,HILIGHT [,UCTRAN]),  
CHNASSY=YES,  
DEFSCRN=(24,80),
```

For printers acting as 3270 printers:

```
TRMTYPE=LUTYPE3,  
TRMMODL=2,  
PGESIZE=(24,80),
```

For printers acting as SCS printers:

```
TRMTYPE=SCSPRT,  
FF=YES,  
HF=YES,  
VF=YES,
```

You will probably need other operands, but these are the ones that are most important for the DPS 6.

ACCMETH=VTAM ITF supports only VTAM.

BRACKET=YES ITF uses bracket protocols.

NETNAME=luname This name must agree with the name assigned to the LU on the ACF/NCP LU generation macro.

RUSIZE= $\left. \begin{matrix} (256) \\ (512) \\ (768) \\ (1024) \end{matrix} \right\}$, The maximum RU size for a device must agree with a corresponding parameter of the ITF generation. This value is referred to as MAXIMUM RU SIZE in the Configuration Worksheets.

FOR DISPLAYS

TRMTYPE=LUTYPE2 Indicates a display.

TRMMODL=2 Displays attached to ITF emulate the IBM 3278 Model 2 (1920 character screen).

FEATURE=(DCKYBD,SELCTPEN,AUDALARM,HILIGHT [,UCTRAN]),

ITF displays emulate the 3270 Typewriter keyboard and support light-pen-detectable fields (using the CURSOR SEL key), the audible alarm and extended highlighting. Uppercase translation may be used, if desired.

CHNASSY=YES The CICS should assemble an entire chain before passing it to an application.

DEFSCRN=(24,80) The ITF supports only the 1920-character screen.

FOR PRINTERS ACTING AS 3270 PRINTERS

TRMTYPE=LUTYPE3 Indicates a 3270 printer.

TRMMODL=2 Printers attached to the ITF emulate the IBM 3287 Model 2.

PGESIZE=(24,80) The ITF supports only the 1920-character page size for 3270 printer emulation.

FOR PRINTERS ACTING AS SCS PRINTERS

TRMTYPE=SCSPRT Indicates an SCS printer.

FF=YES
HF=YES
VF=YES

Allows the use of SNA Character String control characters.

Figure 5-1 contains a sample CICS TCT generation (fragment) for the ITF.

```

*****
*
*       SAMPLE CICS TCT GENERATION (PARTIAL) FOR DPS 6 SNA
*       INTERACTIVE TERMINAL FACILITY
*
*****
*
*       DEFINE A DISPLAY TERMINAL
*
HISTERM  DFHTCT TYPE=TERMINAL,          DEFINE A 3270 DISPLAY          X
          ACCMETH=VTAM,                 REQUIRES VTAM SUPPORT        X
          NETNAME=INTLU1,                POINT TO LU NAME IN NCP GEN. X
          RELREQ=(YES,YES),              RELEASE WHEN NOT IN USE      X
          CHNASSY=YES,                   ASSEMBLE FULL CHAINS        X
          TCTUAL=255,                    PCI LENGTH                   X
          FEATURE=(DCKYBD,SELCTPEN,AUDALARM,HILIGHT,UCTRAN), X
          BRACKET=YES,                   USE BRACKETS                 X
          TRMIDNT=TRM1,                  CICS TERMINAL NAME          X
          TRMMODL=2,                     1920 CHARACTER SCREEN       X
          BUFFER=0,                      TAKE WHAT APPL. GIVES       X
          RUSIZE=1024,                   SIZE OF 3270 RU              X
          TRMSTAT=(TRANSCIVE),           STARTING STATUS              X
          TRMTYPE=LUTYPE2,               SNA 3270 DISPLAY            X
          CONNECT=NO,                    DON'T AUTOMATICALLY CONNECT X
          PGESTAT=PAGE,                  PAGE HANDLING                X
          PGESIZE=(24,80),               PAGE SIZE FOR BMS           X
          ALTPGE=(24,80),                NO ALTERNATE PAGE SIZE      X
          DEFSCRN=(24,80),               3270 SCREEN SIZE            X
          ALTSCRN=(24,80),               NO ALTERNATE SCREEN SIZE    X
          TIOAL=(1024,4096)              TERMINAL I/O AREA SIZE
*
*       DEFINE A 3270 DATA STREAM PRINTER
*
HISDSP   DFHTCT TYPE=TERMINAL,          3270 D.S. PRINTER           X
          ACCMETH=VTAM,                 REQUIRES VTAM SUPPORT        X
          NETNAME=INTLU5,                POINT TO LU NAME IN NCP GEN. X
          BRACKET=YES,                   USE BRACKETS                 X
          TRMIDNT=PTR1,                  CICS TERMINAL NAME          X
          TRMMODL=2,                     1920 CHARACTER SCREEN       X
          BUFFER=0,                      TAKE WHAT APPL. GIVES       X
          RUSIZE=1024,                   SIZE OF 3270 RU              X
          TRMSTAT=(TRANSCIVE),           STARTING STATUS              X
          TRMTYPE=LUTYPE3,               SNA 3270 PRINTER            X
          PGESIZE=(24,80),               PAGE SIZE FOR BMS           X
          TIOAL=2048                     TERMINAL I/O AREA SIZE
*
*       DEFINE AN SNA CHARACTER STRING (SCS) PRINTER
*
HISSCS   DFHTCT TYPE=TERMINAL,          SCS PRINTER                  X
          ACCMETH=VTAM,                 REQUIRES VTAM SUPPORT        X
          NETNAME=INTLU6,                POINT TO LU NAME IN NCP GEN. X
          BRACKET=YES,                   USE BRACKETS                 X
          RUSIZE=1024,                   SIZE OF 3270 RU              X
          TRMIDNT=SCS1,                  CICS TERMINAL NAME          X
          TRMSTAT=RECEIVE,               STARTING STATUS              X
          TRMTYPE=SCSPRT,                SNA 3270 PRINTER            X
          FF=YES,                        ALLOW FORM FEEDS             X
          HF=YES,                        ALLOW HORIZONTAL FORMAT CONTROLS X
          VF=YES,                        ALLOW VERTICAL FORMAT CONTROLS X
          TIOAL=2048                     TERMINAL I/O AREA SIZE

```

Figure 5-1. Sample CICS TCT Generation for ITF

IMS DEFINITION OF ITF DEVICES

This subsection discusses how to code the IMS generation macros for the ITF. Not all the operands are discussed--only those that depend on the characteristics of ITF or the way ITF is configured. See the appropriate IBM documentation for a discussion of the other aspects of IMS generation.

The ITF configuration and IMS generation must agree about certain characteristics of the ITF devices. Use the Configuration Worksheets in the appendix to ensure that the same values are given to both.

Figure 5-2 contains a sample IMS generation (fragment) for the ITF.

```
*****
*
*      SAMPLE IMS TERMINAL DEFINITION (PARTIAL) FOR DPS 6 SNA      *
*      INTERACTIVE TERMINAL FACILITY                               *
*
*****
*
*      TYPE  UNITYPE=SLUTYPE2          DEFINE DISPLAYS
*
*      TERMINAL NAME=DISP1,          LU NAME          X
*      MODEL=2,                     1920 CHAR SCREEN  X
*      FEAT=(PFK,NOCD,PEN)          TERMINAL FEATURES
*
*      TYPE  UNITYPE=SLUTYPE1          DEFINE SCS PRINTERS
*
*      TERMINAL NAME=SCS1,          LU NAME          X
*      COMPT1=(PRINTER1,MFS-SCS1)   SCS PRINTER
*
*      NAME  PTR1,COMPT=1
```

Figure 5-2. Sample IMS Terminal Definition for the ITF

TYPE Macro

The TYPE macro is the first of a set of terminal description macro statements.

The operands that must be coded for the ITF are:

For displays:

```
TYPE  UNITYPE=SLUTYPE2,
```

```
      .
      .
      .
```

For SCS printers:

```
TYPE  UNITYPE=SLUTYPE1,  
      .  
      .  
      .
```

You will probably need other operands, but these are the ones that are most important for the DPS 6.

```
UNITYPE= {SLUTYPE1}  
          {SLUTYPE2}
```

ITF devices appear to IMS as SNA Logical Units Type 1 (SCS Printer) or Type 2 (Display).

TERMINAL Macro

The TERMINAL macro defines the physical and logical characteristics of the ITF device.

The operands that must be coded for the ITF are:

For displays:

```
TERMINAL NAME=nodename,  
          MODEL=2,  
          FEAT=(PFK, NOCD, PEN),  
          .  
          .  
          .
```

For SCS printers:

```
TERMINAL NAME=luname,  
          COMPT1=(PRINTER1, MFS-SCS1),  
          .  
          .  
          .
```

You will probably need other operands, but these are the ones that are most important for the DPS 6.

NAME= {nodename} This name must agree with the name
 {luname } assigned to the device on the ACF/NCP
 generation macro.

MODEL=2 An ITF display appears as a 3270 Model 2
 with a 1920-character screen.

FEAT= (PFK, NOCD, PEN)

The ITF supports 24 function keys and light-pen detectable fields (using the CURSOR SEL key), but does not support a badge reader.

COMPT1= (PRINTER1, MFS-SCS1)

The ITF expects SNA Character Strings for IMS printers.

Section 6

DEFINING THE RJE FACILITY TO JES2

This section discusses how to code the MVS Job Entry Subsystem 2 (JES2) generation parameters for the DPS 6 Remote Job Entry (RJE) Facility. The RJE Facility provides complete emulation of an IBM 3777 Model 3 RJE workstation. Each copy of the RJE Facility can, therefore, support a console and up to six unit record devices (readers, printers, punches, diskettes) or disk files that appear to the host to be unit record devices.

This discussion covers only the JES2 RMTnnnn parameter that defines the characteristics of SNA RJE workstations. Not all operands are discussed--only those that depend on the characteristics of RJE or the way RJE is configured. See the appropriate IBM documentation for a discussion of the other aspects of JES2 generation.

The number and types of unit record device associated with the RJE Facility are set by the RJE Facility operator using RJE Facility commands. The network administrator must make sure that the configurations used by the RJE Facility operators agree with the configurations described to JES2 in the RMTnnnn.PRM, RMTnnnn.PUM, and RMTnnnn.RDM parameters.

The RJE Facility configuration and JES2 generation must agree about certain characteristics of the workstation. Use the Configuration Worksheets in the appendix to ensure that the same values are given to both.

Figure 6-1 contains a sample JES2 Generation (fragment) for the RJE Facility.

```

*****
*
*          SAMPLE JES2 RJE FACILITY DEFINITION (PARTIAL)
*
*****
*
RMT1      LUTYPE1, BUFSIZE=256, COMP, NUMRD=4, NUMPR=4, NUMPU=2,          X
CONSOLE, SETUPMSG
R1.RD1    CLASS=A
R1.RD2    CLASS=A
R1.RD3    CLASS=A
R1.RD4    CLASS=A
R1.PR1    CLASS=A, PRWIDTH=132, CKPTLNS=32767, CKPTPGS=32767
R1.PR2    CLASS=A, PRWIDTH=132, CKPTLNS=32767, CKPTPGS=32767
R1.PR3    CLASS=A, PRWIDTH=128, CKPTLNS=32767, CKPTPGS=32767
R1.PR4    CLASS=A, PRWIDTH=128, CKPTLNS=32767, CKPTPGS=32767, SELECT=EXCH1
R1.PU1    CLASS=B, CKPTLNS=32767, CKPTPGS=32767
R1.PU2    CLASS=B, CKPTLNS=32767, CKPTPGS=32767, SELECT=BASIC1, NOCTL

```

Figure 6-1. Sample JES2 Definition for the RJE Facility

CODING THE JES2 RMTnnnn MACRO

The operands that must be coded for the RJE Facility are:

```

RMTnnnn LUTYPE1,
        BUFSIZE= {256} ,
                 {512}
        CONSOLE,
        SETUPMSG,
        .
        .
        .

```

Operands that are not required but for which recommendations can be made are:

```

COMP/NOCOMP
CMPCT/NOCMPCT

```

You will probably need other operands, but these are the ones that are most important for the DPS 6.

LUTYPE1 SNA RJE workstations are logical units type 1.

BUFSIZE= {256}
{512}

The maximum buffer size to be sent to the RJE Facility workstation must agree with a corresponding parameter in the RJE Facility configuration. This value is referred to as MAXIMUM RU SIZE in the Configuration Worksheets. The value of MAXIMUM RU SIZE should be less than or equal to the value of BUFSIZE in the JES2 remote station definition.

CONSOLE

The RJE Facility always uses a console.

SETUPMSG

JES2 should tell the RJE Facility operator about a forms mount by way of a console message.

COMP/NOCOMP

Compression/expansion usually reduces the amount of time required for transmission substantially and should be used unless there is some compelling reason not to.

CMPCT/NOCMPCT

Use CMPCT if the RJE Facility will receive compacted data from the host.

Section 7

INSTALLING SFT ON THE HOST

This section discusses host-resident files needed by the SNA File Transfer Facility (SFT-HOST). Job control language to create these files is included on the installation tape; this section is provided in case you wish to alter the file characteristics.

Installing the SFT on an IBM host consists of:

1. Coding ACF/NCP generation macros for the SFT
2. Coding ACF/VTAM generation statements for the SFT
3. Creating and loading the SFT-H libraries
4. Creating the default values table
5. Creating the SFT files
6. Creating a security table for the online operator interface (optional)
7. Loading the SFT files.

Steps 1 and 2 are described in Sections 3 and 4, respectively. This section describes steps 4, 5, and 6. Steps 3 through 7 are controlled by the distribution tape, which contains JCL for loading SFT files.

SFT-H INSTALLATION TAPE

The installation tape includes an instruction file (file 7). Use the following JCL to dump file 7 of the tape to a partitioned data set that will be referenced throughout the install process and print down the instruction document.

```
//JOBNAME JOB ACCOUNTINGINFO,'USER INFO',CLASS=A,MSGCLASS=A
//DUMPFIL7 EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=*
//INTAPE DD DSN=SFTHR12.INSTALL,UNIT=TAPE,
//      LABEL=(7,SL),
//      VOL=SER=HISSFT,
//      DCB=(LRECL==80,BLKSIZE=6160,RECFM=FB)
//OUTPDS DD DSN=NNNNNNNN.SFTHR12.INSTALL,
//      DISP=(NEW,CATLG,DELETE),
//      UNIT=DISK,
//      SPACE=(CYL,(5,2,40),RLSE),
//      DCB=(LREC=80,BLKSIZE=6160,RECFM=FB),
//      VOL=SER=XXXXXX
//SYSIN DD *
//      COPY INDD=INTAPE,OUTDD=OUTPDS
/*
//PRINTDOC EXEC PGM=IEBGENER
//SYSIN DD DUMMY
//SYSPRINT DD SYSOUT=*
//SYSUT1 DD DSN=NNNNNNNN.SFTHR12.INSTALL(SFTHDOC),DISP=SHR
//SYSUT2 DD SYSOUT=*,DCB=(LRECL=80,BLKSIZE=800,RECFM=FBA)
//
```

Change NNNNNNNN to your installation's high level index name. Change XXXXXX to the disk volume on which the partitioned data set will reside. Substitute valid information for JOBNAME, ACCOUNTINGINFO, 'USER INFO', and UNIT.

UPDATING THE DEFAULT VALUES TABLE

The default values table contains installation-dependent defaults that are used by the File Maintenance Utility (SFTBATCH) and the Transmission Control Program (SFTTCP). You can override values in the default values table using PARM= parameters on the EXEC card that executes SFTBATCH or SFTTCP.

Figure 7-1 contains the default values table that is supplied with SFT.

TITLE 'DEFAULT VALUES TABLE '

*

FTDFLT MODE=START,	START, NOT RESTART	X
DEBUG=NO,	DEBUG MODE (FILE MAINT. UTILITY)	X
TPSFDD=9,	MAX NUMBER OF STAGING FILE DD CARDS	X
ERROPT=ABT,	ON ALL ERRORS, ABORT SESSION IS DFLT	X
RUNID=22222222,	RUN IDENTIFIER	X
MSGPASS=TESTPASS,	VSAM PASSWORD FOR MESSAGE FILE	X
VTAM1=(FTF4,PASS4),	VTAM APPLID / PASSWORD ALTERNATE	X
VTAM2=(FTF3,PASS3),	VTAM APPLID / PASSWORD ALTERNATE	X
VTAM3=(FTF2,PASS2),	VTAM APPLID / PASSWORD ALTERNATE	X
VTAM4=(FTF1),	VTAM APPLID = FTF1, NO PASSWORD	X
SFINDDP=INSFPASS,	PASSWORD FOR INPUT STAGING FILES	X
SFOTDDP=OTSFPASS,	PASSWORD FOR OUTPUT STAGING FILES	X
BLKOUT=NO	BLOCK TO FULL RUS	

END

Figure 7-1. Default Values Table Supplied with SFT

The following values are used by both SFTBATCH and SFTTCP:

- DEBUG= {YES}
 {NO }

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

- INDD=input_staging_file

Default input staging file DD name used for SEND and UNSTAGE operations when an INDD= value is not supplied. Specify any valid DD name (one to eight alphanumeric characters with the first character alphabetic). The default is FTSEFIN.

- SFINDDP=password1

Password for DD name specified by INDD. Valid values: one to eight alphanumeric characters. Default: no password.

- **OUTDD=output_staging_file**
 Default output staging file DD name used for RECEIVE and STAGE operations if no OUTDD= value is supplied. Use any valid DD name. The default is FTSFOUT.
- **SFOTDDP=password2**
 Password for DD name specified by OUTDD. Valid values: one to eight alphanumeric characters. Default: no password.
- **RMFPASS=password3**
 Resource master file VSAM password specified when the VSAM cluster was defined. Default: no password.
- **HSTPASS=password4**
 History file VSAM password specified when the VSAM cluster was defined. Default: no password.
- **MSGPASS=password5**
 Message file VSAM password specified when the VSAM cluster was defined. Default: no password.
- **TCFPASS=password6**
 Transmission control file VSAM password password specified when the VSAM cluster was defined. Default: no password.
- **TSFPASS=password7**
 Transmission status file VSAM password specified when the VSAM cluster was defined. Default: no password.
- **PRIO=priority**
 Priority assigned to session when priority is not specified in the ADDSES statement. Valid values are 0 through 255; sessions with priority 0 execute first. The default value is 128. Note that this is the priority within the current execution of the SFT-H, not the priority in relation to MVS.
- **SOURCE=source**
 Value used during staging operations if the SOURCE= parameter is not specified. Valid values are one through eight alphanumeric characters. The default value is IBM.

- BUSFDD=max_number1

Maximum number of staging files used by SFTBATCH. BUSFDD is an integer between 1 and 32,767; the default value is 0.

- TPSFDD=max_number2

Maximum number of staging files used by SFTTCP. TPSFDD is an integer between 1 and 32,767; the default value is 0.

- SFSTR=requests

Default number of concurrent I/O requests to allow for each staging file. SFSTR is an integer between 1 and 255. This value can be overridden on the DD statement for an individual staging file. SFSTR should not exceed MAXSESS (see below). The default is 5.

The following values are used by SFTTCP only:

- ERROPT=option

Default error option used when ERROPT= is not specified on either an ADDSES or an ADDACT statement. Valid values are:

DEF -- Follow internal default of Abort Session
OPR -- Ask operator to specify error option
IGN -- Continue with next action
ABT -- Abort session; do not retry.

The default is ABT.

- RTCODE=code

Routing code used for all system console messages. RTCODE is an integer between 1 and 15. The default is 5.

- MAXSESS=number

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

- INTRACE=entries

Number of 32-byte entries in the SFTTCP internal trace table. INTRACE is an integer between 0 and 32,767. The default is 1000.

- EXTRACE= {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.

- MODE=operation_mode

SFTTCP mode of operation. Valid values are START and RESTART. START means discard all records of previously attempted and completed activity. RESTART means continue with work not previously completed. The default is RESTART.

- RUNID=identifier

One to 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 supplied default is 22222222.

- NOMTIME=time

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.

- EXREQS=req_num

Maximum number of online operator interface logons permitted. EXREQS is an integer from 1 through 10. The default is 5.

- BLKOUT= {YES }
 {NO }

Enable or disable record blocking during transmission. The default is NO.

UPDATING SFT FILES

The SFT-H requires the following files:

- History file
- Resource master file
- Transmission control file
- Transmission status file
- Staging file(s)
- Message file
- Prototype file.

Staging files are required for Receive actions, optional for Send actions, and used as a work file for some summary reports. You must allocate the message file, but the file is loaded from the distribution tape when the SFT-H is installed. The prototype file, used as a source of dummy records when SFT files are cleared, must be loaded from the distribution tape. Directions for loading the file are on the tape.

Be sure that the volume you specify has sufficient space to create and define the files. If you use the 'REUSE' option, then be sure the volume has enough VSAM data space. (Table 7-2 contains formulas for estimating file sizes.)

Create empty VSAM files using the Access Method Services Utility IDCAMS. (IDCAMS is described in detail in the IBM manual OS/VS2 Access Method Services.) Invoke IDCAMS as follows:

```
//STEP010          EXEC  PGM=IDCAMS,REGION=512K
***              -----
***              ALLOCATE SPACE FOR SFT-H CLUSTERS USING AMS
***              -----
//SYSTEM          DD    SYSOUT=*
//SYSPRINT        DD    SYSOUT=*
//SYSIN           DD    *
```

The following parameters must be specified for any VSAM cluster:

- CLUSTER--A cluster is being defined.
- NAME--The installation-specified cluster name.
- CYLINDERS, RECORDS, TRACKS--The amount of space to be allocated.
- VOLUMES--The volume or volumes to contain the cluster.

SFT-H requires that you specify the following parameters:

- SHAREOPTIONS(2)--The cluster can be opened for input by any number of users and for output by only one user.

- NONINDEXED--Required for the history cluster only; indicates an entry sequence cluster (the default is INDEXED).
- KEYS(length,offset)--Required for all but the history cluster; Table 7-1 contains key values for the SFT-H files.
- RECORDSIZE(256,32767)--Required for staging files only; indicates that the average record size is 256 and that the maximum record size is 32,767. If you don't need to stage large records, reduce the maximum size specification appropriately. This improves the efficiency of VSAM access.
- SPANNED -- Required for staging files only; required when the maximum record size is larger than the control interval size.

The following parameters are recommended for SFT-H files:

- SPANNED--For the resource master file as well as staging files.
- UNIQUE--A file occupies its own data space on the volume. With new IBM catalog systems, this is the only option available.
- RECORDSIZE--Use when space is specified with the RECORDS parameter; Table 7-1 summarizes the record sizes of the SFT-H files.
- CYLINDERS--Recommended for staging files and the transmission status file, to improve VSAM access.
- IMBED--To put the index within the data portion of the VSAM cluster. Recommended for the transmission status file, to improve VSAM access.
- REPLICATE--To put the index on the first track of each cylinder the data portion occupies. Recommended for staging files and the transmission status file, to improve VSAM access.
- NONSPANNED--Recommended for the transmission status file, to improve I/O access.

Table 7-1. Key Location and Record Size for SFT-H Files

SFT-H File	Cluster	File Type	Keys	Record Size	
				Avg.	Max.
Message File	MSG	INDEXED	5,0	144	144
History File	HST	NONINDEXED	N/A	194	194
Resource Master File	RMF	INDEXED	8,0	24	4034
Transmission Control File	TCF	INDEXED	19,0	392	392
Transmission Status File	TSF	INDEXED	17,0	342	342
Staging File	SF	INDEXED	28,0	256	32767

The rest of this subsection contains sample code segments that define and create the history file, resource master file, transmission control file, transmission status file, and one staging file; and allocate the message file. These definitions use the 'UNIQUE' option for VSAM file allocation, since this is the stated direction of IBM relative to VSAM files. In all examples, replace VOLUMES(VVVVVV) with the name of an appropriate volume for your installation.

Table 7-2 describes the number of records in each SFT-H file.

Table 7-2. Size of Records in SFT-H Files

Cluster	Number of Records
MSG	860
RMF	1 + 1 per LU + 1 per group
TCF	1 + 1 per session + 1 per action in session
TSF	1 + 1 per TCF session with LU= + 1 per LU in group for TCF sessions with GROUP=
SF	Depends on the amount of data transferred
HST	10 per TCP startup + 1 per session (each TSF record) + 4 (approx.) per console operator request + 4 (approx.) per SFT-6 session attempted + 5 (approx.) per SFT-6 action within each session attempted + 3 per online interface session + 1 per online interface command other than Display (Change Status, Change Dest., etc.) + 6 for TCP termination + 1 per staging file opened + 2 per dynamic file allocation + additional records per error condition detected

Updating the History File

The following sample code fragment creates the history file:

```

/* + + + + + DEFINE HISTORY FILE          + + + + + */
DEFINE CLUSTER (                            -
    NAME (NNNNNNNN.SNAR12.HST.CLUSTER)     -
    RECORDS(1000 100)                       -
    VOLUMES(VVVVVV)                         -
    NONINDEXED                              -
    OWNER('HIS')                            -
    UNIQUE                                   -
    SHAREOPTIONS(2)                         -
    SPANNED                                  -
    TO(99365) )                             -
DATA (                                       -
    NAME (NNNNNNNN.SNAR12.HST.DATA)        -
    RECORDSIZE(194 194) )

```

Updating the Resource Master File

The following sample code fragment creates the resource master file:

```
/* + + + + + DEFINE RESOURCE MASTER FILE + + + + + */
DEFINE CLUSTER (
    NAME (NNNNNNNN.SNAR12.RMF.CLUSTER)
    VOLUMES (VVVVVV)
    FREESPACE (20)
    INDEXED
    OWNER ('HIS')
    UNIQUE
    SHAREOPTIONS (2)
    SPANNED
    RECORDS (25 25)
    TO (99365) )
DATA (
    NAME (NNNNNNNN.SNAR12.RMF.DATA)
    RECORDSIZE (24 4034)
    KEYS (8 0) )
INDEX (
    NAME (NNNNNNNN.SNAR12.RMF.INDEX) )
```

Updating the Transmission Control File

The following sample code fragment creates the transmission control file:

```
/* + + + + + DEFINE TRANSMISSION CONTROL FILE + + + + + */
DEFINE CLUSTER (
    NAME (NNNNNNNN.SNAR12.TCF.CLUSTER)
    VOLUMES (VVVVVV)
    FREESPACE (20)
    INDEXED
    OWNER ('HIS')
    UNIQUE
    SHAREOPTIONS (2)
    SPANNED
    RECORDS (100 100)
    TO (99365) )
DATA (
    NAME (NNNNNNNN.SNAR12.TCF.DATA)
    RECORDSIZE (392 392)
    KEYS (19 0) )
INDEX (
    NAME (NNNNNNNN.SNAR12.TCF.INDEX) )
```

Updating the Transmission Status File

The following sample code fragment creates the transmission status file:

```
/* + + + + + DEFINE TRANSMISSION STATUS FILE + + + + + */
DEFINE CLUSTER (
    NAME (NNNNNNNN.SNAR12.TSF.CLUSTER)
    VOLUMES (VVVVVV)
    FREESPACE (20)
    INDEXED
    IMBED
    REPLICATE
    OWNER ('HIS')
    UNIQUE
    SHAREOPTIONS (2)
    NONSPANNED
    CYLINDERS (5 5)
    TO (99365) )
DATA (
    NAME (NNNNNNNN.SNAR12.TSF.DATA)
    RECORDSIZE (342 342)
    CISIZE (2048)
    KEYS (17 0) )
INDEX (
    NAME (NNNNNNNN.SNAR12.TSF.INDEX)
    CISIZE (512) )
```

Updating Staging Files

The following sample code fragment creates one staging file:

```
/* + + + + + DEFINE A STAGING FILE + + + + + */
/* REFERRED TO WITH DD NAME OF DFL1 (DEFAULT1) */
DEFINE CLUSTER (
    NAME (NNNNNNNN.SNAR12.DFL1.CLUSTER)
    VOLUMES (VVVVVV)
    FREESPACE (50)
    INDEXED
    OWNER ('HIS')
    UNIQUE
    SHAREOPTIONS (2)
    SPANNED
    TO (99365) )
DATA (
    NAME (NNNNNNNN.SNAR12.DFL1.DATA)
    CYLINDERS (3 3)
    RECORDSIZE (256 32767)
    KEYS (28 0) )
INDEX (
    NAME (NNNNNNNN.SNAR12.DFL1.INDEX)
```

The maximum record size allowed is 32767; for efficiency, specify a smaller value. Also, VSAM works most efficiently with a control-interval size of 4096. If your data records are shorter, use a smaller value in the RECORDSIZE parameter. Also, use a CI size of 512 for the index component.

Updating the Message File

The following sample code fragment allocates the message file:

```

/* + + + + + DEFINE MESSAGE CLUSTER + + + + + */
DEFINE CLUSTER (
    NAME(NNNNNNNN.SNAR12.MSG.CLUSTER)
    VOLUMES(VVVVVV)
    FREESPACE(10)
    INDEXED
    OWNER('HIS')
    UNIQUE
    SHAREOPTIONS(2)
    SPANNED
    RECORDS(100 100)
    DATA(
        NAME(NNNNNNNN.SNAR12.MSG.DATA)
        RECORDSIZE(144 144)
        KEYS(5 0) )
    INDEX(
        NAME(NNNNNNNN.SNAR12.MSG.INDEX) )

```

UPDATING THE SECURITY TABLE

The online operator interface optionally requires users to identify themselves with operator IDs and passwords. The security table is used to verify Operator IDs and passwords. Use the Honeywell-supplied FTSECURE macro listed in Figure 7-2 to construct the security table. Assemble FTSECURE before invoking the online operator interface.


```

*****
**
**      FTSECURE:  OPERATOR ID AND PASSWORD TABLE      **
**
*****
*
*      INTERNAL MACRO:
*
*      SPACE 2
*      MACRO
*      FTSECURE &NAME, &PASS, &TYPE=ENTRY
*
*-----*
*  INLINE MACRO      *
*-----*
*
*  NAME:  FTSECURE
*
*  FUNCTION:  GENERATE ENTRY IN SFT-H OPERATOR SECURITY TABLE
*
*  OPERANDS:
*  TYPE:  KEYWORD PARAMETER INDICATING ENTRY TYPE -
*  ENTRY  GENERATE OPERATOR ID/PASSWORD ENTRY
*  END    GENERATE END OF TABLE ENTRY
*
*  NAME:  POSITIONAL PARAMETER USED WITH TYPE=ENTRY.
*  1 TO 12 CHARACTER OPERATOR ID.  * INDICATES THAT
*  ALL IDS ARE VALID.
*
*  PASS:  POSITIONAL PARAMETER USED WITH TYPE=ENTRY.
*  1 TO 4 CHARACTER PASSWORD.  * INDICATES THAT
*  ALL PASSWORDS ARE VALID.
*
*  NOTES:  ANY NUMBER OF TYPE=ENTRY MACROS CAN BE USED.
*  THE FIRST TYPE=END ENTRY TERMINATES THE TABLE.
*  IF MORE TYPE=ENTRY MACROS FOLLOW, THOSE ENTRIES
*  ARE NOT USED.
*
*  AIF      ('&TYPE' EQ 'END').END
*  DC CL12 '&NAME', CL4 '&PASS'
*  MEXIT
*  ANOP
*  DC XL16 '00'
*  MEND
*  EJECT
*
*-----*
*
*  END
*
*  END OF TABLE

```

Figure 7-2. FTSECURE Macro for Security Table

```

*****
*****
***** OPERATOR ID AND PASSWORD TABLE *****
*****
*****
SPACE 5
*
FTSECURE CSECT , *-----*
* * ENTRY POINT FOR FTSECURE TABLE *
* *-----*
SPACE 2
*
FTSECURE *,0000 *-----*
* *ANY ID/PASSWORD OF 0000 *
* *-----*
SPACE 2
*
FTSECURE 9999999999,1111 *-----*
* * ID=NINES, PASSWORD=ONES *
* *-----*
SPACE 2
*
FTSECURE TYPE=END *-----*
* * END OF FTSECURE TABLE *
* *-----*
END

```

Figure 7-2 (cont). FTSECURE Macro for Security Table

Section 8

DEFINING AIF TO INTERACTIVE SYSTEMS

This section provides information about the DPS 6 SNA Application Interface Facility (AIF) that may be needed by host systems programmers and application designers. This section discusses how to code the terminal definition statements for the Customer Information Control System (CICS) and the Information Management System (IMS).

CICS DEFINITION OF AIF

This subsection discusses how to code the CICS terminal control table generation macro DFHTCT for AIF. Not all the DFHTCT operands are discussed--only those that depend on the characteristics of the AIF or the way the AIF is configured. See the appropriate IBM documentation for a discussion of the other aspects of CICS generation.

The AIF configuration and CICS generation must agree about certain characteristics of the AIF devices. Use the Configuration Worksheets in the appendix to ensure that the same values are given to both.

Figure 8-1 contains a sample CICS TCT generation (fragment) for the AIF.

```

*****
*
*       SAMPLE CICS TCT GENERATION (PARTIAL) FOR DPS 6 SNA
*       APPLICATION INTERFACE FACILITY
*
*****
*
*       DEFINE LU TYPE 0
*
TCTLU0  DFHTCT TYPE=TERMINAL,          DEFINE A 3790 DEVICE          X
        ACCMETH=VTAM,                REQUIRES VTAM SUPPORT        X
        NETNAME=TCTLU0,              POINT TO LU NAME IN NCP GEN.  X
        TRMIDNT=TCTLU0,              CICS TERMINAL NAME          X
        TRMMODL=2,                   1920 CHARACTER SCREEN        X
        TRMPRTY=0,                   EVEN PARITY                   X
        TRMSTAT=(TRANSCIVE,NOINTLOG), STARTING STATUS                X
        TRMTYPE=3790,                SNA 3790 DEVICE              X
        TIOAL=1000,                  TERMINAL I/O AREA SIZE       X
        BUFFER=256,                  TAKE WHAT APPL. GIVES        X
        ERRATT=NO,                   X
        GMMMSG=NO,                   X
        RELREQ=(YES,YES),            RELEASE WHEN NOT IN USE      X
        SESTYPE=USERPROG

```

Figure 8-1. Sample CICS TCT Generation for AIF

DFHTCT Macro

The DFHTCT macro defines the characteristics of the AIF to the CICS Terminal Control Program.

The operands that must be coded for the AIF are:

```

DFHTCT TYPE=TERMINAL,
        ACCMETH=VTAM,
        NETNAME=luname,
        TRMIDNT=luname,
        TRMMODL=2,
        TRMPRTY=0,
        TRMSTAT=(TRANSCIVE,NOINTLOG),
        TRMTYPE=3790,
        TIOAL=1000,
        BUFFER=256,
        ERRATT=NO,
        GMMMSG=NO,
        RELREQ=(YES,YES),
        SESTYPE=USERPROG,

```

You will probably need other operands, but the following are the ones that are most important for the DPS 6.

ACCMETH=VTAM

AIF supports only VTAM.

NETNAME=luname

This name must agree with the name assigned to the LU on the ACF/NCP LU generation macro.

TRMIDNT=luname	This is the CICS terminal name. This name <u>must</u> agree with the name assigned to the LU on the ACF/NCP LU generation macro.
TRMMODL=2	AIF uses a 1920-character "screen."
TRMPRTY=0	Indicates even parity.
TRMSTAT=(TRANCEIVE,NOINTLOG)	Starting status.
TRMTYPE=3790	Indicates a 3790 device.
TIOAL=1000	Indicates I/O area size.
BUFFER=256	AIF uses a buffer size of 256.
ERRATT=NO	Indicates unattended operation.
RELREQ=(YES,YES)	Release required when not in use.
SESTYPE=USERPROG	Indicates session type (full-function terminal).

IMS DEFINITION OF AIF DEVICES

This subsection discusses how to code the IMS generation macros for AIF. Not all the operands are discussed--only those that depend on the characteristics of AIF or the way AIF is configured. See the appropriate IBM documentation for a discussion of the other aspects of IMS generation.

The AIF configuration and IMS generation must agree about certain characteristics of the AIF. Use the Configuration Worksheets in the appendix to ensure that the same values are given to both.

Figure 8-2 contains a sample IMS generation (fragment) for the AIF.

```
*****
*
*   SAMPLE IMS TERMINAL DEFINITION (PARTIAL) FOR DPS 6 SNA   *
*   APPLICATION INTERFACE FACILITY                           *
*
*****
*
*   TYPE   UNITYPE=SLUTYPEP           DEFINE DISPLAYS
*
*   TERMINAL NAME=A211                LU A211                X
*   NAME A211                          X
*
*   .
*   .
*   .
*
*   TERMINAL A211
*   COMMAND DISPLAY
*   COMMAND START
*   COMMAND STOP
*   COMMAND DBRECOVERY
*   COMMAND ASSIGN
*   COMMAND DEQUEUE
*   COMMAND EXIT
*   COMMAND HOLD
*   COMMAND IDLE
*   COMMAND PSTOP
*   COMMAND BROADCAST
*   COMMAND CHANGE
*   COMMAND CHECKPOINT
*   COMMAND LOOPTEST
*   COMMAND PURGE
*   COMMAND SMCOPY
*   COMMAND TRACE
```

Figure 8-2. Sample IMS Terminal Definition for AIF

TYPE Macro

The TYPE macro is the first of a set of terminal description macro statements.

The operands that must be coded for the AIF are:

```
TYPE  UNITYPE=SLUTYPEP,  
      .  
      .  
      .
```

You will probably need other operands, but these are the ones that are most important for the DPS 6.

```
UNITYPE=SLUTYPEP           AIF appears to IMS as one or more  
                           SNA secondary logical units,  
                           programmable.
```

TERMINAL Macro

The TERMINAL macro associates the AIF with a VTAM logical unit, and defines physical characteristics.

The operands that must be coded for the AIF are:

```
TERMINAL NAME=nodename,  
        .  
        .  
        .
```

You will probably need other operands, but the following are the ones that are most important for the DPS 6.

```
NAME= {nodename}           This name must agree with the name  
      {luname  }           assigned to the device on the  
                           ACF/NCP generation macro.
```

NAME Macro

The NAME macro associates the AIF logical unit with the IMS logical terminal definition.

The operand that must be coded for AIF is:

```
NAME log_term_name,  
      .  
      .  
      .
```

You will probably need other operands, but the following is the one that is most important for the DPS 6.

```
NAME=log_term_name        Name of the IMS logical terminal.
```

Logical Terminal Definition

This describes the AIF logical terminal characteristics to IMS.

The operands that must be coded for AIF are:

TERMINAL luname
COMMAND command

·
·
·

You will probably need other operands, but the following are the ones that are most important for the DPS 6.

TERMINAL luname

Logical-unit name of the AIF
logical unit.

COMMAND command

Defines characteristics of the AIF
logical unit.

Section 9

NCCF AND NPDA SUPPORT

The DPS 6 SNA products support the following types of SNA Formatted Maintenance Statistics:

- Type 1: SDLC Test Command/Response Statistics
- Type 2: Summary Error Data
- Type 3: Communications Adapter Error Statistics
- Type 4: PU/LU Dependent Data
- Type 5: Engineering Change Levels.

The IBM products Network Communications Control Facility (NCCF) and Network Problem Determination Application (NPDA) will retrieve and display the SNA statistics.

The NPDA command to get and display the statistics is:

```
NPDA CTRL puname {LINK  
                  {SEC  
                  {DDD  
                  {LVL }
```

where:

- LINK gets and displays type 1 statistics
- SEC gets and displays types 2 and 3 statistics
- DDD gets and displays type 4 statistics
- LVL gets and displays type 5 statistics.

and "puname" is the name of the ITF, RJE Facility, SFT-6, or AIF physical unit. Alternatively, you can get the same information by selecting the specific controller name on certain NPDA screens.

The formats of statistics types 1, 2, and 3 are defined by SNA, and all of the products provide them in these formats. Specifically, the statistics provided by ITF and the RJE Facility are the same as those provided by the IBM devices that they emulate. The statistics provided by the SFT-6 are the same as those for the RJE Facility.

When NPDA requests the PU/LU Dependent (type 4) statistics from an SNA product, the product sends statistics for its physical unit plus statistics for up to seven of the its active logical units. NPDA displays the statistics as a block of hexadecimal digits. The format of the information sent by the SNA products is explained in detail at the end of this section.

When NPDA requests the Engineering Change Level (type 5) statistics from an SNA product, the product sends information on the release of the SNA Transport Facility being used and the release of the SNA product. NPDA displays the Engineering Change Level information as a series of hexadecimal digits. The format of the information sent by the SNA products is explained in detail in Table 9-1 and 9-2.

Table 9-1. PU/LU Dependent (Type 4) Statistics

Byte	Contents
0-17	PU Statistics:
0-1	Number of current LU sessions
2-3	Number of -RSP sent by SNA Transport
4-7	Number of bytes sent by completed sessions
8-11	Number of bytes received by completed sessions
12-17	Time PU statistics were last reset
18-199	LU Statistics for up to 7 LU's:
18	LU identifier
19	LU status (always 20 = in session)
20-21	Number of request RUs sent
22-23	Number of request RUs received
24-25	Number of +RSP RUs sent
26-27	Number of -RSP RUs sent
28-29	Number of +RSP RUs received
30-31	Number of -RSP RUs received
32-35	Number of characters sent
36-39	Number of characters received
40-45	Time LU statistics were last reset

Table 9-2. Engineering Change Level (Type 5) Statistics

Byte	Contents
0-7	Configuration file name (in EBCDIC)
8-19	SNA Transport Facility release:
8-17	SNA R1.2
18-19	Reserved
20-29	Program Product Release
20-23	Program product ID ("RJEF", "ITF ", "AIF ", "SFT ")
24-29	R01.20

Appendix A **CONFIGURATION** **WORKSHEETS**

This appendix consists of three worksheets to help you configure the ITF, the RJE Facility, the SFT-6, and the AIF, respectively. The values specified on these worksheets are those values that are common to both the host and the DPS 6. Default values are underlined.

DPS 6 SNA INTERACTIVE TERMINAL FACILITY
CONFIGURATION WORKSHEET

PU CHARACTERISTICS

LINE: NON-SWITCHED

SWITCHED

XID: 0 2 0 0 0 1 7 - - (SWITCHED ONLY)
IDBLK IDNUM

PU ADDRESS: (X'01'-X'FE')

MAXIMUM FRAME (PIU) SIZE: 256

MAXIMUM RU SIZE: (256, 512, 768, OR 1024)

SEND LIMIT:

LU CHARACTERISTICS

LU ADDRESS: (02-33) LU TYPE: (SCS=1,DISP=2,PTR=3)

LU ADDRESS: LU TYPE:

LU ADDRESS: LU TYPE:

LU ADDRESS: LU TYPE:

LU ADDRESS: LU TYPE:

DPS 6 SNA REMOTE JOB ENTRY FACILITY
CONFIGURATION WORKSHEET

PU CHARACTERISTICS

LINE: NON-SWITCHED

SWITCHED

XID: 0 2 0 0 0 1 3 - - (SWITCHED ONLY)
 IDBLK IDNUM

PU ADDRESS: (X'01'-X'FE')

MAXIMUM FRAME (PIU) SIZE: (265 OR 521)

MAXIMUM RU SIZE: (256 OR 512)

SEND LIMIT:

LU CHARACTERISTICS

LU ADDRESS: (1-6) RU SIZE: (256 OR 512)

LU ADDRESS: RU SIZE:

LU ADDRESS: RU SIZE:

LU ADDRESS: RU SIZE:

LU ADDRESS: RU SIZE:

LU ADDRESS: RU SIZE:

DPS 6 SNA FILE TRANSFER FACILITY
CONFIGURATION WORKSHEET

PU CHARACTERISTICS

LINE: NON-SWITCHED

SWITCHED

XID: 0 2 0 0 0 1 3 - - (SWITCHED ONLY)
 IDBLK IDNUM

PU ADDRESS: (X'01'-X'FE')

MAXIMUM FRAME (PIU) SIZE: (265 OR 521)

MAXIMUM RU SIZE: (256 OR 512)

SEND LIMIT:

LU CHARACTERISTICS

LU ADDRESS: (1-6) RU SIZE: (256 OR 512)

LU ADDRESS: RU SIZE:

LU ADDRESS: RU SIZE:

LU ADDRESS: RU SIZE:

LU ADDRESS: RU SIZE:

LU ADDRESS: RU SIZE:

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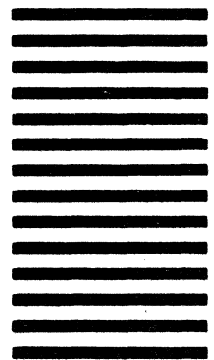


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42363, 1585, Printed in U.S.A.

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