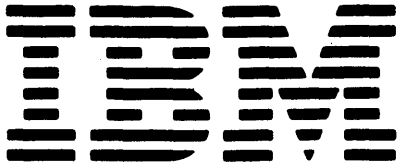


SC21-7689-7

File No. S34-34

IBM System/34
Installation and Modification
Reference Manual
— Program Products
— Physical Setup

Program Number 5726-SS1



SC21-7689-7

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IBM System/34
Installation and Modification
Reference Manual
— Program Products
— Physical Setup
Program Number 5726-SS1

Eighth Edition (January 1982)

This is a major revision of, and obsoletes, SC21-7689-6. Changes or additions to the text and illustrations are indicated by a vertical line to the left of the change or addition.

This edition applies to release 8, modification 0 of the IBM System/34 System Support Program Product (Program 5726-SS1) and to all subsequent releases and modifications until otherwise indicated in other editions or technical newsletters.

The following changes have been made as a result of Release 8 enhancements and reader's comment suggestions:

- Spool enhancements
 - Screen 2E for the local and remote work stations has been added.
 - Section 6.0 *Spooling Parameters* in Chapter 2 and Screen 6.0 have been updated.
 - *Spool File Storage Estimates* in Appendix A has been rewritten.
- Section 8.1 *SSP Feature Support II* in Chapter 2 has been updated to include history file scroll.
- The table in Chapter 2 reflecting the number of VTOC entries has been updated to agree with the new maximum limits for the VTOC.
- As a result of programming changes to the release update function, Chapter 4. *Installing a System/34 Release Update* has been completely rewritten.
- Appendix D has been added describing the software installation of the X.21 feature.
- As a result of reader's comment suggestions, Appendix F. *Hardware Upgrades* has been added and the last section of the System/34 Installation Planning Chart has been reformatted.

Changes are periodically made to the information herein; changes will be reported in technical newsletters or in new editions of this publication.

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This publication provides information to aid the system installation manager, IBM systems engineer, IBM customer engineer, and application programmers in performing physical setup and program product installation or modification on an IBM System/34.

Included is information you need for:

- Physical setup of your environment
- Completing the planning charts and the network diagrams for installation
- Performing the installation and modification of the SSP (System Support Program Product, Program 5726-SS1)
- Adding additional program products that have been ordered

There is also reference information pertaining to installation and configuration.

This manual follows the convention that *he* means *he* or *she*.

Prerequisite Knowledge

You should be familiar with general concepts of the System/34 (see the *IBM System/34 Introduction*, GC21-5153), programming information (see the *IBM System/34 Planning Guide*, GC21-5154), and operating procedures (see the *IBM System/34 Operator's Guide*, SC21-5158). You should also be familiar with *IBM 5250 Information Display System Planning and Site Preparation Guide*, GA21-9337.

Related Publications

- *IBM System/34 Installation Manual—Physical Planning*, GA21-9242
- *IBM 5250 Information Display System Introduction*, GA21-9246
- *IBM 5251 Display Station Models 1 and 11 Setup Procedure*, GA21-9286
- *IBM 5251 Display Station Models 1 and 11, IBM 5252 Dual Display Station Operator's Guide*, GA21-9248
- *IBM 5251 Display Station Models 2 and 12 Setup Procedure*, GA21-9289
- *IBM 5251 Display Station Models 2 and 12 Operator's Guide*, GA21-9323
- *IBM 5252 Dual Display Station Setup Procedure*, GA21-9288
- *IBM 5256 Printer Setup Procedure*, GA21-9290
- *IBM 5256 Printer Operator's Guide*, GA21-9260
- *IBM 5224 Printer Models 1 and 2 Setup Procedure*, GA34-0093
- *IBM 5224 Printer Models 1 and 2 Operator's Guide*, GA34-0092
- *IBM 5225 Printer Models 1, 2, 3, and 4 Setup Procedure*, GA34-0085
- *IBM 5225 Printer Models 1, 2, 3, and 4 Operator's Guide*, GA34-0054
- *IBM 5211 Printer Models 1 and 2 Component Description and Operator's Guide*, GA24-3658
- *IBM 3262 Printer Models A1 and B1 Component Description and Operator's Guide*, GA33-1530
- *IBM System/34 System Support Reference Manual*, SC21-5155

- *IBM System/34 Operator's Guide, SC21-5158*
- *IBM System/34 RPG II Reference Manual, SC21-7667*
- *IBM System/34 FORTRAN IV Reference Manual, SC21-7706*
- *IBM System/34 COBOL Reference Manual, SC21-7741*
- *IBM System/34 BASIC Reference Manual, SC21-7835*
- *IBM System/34 Basic Assembler and Macro Processor Reference Manual, SC21-7705*
- *IBM System/34 Data File Utility Reference Manual, SC21-7656*
- *IBM System/34 Source Entry Utility Reference Manual, SC21-7657*
- *IBM System/34 Sort Reference Manual, SC21-7658*
- *IBM System/34 Work Station Utility Reference Manual, SC21-7663*
- *IBM System/34 Screen Design Aid Programmer's Guide and Reference Manual, SC21-7716*
- *IBM System/34 Data Communications Reference Manual, SC21-7703*
- *IBM System/34 Interactive Communications Feature Reference Manual, SC21-7751*
- *IBM System/34 3270 Device Emulation User's Guide, SC21-7868*
- *IBM System/34 Magnetic Character Reader Reference Manual, SC21-7740*
- *IBM System/34 Displayed Messages Guide, SC21-5159*
- *IBM System/34 Master Index, SC21-7739*
- *IBM System/34 Bibliography, GH30-0231*

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INTRODUCTION

System/34 system installation and configuration is the process you use to create a System/34 operating system that is tailored to your unique data processing requirements and work station configuration.

You first perform the installation and configuration process when you install the SSP (System Support Program Product). Once you have installed the SSP, you can install additional program products or make modifications. For example, you can add new features, make hardware changes, or make minor configuration parameter changes.

HOW TO USE THIS MANUAL

This manual explains the physical setup of your system, the preparation needed for installation of the SSP, and the actual installation and modification of your system. It also includes other pertinent information regarding System/34 installation. The following is an overview of the chapters and appendixes in this manual:

Chapter 1. Physical Setup contains information about the physical setup of your System/34. It contains an installation procedure outline to guide you to the manuals that will assist you in setting up your system.

Chapter 2. Preparing for Installation explains how to prepare for installation of the SSP. It shows how to fill out planning forms to assist you during installation. Use this chapter if you are not familiar with filling out the planning forms used for installation. Also use this chapter as a reference for parameter descriptions used during installation of the SSP.

Chapter 3. Initial SSP Installation Steps shows a complete step-by-step procedure that can be used when System/34 is installed for the first time.

Chapter 4. Installing A System/34 Release Update shows a complete step-by-step procedure that can be used as a guide for installing a System/34 release update. This chapter also shows different ways of completing a System/34 release update.

Chapter 5. Modifying Your System/34 Environment explains how to add or delete work stations or work station controllers on your System/34.

Chapter 6. Adding Program Products (Other than the SSP) explains how to install program products and features other than the SSP, how to apply PTFs, and how to back up your program products.

Chapter 7. Reloading and Backing Up the System Library explains how to reload the system library from PID diskettes or from backup diskettes. This chapter also explains how to back up the system library.

Chapter 8. Installation Example contains an example of an initial installation process. This process goes from filling out the planning forms to actual configuration.

Chapter 9. Installation and Configuration of the Interactive Communications Support Feature explains how to install SSP-ICF (Interactive Communications Feature) support. This chapter shows how to run the CNFIGICF procedure and how to install SSP-ICF support for specific subsystems.

Chapter 10. Program Product Installation Verification Programs contains sample programs for verification of program product and feature installation.

Chapter 11. Security explains System/34 security: different types of security, how to set it up, how to maintain it, how to list the security files, error recovery, limitations, and levels of security.

Appendix A. Storage Estimates contains information needed to determine a work file size for your system, plan disk space usage, make additions to the library directory, determine system defaults, determine diskette and disk capacities, and estimate spool storage size.

Appendix B. Installation Aids contains information regarding the following:

- Initializing backup diskettes
- Altering configuration parameter values
- APPLYPTF procedure
- Print belt characters

Appendix C. Multinational Character Set Conversion Utility Installation contains information necessary to install the Multinational Character Set Conversion Utility.

Appendix D. X.21 Feature Software Installation contains information necessary to install the software supporting the X.21 feature.

Appendix E. System/34 Translation Tables contains translation tables for five different character folds.

Appendix F. Hardware Upgrades describes customer responsibilities for certain hardware changes.

Appendix G. Planning Forms contains extra network diagrams and planning charts.

Chapter 1. Physical Setup

This chapter contains the information you need to:

- Plan the physical setup requirements
- Prepare the site for the physical setup
- Set up the work stations
- Attach the display stations and work station printers to System/34
- Check out the system and work station configuration

An outline of the installation procedure for System/34, the 5250 Display Station, 5256 Printer, and 5224/5225 Printer is shown. This outline also tells you which manuals contain the information required to complete these steps.

INSTALLATION PROCEDURE OUTLINE

It is the customer's responsibility to ensure that the following procedures are completed.

PLAN THE INSTALLATION

Plan space requirements.	<i>IBM System/34 Installation Manual—Physical Planning, GA21-9242.</i>
Plan System/34 power requirements.	
Determine network configuration.	This manual (Chapter 2) and the <i>IBM 5250 Information Display System Planning and Site Preparation Guide, GA21-9337</i> (for remote work stations).
Determine cable requirements.	
Plan work station power requirements.	

PREPARE THE SITE

Make sure space is ready.	<i>IBM System/34 Installation Manual—Physical Planning, GA21-9242.</i>
Install power outlets.	
Install, label, and test cables.	<i>IBM 5250 Information Display System Planning and Site Preparation Guide, GA21-9337.</i>
Install any communication equipment and lines.	

SET UP THE WORK STATIONS

5251 Display Stations Models 1, 2, 11, 12, and the 5252 Dual Display Stations

Set up the display station (including the system console).	<i>IBM 5251 Display Station Models 1 and 11 Setup Procedure, GA21-9286.</i>
Perform offline tests.	<i>IBM 5251 Display Station Models 2 and 12 Setup Procedure, GA21-9289.</i>
Connect the cables.	
Set the switches.	<i>IBM 5252 Dual Display Station Setup Procedure, GA21-9288.</i>
Perform online tests.	

5256 Printers

Set up the printer.	<i>IBM 5256 Printer Setup Procedure, GA21-9290.</i>
Perform offline tests.	
Connect the cable.	
Set the address switches. ¹	
Set the terminator switch. ¹	
Perform online tests.	

¹These switches are present only with the Cable Thru feature.

INSTALLATION PROCEDURE OUTLINE (continued)

5224/5225 Printers

Set up the printer.	<i>IBM 5225 Printer Models 1, 2, 3, and 4 Setup Procedure, GA34-0085.</i>
Perform offline tests.	<i>IBM 5225 Printer Models 11 and 12 Setup Procedure, GA34-0090.</i>
Connect the cable.	<i>IBM 5224 Printer Models 1 and 2 Setup Procedure, GA34-0093.</i>
Set the address switches. ¹	<i>IBM 5224 Printer Model 12 Setup Procedure, GA34-0096.</i>
Set the terminator switch. ¹	
Perform online tests.	

ATTACH CABLES TO SYSTEM/34

Connect cables to 5340 System Unit.	This manual.
-------------------------------------	--------------

CHECK OUT SYSTEM AND WORK STATION CONFIGURATION²

Install System/34 SSP (execute the CNFIGSSP procedure). Install System/34 program products. Verify that all display stations and printers are operational.	This manual.
--	--------------

¹These switches are present only with the Cable Thru feature.

²The system cannot be used for any other purpose while this checkout procedure is being done.

PLAN THE INSTALLATION

Detailed physical planning information is contained in the *System/34 Physical Planning* and *5250 Information Display System Planning and Site Preparation Guide* manuals.

In addition to completing the requirements shown in these manuals, make certain that you have the completed copies of the network diagram and the planning chart available. See Chapter 2, *Preparing for Installation* for information about these charts.

PREPARE THE SITE

Complete the following tasks before setting up and installing the 5251, 5252, 5256, 5224, 5225, and System/34:

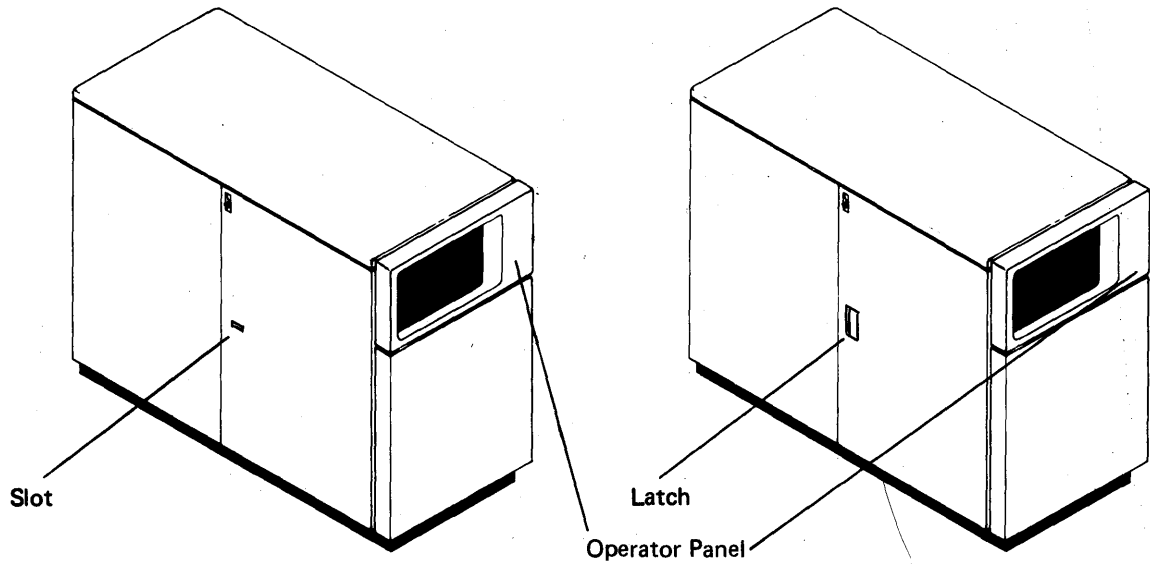
- Make certain a three-wire grounding power outlet is available for each 5251 Display Station, 5252 Display Station, 5256 Printer, 5224 Printer, and 5225 Printer. If locking plugs were ordered, the corresponding receptacles are required.
- Install, test, and label the cables and connectors. Detailed instructions on how to do this are in the *5250 Physical Planning* manual.
- Unpack the display stations and printers and place them where they will be used. Detailed unpacking instructions are printed on the outside of each carton. Study these instructions before opening the cartons.

SET UP THE WORK STATIONS

To set up the work station, see the *5251 Models 1 and 11 Setup* manual, the *5251 Models 2 and 12 Setup* manual, the *5252 Dual Display Station Setup* manual, the *5256 Printer Setup* manual, the *5224 Printer Setup* manual, and the *5225 Printer Setup* manual. (These manuals are packed inside the cartons on top of the work stations.) These manuals contain the customer setup procedures for the work stations. For the 5251 Model 2 or 12 Controller used with remote work station support, see the *5251 Models 2 and 12 Display Station Setup* manual.

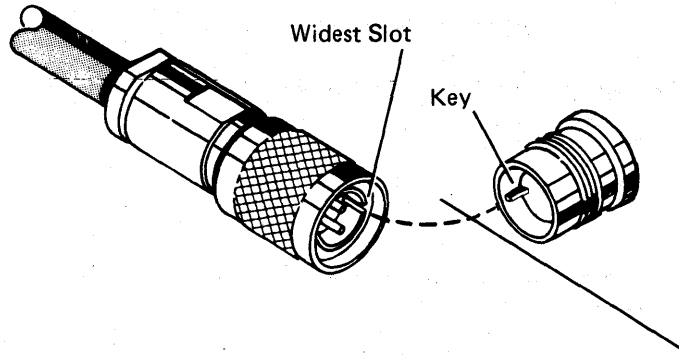
ATTACH CABLES TO SYSTEM/34

1. Make certain that the 5340 System Unit power is off (Power switch on the operator panel is set to the 0 position; keylock switch is turned off).
2. Open the left side cover on the 5340 System Unit. If your system has the type of cover shown on the left, insert a tool or coin into the slot and push to open the cover. If your system has the type of cover shown on the right, push the latch to open the cover.

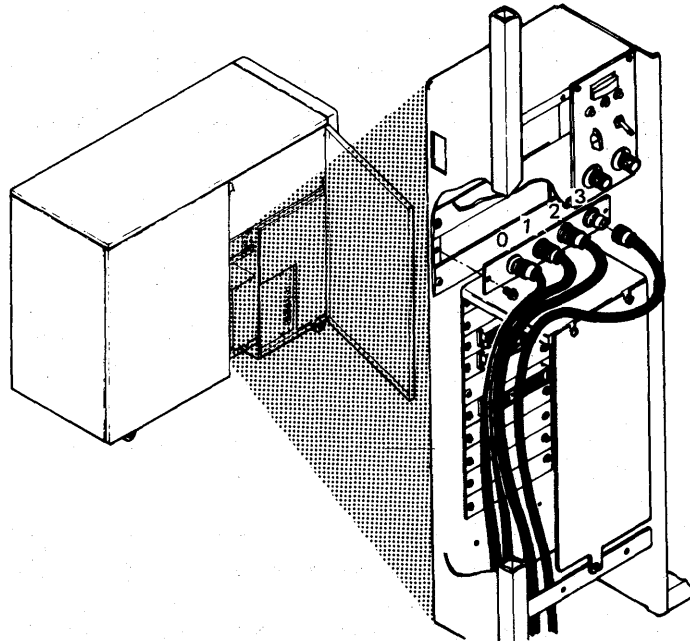


3. Route the cables through the frame of the 5340 System Unit.

4. Connect the appropriate end(s) of the cable(s) to the proper port(s) on the system unit according to the way you completed your network diagram. Connect the cable from the system console to port 0. Attach cable 1 to port 1; cable 2 to port 2; and cable 3 to port 3. The cable connectors are slotted. Make certain that the slot in the cable connector lines up with the key on the port.



Note: Make certain that the cable connectors are tightened securely to the sockets. A loose connection can cause machine malfunctions.



5. Close the side cover on the 5340 system unit.

CHECK OUT SYSTEM AND WORK STATIONS

Typical times when you need to check out your system and work stations are:

- After the system and all of the work stations are physically installed and configured.
- After installing a release update.
- After relocating a work station in your system.
- After adding a work station to your system or removing a work station from your system.

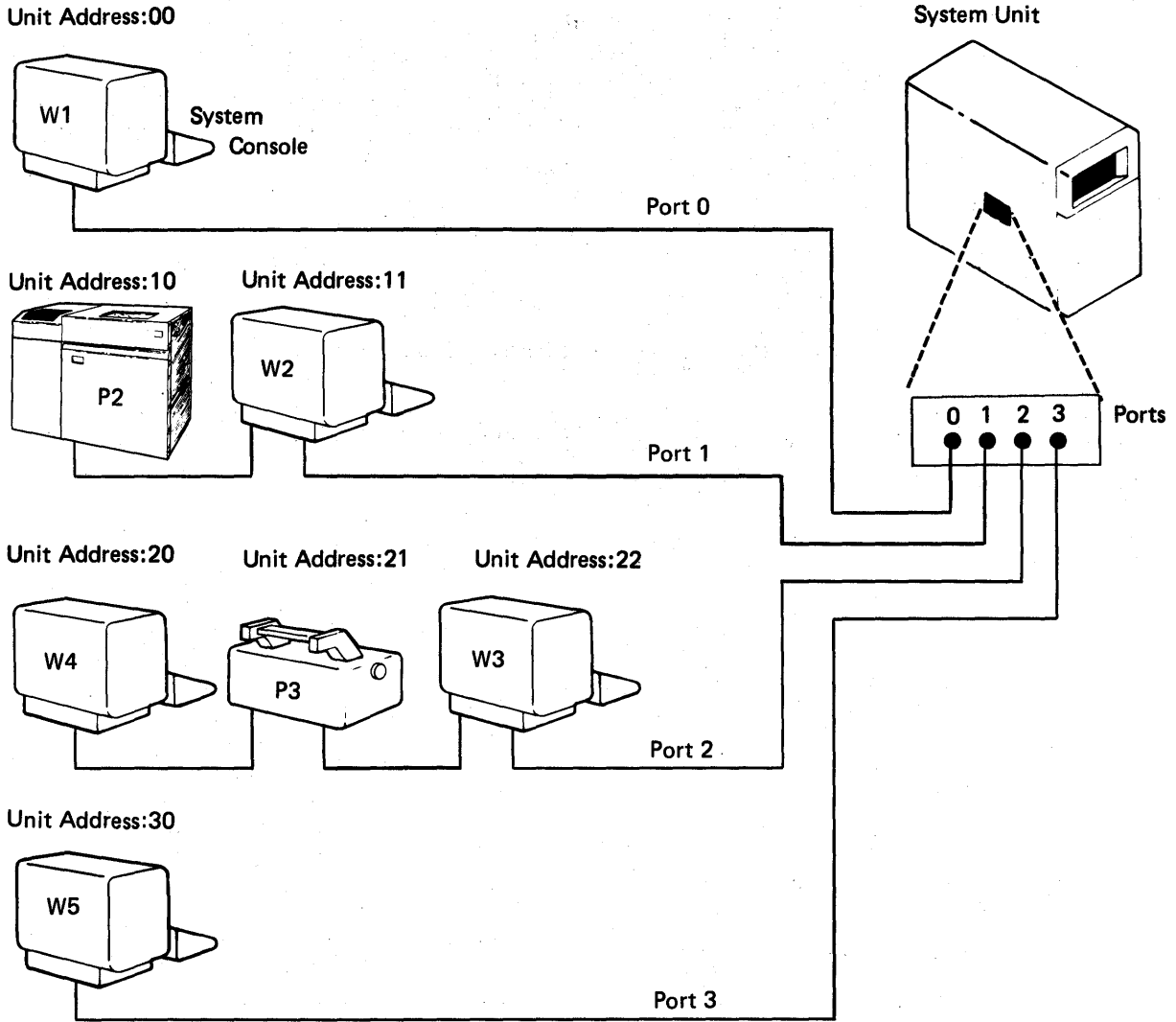
The following are the steps you should use to check out your system and work stations:

1. Set the 5340 System Unit Power switch to the 1 (on) position (turn keylock on).
2. Turn the system console and the system printer power on. If necessary, turn keylock on.
3. Install the correct release of the SSP, if necessary. (See *Chapter 3. Initial SSP Installation Steps* or *Chapter 4. Installing a System/34 Release Update*.)
4. Perform IPL from disk (with CE switch set to 0000), by pressing the Load switch on the system unit operator panel if not already done. IPL should complete without any check conditions or error messages. When IPL has successfully completed, the IPL Sign On display appears on the system console.
5. Sign on the IPL Sign On display to complete IPL.
6. Check out the display stations. See the checkout procedure in the *5251 Models 1 and 11 Display Station Setup* manual, and *5252 Dual Display Station Setup* manual.
7. Check out the 5256 printers. See the checkout procedure in the *5256 Printer Setup* manual.
8. Check out the 5224 and the 5225 Printer. See the checkout procedure in the *5224 Printer Setup* manual and the *5225 Printer Setup* manual.

Successful completion of the checkout procedures ensures that each work station can communicate with the system.

Note: The system cannot be used for any other purpose while this checkout procedure is being done.

Figure 1-1 is a configuration example with the system console attached to port 0; one display station and one printer attached to port 1; two display stations and one printer attached to port 2; and one display station attached to port 3. The system console must be attached to port 0 and have a unit address of 00.



Note: The leftmost position of the unit addresses indicates the port number to which the cable is attached. W2, W3, and P3 have the Cable Thru feature. The Cable Thru feature is optional on the last device on a cable.

Figure 1-1. System/34 Configuration Example

Chapter 2. Preparing for Installation

This chapter will help you prepare to configure your System/34 and prepare to install the SSP (System Support Program Product, Program 5726-SS1). Configuration is the process of tailoring your system to meet your data processing requirements. You configure your system when you install the SSP.

Three forms are provided to help you:

- The *Local Work Station Network Diagram*
- The *Remote Work Station Network Diagram*
- The *System/34 Installation Planning Chart*

The network diagrams and the planning chart should be filled out before actual system configuration and SSP installation.

COMPLETING THE WORK STATION CONFIGURATION PLANNING FORMS

You should fill out the work station configuration planning forms (local work station network diagram and remote work station network diagram) before starting SSP installation. There are blank forms at the back of this manual. You may want to remove a copy of each of the planning forms and fill them out as you read this chapter.

Note: Extra copies of the work station configuration planning forms are provided; they can be used as masters to make more copies as needed.

Completing the Local Work Station Network Diagram

The local work station network diagram helps you plan the layout of your local work stations. You fill in the blanks to indicate how many local work stations you will use and what types they are (display station or printer). Using the local work station network diagram, you can also specify other characteristics that will affect your local work stations, such as logical IDs, unit addresses, attributes, and so on. Figure 2-1 shows a local work station network diagram.

When you plan your local work station configuration setup, remember the following restrictions:

- One and only one display station can be designated as the system console (attached to port 0 with a unit address of 00).
- You can have a combination of up to 15 additional work stations attached to ports 1, 2, and 3.
- If more than one work station is attached to a port, the Cable Thru feature must be used. The Cable Thru feature is illustrated in Figure 2-1 by the cable shown connecting port 2 of one work station to port 1 of the next work station. The Cable Thru feature is not needed on the last work station on a port. However, if the last work station on a port does not have the Cable Thru feature, that work station must be assigned the unit address x0 (where x is the port number).

Using the local network diagram, fill in the *logical ID* for your system console and your IBM 5211 or 3262 Printer (if you have one). The logical ID is a two-position value. Only alphabetic characters are valid for the first position, but alphanumeric characters are valid for the second position. For example, in Figure 2-1 the logical ID for the system console is W1 and the logical ID for the IBM 5211 or 3262 Printer is P1.

Note: \$, #, and @ are considered alphabetic.

Fill in values for default printer and screen size for the system console. When determining these values, refer to the description of the default printer and screen size for local work stations later in this chapter.

Fill in the *attribute* for the 5211 or 3262 Printer. Possible entries are S and blank (no entry). S indicates it is the system printer. Blank indicates it is not the system printer. For example, in Figure 2-1 the attribute for the 5211/3262 printer is S (system printer).

Fill in values for subconsole ID, resident writer, priority, and separator pages for the 5211 or 3262 Printer. To determine these values, refer to the description later in this chapter of the subconsole ID, resident writer, priority, and separator pages for local work stations.

The remainder of the system console and 5211 or 3262 Printer entries are fixed (assigned by the system and cannot be changed). The fixed entries for the system console are the device type, unit address, and attribute. The device type must be D (display station), the unit address must be 00, and the attribute must be S (system console). As shown on the local work station network diagram, another work station can optionally be attached to port 0. This represents the second display station of a 5252 Display Station. One side would be the system console, and the other could be any type of display station (alternative system console, subconsole, command, or data entry). The unit address for this work station must be 01. The fixed entry for the 5211/3262 Printer is the device type. The device type must be L (line printer).

Next, fill in the entries for each of your local work stations. Following is a description of each of the entries.

Logical ID: This is a two-position value. Only alphabetic characters are valid for the first position, but alphanumeric characters are valid for the second position. For example, in Figure 2-1 the logical IDs assigned for the work stations are W2, P2, W3, P3, W4, and W5.

Note: \$, #, and @ are considered alphabetic.

Device Type: Possible entries are D, 2P, and P. D indicates a display station, 2P indicates a 5224 or 5225 Printer, and P indicates all other printers. If this entry is left blank, the default is D.

Unit Address: Consists of two digits. The first digit indicates the port address. Valid first digits that you can assign are 1 through 3. The second digit of the unit address is the address you assign to your work station. The second digit indicates the switch setting for the work station. The digit and the switch setting on the work station must be the same. Valid second digits are 0 through 6.

In order to have more than one work station on a port, you need to have the Cable Thru feature. The last work station on a cable does not need the Cable Thru feature. If you choose not to have the Cable Thru feature on the last work station of each cable, the second digit of the unit address must be 0. See Figure 2-1 for an example of values specified for the unit addresses.

Attribute: Describes work station characteristics. Possible entries are as follows:

Attribute	Meaning
A	<p>Alternative system console. This attribute can be assigned to local display stations only. The alternative system console can be used as the system console when the primary system console is not acting as the system console. For information on operating the alternative system console as the system console, refer to the <i>Operator's Guide</i>. The alternative system console can also be used as a subconsole display station. When in subconsole mode, a display station designated as an alternative system console can perform the same functions as a subconsole display station.</p> <p>Consider the following restriction when determining which display stations should be alternative system consoles. If the CONSOLE command is entered after IPL has completed, the alternative system console from which the command is entered must have the same or larger screen size (1920 character) as the current system console. If the CONSOLE command is entered before IPL has completed, the alternative system console can be assigned to a smaller size (960 character) screen.</p>
E	<p>Subconsole display station. Subconsole display stations can operate in subconsole, command or data mode. For further information on subconsole mode, refer to the <i>Operator's Guide</i>.</p> <p><i>Note:</i> The work stations designated as subconsoles will not function as subconsoles until you specify 1 (yes) to the subconsole support prompt on display 8.1 SSP Feature Support II.</p>
C	<p>Command display station. Command display stations can operate in command or data mode. For further information on command and data mode, refer to the <i>Operator's Guide</i>.</p>
D	<p>Data display station. Data display stations can only operate in data mode. For further information on data mode, refer to the <i>Operator's Guide</i>.</p>
S	<p>System Printer. This attribute can be assigned only to a locally attached printer. Specifying this attribute for a locally attached printer makes that printer the system printer.</p> <p><i>Note:</i> The system printer attribute (S) is also used to designate the system console. However, the system console attribute is a preassigned entry.</p>

Default Printer: Must be assigned to accept the output from each display station. Supply the logical ID of the specific printer or specify 27 to indicate that the output is to go to the currently assigned system printer. Note that a printer can be assigned to several display stations. Figure 2-1 shows an example of entries for the default printer.

Screen Size: Indicates whether a display station has a 1920-character screen or a 960-character screen. Possible entries are 1 and 9. A 1 indicates a 1920-character screen, and a 9 indicates a 960-character screen. If this entry is left blank, the default is a 1920-character screen. Figure 2-1 shows an example of entries for the screen size.

Stripe Reader: Specify 1 (yes) to indicate which display stations have a magnetic stripe reader that is used in conjunction with badge reader security. Specify 0 (no) if the magnetic stripe reader is not present or if a magnetic stripe reader is present but will not be used with badge reader security. Figure 2-1 shows an example of this entry.

Language Group: Indicates the language group installed with the 5256, 5224, and 5225 printers. (Figure 2-1 shows an example of this entry.) The default is 0. Specify one of the following language group numbers:

Number	Language
0	Multilingual set (International set included)
1	United States EBCDIC (and Canadian English)
2	Austria/Germany (German)
3	Belgium (French)
4	Brazil (Portuguese)
5	Canada (French)
6	Denmark/Norway (Norwegian)
7	Finland/Sweden (Swedish)
8	France (French)
9	Italy (Italian)
A	Japan (English)
B	Japan (Katakana)
C	Portugal (Portuguese)
D	Spain (Spanish)
E	Spanish-speaking (Spanish)
F	United Kingdom (English)

Subconsole ID: The Subconsole ID entry is specified only when a printer is being defined. This entry specifies the logical ID of the display station that is to control the printer. The display station specified must have been defined with either the subconsole attribute (E) or the alternative system console attribute (A). If the Subconsole ID entry is left blank, the value defaults to the logical ID of the system console. For example, Figure 2-1 shows that printer P3 is to be controlled by display station W4, which has been defined with the subconsole attribute (E); therefore, the Subconsole ID for work station P3 is W4.

Note: The work stations designated as subconsoles will not function as subconsoles until you specify 1 (yes) to the subconsole support prompt on display 8.1 SSP Feature Support II.

Lines Per Inch: Specify the number of lines per inch to be printed by the 5224 or 5225 Printer. Possible entries are 4, 6, and 8 lines per inch. You can override this value for specific print file by using the PRINTER OCL statement. You can override this value for a complete session by using the FORMS OCL statement or LINES procedure. If the number of lines per inch is not specified for the 5224 or 5225 Printer (device type 2P), the system defaults to 6 lines per inch.

Resident Writer: This option allows you to make the spool writer resident or not resident for each printer that has spooling active. If a spool writer is resident, it is never swapped out of main storage when active. Each writer uses 8 K of user area when active. If the spool writer is not resident, it is swappable and is called into main storage only when needed. Specify 1 for each printer that you want to make the spool writer resident, 0 to make it not resident. The default is 0.

However, when considering spooling performance, consider specifying *priority* instead of making the spool writers resident. If several spool writers are made resident (at 8 K each), they may take up too much user area, which may not allow you to run your application programs.

Priority: Specifying 1 (high) causes the spool writer to take priority over other main storage jobs. Specifying 0 (normal) causes the spool writer to contend equally with other concurrently executing jobs. Specify the priority of each printer that has spooling active. The default is 0 (normal).

Separator Pages: Specify for each printer that has spooling active the number of separator pages you want. If 0 is specified, there will be no separator pages. If 1, 2, or 3 is specified, the output from different jobs will be separated by 1, 2, or 3 pages that contain information about the next job to be printed. The default is 0.

Local Work Station Network Diagram--Part 1

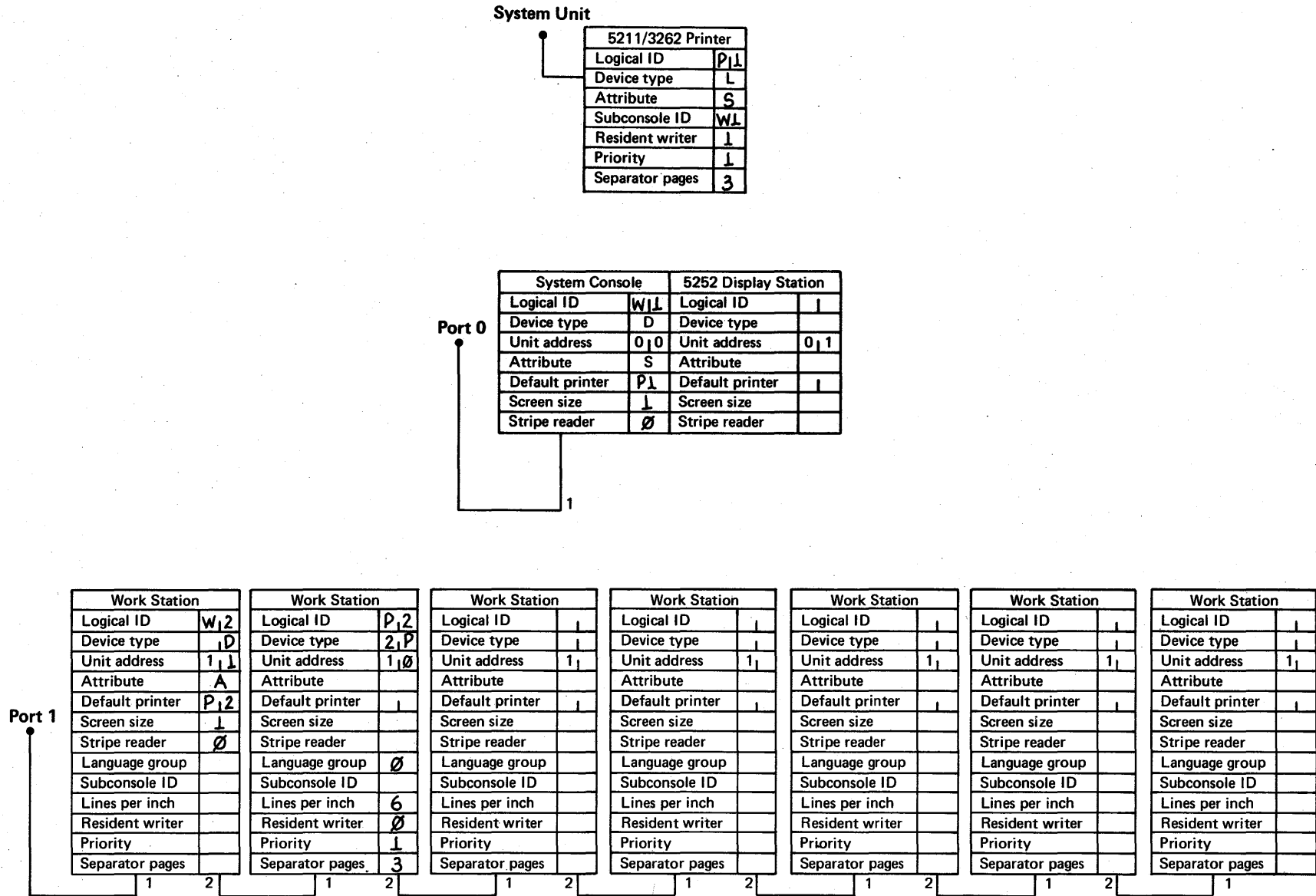


Figure 2-1 (Part 1 of 2). Completed Local Work Station Network Diagram

Local Work Station Network Diagram—Part 2

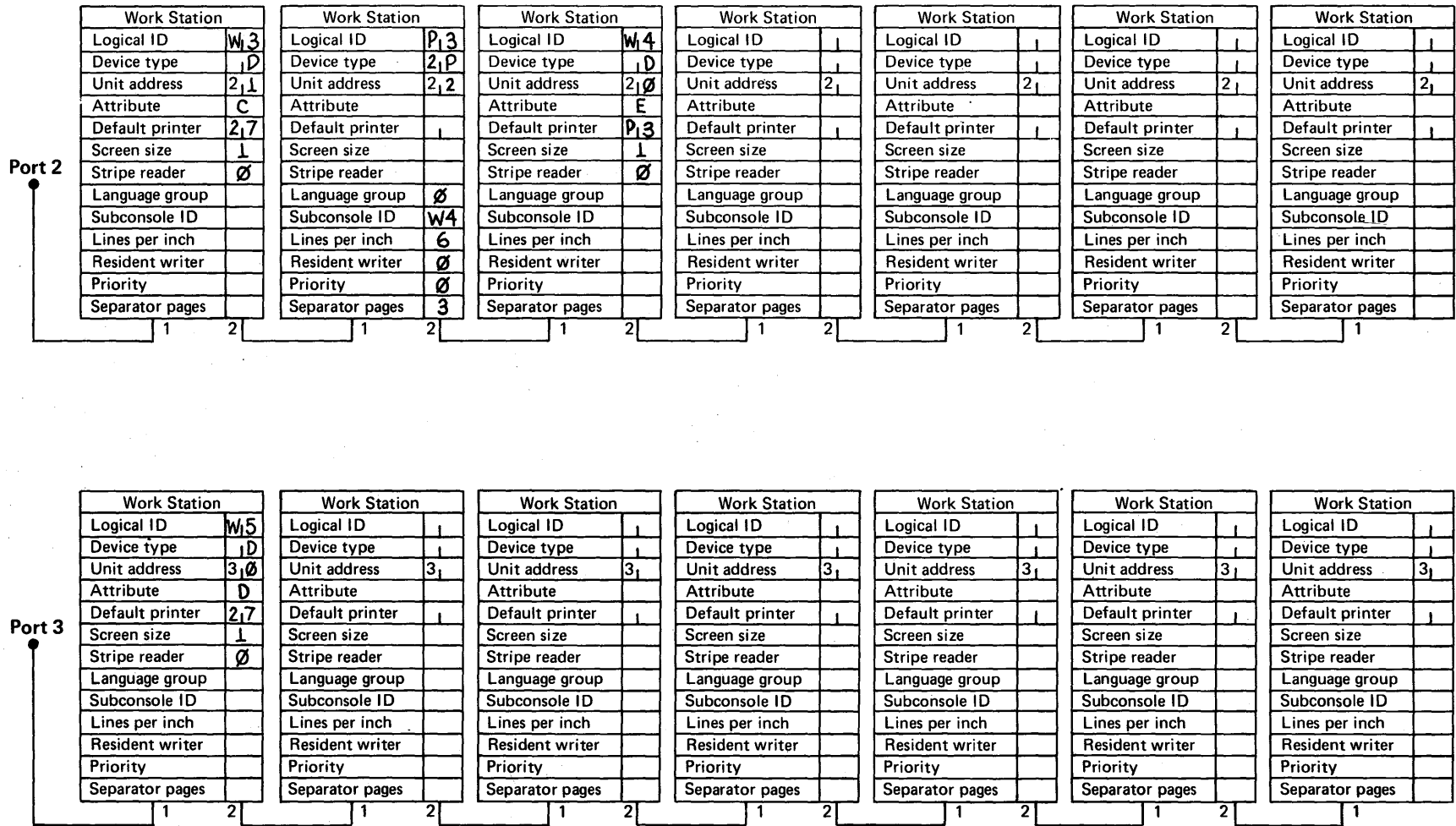


Figure 2-1 (Part 2 of 2). Completed Local Work Station Network Diagram

The following are the local work station configuration displays. These displays reflect the entries that you specify on the local work station network diagram:

```

2A LOCAL WORK STATION                                W1
CONFIGURATION
  1. LOGICAL ID:           W1 W2 P2 W3 P3 W4 W5      P1
  2. DEVICE TYPE:         D  D 2P D  P  D  D      L
  3. UNIT ADDRESS:        00 11 10 21 22 20 30
  4. ATTRIBUTE:           S  A      C      E  D      S
  5. DEFAULT PRINTER:     P1 P2      27      P3 27

CMD KEY 4/ENTER - CHANGE SETS  CMD KEY 5 - VERIFY      ROLL KEYS - PAGING
CMD KEY 9 - END                CMD KEY 19 - CANCEL   HELP - DEFINITIONS

```

```

2B LOCAL WORK STATION                                W1
CONFIGURATION
  1. LOGICAL ID:           W1 W2 P2 W3 P3 W4 W5      P1
  2. DEVICE TYPE:         D  D 2P D  P  D  D      L
  6. SCREEN SIZE:         1  1      1      1  1
  7. MAGNETIC STRIPE:     0  0      0      0  0

CMD KEY 4/ENTER - CHANGE SETS  CMD KEY 5 - VERIFY      ROLL KEYS - PAGING
CMD KEY 9 - END                CMD KEY 19 - CANCEL   HELP - DEFINITIONS

```

```

2C LOCAL WORK STATION                                W1
CONFIGURATION ** PRINTERS **
  1. LOGICAL ID:           W1 W2 P2 W3 P3 W4 W5      P1
  2. DEVICE TYPE:         D  D 2P D  P  D  D      L
  9. LANGUAGE GROUP #:    0      0
 10. SUBCONSOLE ID:       W1      W4      W1
 11. LINES PER INCH (4,6,8): 6

CMD KEY 4/ENTER - CHANGE SETS  CMD KEY 5 - VERIFY      ROLL KEYS - PAGING
CMD KEY 9 - END                CMD KEY 19 - CANCEL   HELP - DEFINITIONS

```

```

2E LOCAL WORK STATION                                W1
CONFIGURATION ** SPOOL **
  1. LOGICAL ID:           W1 W2 P2 W3 P3 W4 W5      P1
  2. DEVICE TYPE:         D  D 2P D  P  D  D      L
 15. RESIDENT WRITER:    0      0      1
 16. PRIORITY:           1      0      1
 17. SEPARATOR PAGES:    3      3      3

CMD KEY 4/ENTER - CHANGE SETS  CMD KEY 5 - VERIFY      ROLL KEYS - PAGING
CMD KEY 9 - END                CMD KEY 19 - CANCEL   HELP - DEFINITIONS

```

Completing the Remote Work Station Network Diagram

If you do not have remote work stations, go to *Completing the Planning Chart* later in this chapter.

The remote work station network diagram helps you plan the layout of your remote work stations. You fill in the blanks to indicate how many remote work stations you will use and what types they are (display station or printer). Using the remote work station network diagram, you can also specify other characteristics that will affect your remote work stations. Figure 2-2 shows a remote work station network diagram.

Before completing the remote work station network diagram, you must have completed the IBM 5250 Communications Network Setup Form using the cluster configuration chart in the *5250 Planning and Site Preparation Guide*. This is necessary because much of the information from the IBM 5250 Communications Network Setup Form is needed for the remote work station network diagram.

For a description of the restrictions involved with setting up your remote work station configuration, refer to the *5250 Planning and Site Preparation Guide*. Fill in the controller and work station information on the remote work station network diagram.

The controller *logical ID* is three alphanumeric characters with the first character being a C. See Figure 2-2 for an example of this entry.

Next fill in the controller *station address*. This is a 2-digit hexadecimal address in the range of '01' to 'FE'. This must be different from any station address specified as concurrently active on this line, including SSP-ICF station addresses. See Figure 2-2 for an example of this entry.

The *line number* is the number of the communications line on System/34 to which this controller is attached. Indicate line 1, 2, 3, or 4.

The *alternative lines* is the number of the backup switched lines to which this controller can be attached. Indicate line 1, 2, 3, or 4, but not the same as the entry you made for *line number*. If you have only one line if the primary line is nonswitched, or if alternative lines are not desired, leave this entry blank. The alternative line must be switched and must have the same switch type as the primary line. Refer to display 2.2 Remote Work Station Line Configuration for specifying the switch type. See Figure 2-2 for an example of these entries.

Next, fill in the information for each remote work station.

Logical ID: This is a two-position value. Only alphabetic characters are valid for the first position, but alphanumeric characters are valid for the second position. See Figure 2-2 for an example of this entry.

Note: \$, #, and @ are considered alphabetic.

Device Type: Possible entries are D, 2P, and P. D indicates a display station, 2P indicates a 5224 or 5225 Printer, and P indicates all other printers. If this entry is left blank, the default is D. See Figure 2-2 for an example of this entry.

Unit Address: Consists of 2 digits. The first digit must be 0, and the second digit indicates the unit address assigned to the work station. Valid second digits are 0, 2-9. Use the entries specified on the IBM 5250 Communications Network Setup Form in the *5250 Planning and Site Preparation Guide*. See Figure 2-2 for an example of this entry.

Note: This address is derived from the Cluster Configuration Chart in the *5250 Planning and Site Preparation Guide*.

Attribute: Describes work station characteristics. Possible entries are as follows:

Attribute	Meaning
E	Subconsole display station. Subconsole display stations can operate in subconsole, command, or data mode. For further information on subconsole mode, refer to the <i>Operator's Guide</i> .
C	Command display station. Command display stations can operate in command or data mode. For further information on command mode, refer to the <i>Operator's Guide</i> .
D	Data display station. Data display stations can operate only in data mode. For further information on data mode, refer to the <i>Operator's Guide</i> .

Default Printer: Must be assigned to accept the output from each display station. Supply the logical ID of the specific printer, or specify 27 to indicate that the output is to go to the currently assigned system printer. Figure 2-2 shows an example of this entry. Note that a printer can be assigned to several display stations.

Screen Size: Indicates whether a display station has a 1920-character screen or a 960-character screen. Possible entries are 1 and 9. A 1 indicates a 1920-character screen, and a 9 indicates a 960-character screen. If this entry is left blank, the default is a 1920-character screen. Figure 2-2 shows an example of this entry.

Stripe Reader: Specify 1 (yes) to indicate display stations with a magnetic stripe reader used in conjunction with badge reader security. Specify 0 (no) if the magnetic stripe reader is not present or if a magnetic stripe reader is present but will not be used with badge reader security. Figure 2-2 shows an example of this entry.

Auto Online: Indicates that remote work stations are automatically varied online after IPL. If the remote devices are to be used shortly after IPL, it is recommended that auto online be specified to avoid fragmentation of the assign/free space. Possible values are 0 and 1. 0 indicates no auto online. 1 indicates auto online. If 0 is specified, the device must be varied online by the system operator before use. Figure 2-2 shows an example of this entry.

Language Group: Indicates the language group installed with your 5256, 5224, or 5225 Printer. (Figure 2-2 shows an example of this display.) The default is 0. Specify one of the following language group numbers.

Number	Language
0	Multilingual set (International set included)
1	United States EBCDIC (and Canadian English)
2	Austria/Germany (German)
3	Belgium (French)
4	Brazil (Portuguese)
5	Canada (French)
6	Denmark/Norway (Norwegian)
7	Finland/Sweden (Swedish)
8	France (French)
9	Italy (Italian)
A	Japan (English)
B	Japan (Katakana)
C	Portugal (Portuguese)
D	Spain (Spanish)
E	Spanish-speaking (Spanish)
F	United Kingdom (English)

Subconsole ID: The Subconsole ID entry is specified only when a printer is being defined. This entry specifies the logical ID of the display station that is to control the printer. The display station specified must have been defined with either the subconsole attribute (E) or the alternative system console attribute (A). If the Subconsole ID entry is left blank, the value defaults to the logical ID of the system console. Figure 2-2 shows that work station A1 is to control printer P3; therefore, the Subconsole ID entry for printer P3 is A1.

Note: The work stations designated as subconsoles will not function as subconsoles until you specify 1 (yes) to the subconsole support prompt on display 8.1 SSP Feature Support II.

Lines Per Inch: Specify the number of lines per inch to be printed by the 5224 or 5225 Printer. Possible entries are 4, 6, and 8 lines per inch. You can override this value for a specific print file by using the PRINTER OCL statement. You can override this value for a complete session by using the FORMS OCL statement or LINES procedure. If the number of lines per inch is not specified for a 5224 or 5225 Printer (device type 2P), the system defaults to 6 lines per inch.

Resident Writer: This option allows you to make the spool writer resident or not resident for each printer that has spooling active. If a spool writer is resident, it is never swapped out of main storage when active. Each writer uses 8 K of user area when active. If the spool writer is not resident, it is swappable and is called into main storage only when needed. Specify 1 for each printer that you want to make the spool writer resident, 0 to make it not resident. The default is 0.

However, when considering spooling performance, consider specifying *priority* instead of making the spool writers resident. If several spool writers are made resident (at 8 K each), they may take up too much user area, which may not allow you to run your application programs.

Priority: Specifying 1 (high) causes the spool writer to take priority over other main storage jobs. Specifying 0 (normal) causes the spool writer to contend equally with other concurrently executing jobs. Specify the priority of each printer that has spooling active. The default is 0 (normal).

Separator Pages: Specify for each printer that has spooling active the number of separator pages you want. If 0 is specified, there will be no separator pages. If 1, 2, or 3 is specified, the output from different jobs will be separated by 1, 2, or 3 pages that contain information about the next job to be printed. The default is 0.

Remote Work Station Network Diagram

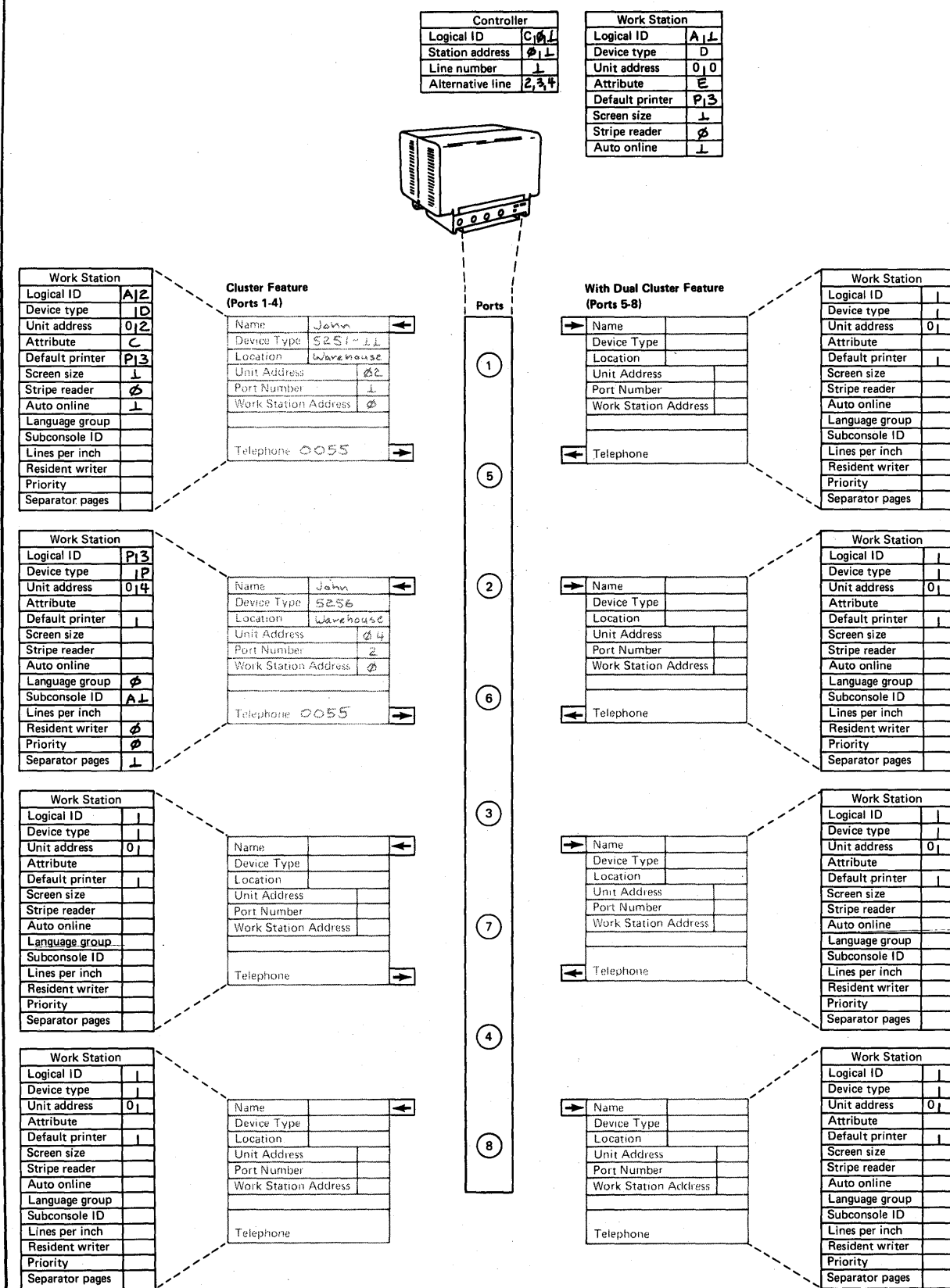


Figure 2-2. Completed Remote Work Station Network Diagram

Following are the remote work station configuration displays. These displays reflect the entries that you specify on the remote work station network diagram:

```

2A REMOTE WORK STATION          CONTROLLER LOGICAL ID      C01   W1
   CONFIGURATION                STATION ADDRESS           01
                                LINE # 1  ALTERNATIVE LINE #  2    3    4
1. LOGICAL ID:                 A1  A2  P3
2. DEVICE TYPE:                 D   D  P
3. UNIT ADDRESS:                00  02  04
4. ATTRIBUTE:                   E   C
5. DEFAULT PRINTER:            P3  P3

CMD KEY 4/ENTER - CHANGE SETS  CMD KEY 5 - VERIFY    ROLL KEYS - PAGING
CMD KEY 9 - END                CMD KEY 19 - CANCEL   HELP - DEFINITIONS

```

```

2B REMOTE WORK STATION          CONTROLLER LOGICAL ID      C01   W1
   CONFIGURATION                STATION ADDRESS           01
                                LINE # 1  ALTERNATIVE LINE #  2    3    4
1. LOGICAL ID:                 A1  A2  P3
2. DEVICE TYPE:                 D   D  P
6. SCREEN SIZE:                 1   1
7. MAGNETIC STRIPE:            0   0
8. AUTO ONLINE:                 1   1  1

CMD KEY 4/ENTER - CHANGE SETS  CMD KEY 5 - VERIFY    ROLL KEYS - PAGING
CMD KEY 9 - END                CMD KEY 19 - CANCEL   HELP - DEFINITIONS

```

```

2C REMOTE WORK STATION          CONTROLLER LOGICAL ID      C01   W1
   CONFIGURATION ** PRINTERS **  STATION ADDRESS           04
                                LINE # 1  ALTERNATIVE LINE #  2    3    4
1. LOGICAL ID:                 A1  A2  P3
2. DEVICE TYPE:                 D   D  P
9. LANGUAGE GROUP #:           0
10. SUBCONSOLE ID:              A1
11. LINES PER INCH (4,6,8)

CMD KEY 4/ENTER - CHANGE SETS  CMD KEY 5 - VERIFY    ROLL KEYS - PAGING
CMD KEY 9 - END                CMD KEY 19 - CANCEL   HELP - DEFINITIONS

```

```

2E REMOTE WORK STATION          CONTROLLER LOGICAL ID      C01   W1
   CONFIGURATION ** SPOOL **    STATION ADDRESS           01
                                LINE # 1  ALTERNATIVE LINE #  2    3    4
1. LOGICAL ID:                 A1  A2  P3
2. DEVICE TYPE:                 D   D  P
15. RESIDENT WRITER:           0
16. PRIORITY:                   0
17. SEPARATOR PAGES:           1

CMD KEY 4/ENTER - CHANGE SETS  CMD KEY 5 - VERIFY    ROLL KEYS  PAGING
CMD KEY 9 - END                CMD KEY 19 - CANCEL   HELP - DEFINITIONS

```

Completing the Planning Chart

The planning chart contains items that you need to specify when configuring your system. The three main parts of the configuration process are:

- Running the RELOAD procedure
- Running the CNFIGSSP procedure to create the work station configuration member and to specify what SSP (system support program product) support should be copied onto the system
- Running the INSTALL procedure to copy any additional program products onto the system

The planning chart has three sections that reflect these three main parts:

- The reload section contains items you specify when you run the RELOAD procedure.
- The configuration section contains items you specify when you run the CNFIGSSP procedure.
- The install section contains items you specify when you run the INSTALL procedure.

Configuration defaults are underlined. Figure 2-3 shows the System/34 Installation Planning Chart.

The planning chart contains information that is prompted for during SSP installation. To illustrate the requirements of the planning chart, each portion of the planning chart is shown. An explanation is given for each question on the planning chart.

For a complete example of an installation process, see Chapter 8. *Installation Example*.

System/34 Installation Planning Chart

Use this chart for planning the options for your system. Fill it in before doing a System/34 Installation.

Reload	Reload Parameters		Comments			
	Library blocks	_____	_____			
	Library directory sectors	_____	_____			
	History file blocks	_____	_____			
	Task work file blocks	_____	_____			
	Number of VTOC entries	_____	_____			
	Delete files from VTOC	_____	_____			
Use backup configuration	_____	_____				
Configuration	1.0 System Configuration Menu					
	Option	_____	_____			
	2.0 Create/Edit Work Station Parameters					
	1.	Work station parameter member name (up to 8 characters)	_____			
	2.	Enter selection:	_____			
		(1-Create new member 2-Edit existing member 3-Create member from current work station configuration)				
2.1 Work Station Configuration Options						
1.	Configure remote work stations?	(0-No 1-Yes)	_____			
2.	Remote work station support swappable?	(0-No 1-Yes)	_____			
3.	Number of local work stations?	(0-locals 1-8 1-locals 9-16)	_____			
2.2 Remote Work Station Line Configuration (Used only if answer to 2.1, Work Station Configuration Options, Question 1 was Yes.)						
Specify:		Line #	1	2	3	4
1.	Remote line use:	(0-No 1-Yes)	_____	_____	_____	_____
2.	Remote line switched:	(0-No 1-Yes)	_____	_____	_____	_____
3.	Switch type:	(0-None 1-Manual call 2-Auto answer 3-Manual answer)	_____	_____	_____	_____
4.	Slow polling:	(0-No 1-Yes)	_____	_____	_____	_____
Refer to the network diagrams to respond to the parameters on Displays 2A, 2B, 2C, and 2E Local Work Station Configuration and Displays 2A, 2B, 2C, and 2E Remote Work Station Configuration.						

Figure 2-3 (Part 1 of 4). System/34 Installation Planning Chart

System/34 Installation Planning Chart	
Configuration	<p>3.0 General Parameters I</p> <p>1. Date format? (1-DDMMYY 2-MMDDYY 3-YYMMDD) _____</p> <p>2. Single program mode? (0-No 1-Yes) _____</p> <p>3. Startup procedure name? (up to 8 characters) _____</p> <p>4. Printer default for released jobs? (1-System 2-Session) _____</p> <p>5. Keep messages at EOJ? (0-No 1-Yes) _____</p>
	<p>4.0 General Parameters II</p> <p>1. Input job queue support? (0-No 1-Yes) _____</p> <p>1A. Input job queue size? (20 - 120 jobs) _____</p> <p>1B. Start input job queue? (0-No 1-Yes) _____</p> <p>2. History file automatic wrap? (0-No 1-Yes) _____</p> <p>2A. Overflow file size? (1-8 multiples) _____</p> <p>3. Print spooling? (0-No 1-Yes) _____</p>
	<p>5.0 Work Station Environment</p> <p>1. Default forms ID _____</p> <p>2. Lines per page (1 - 112) _____</p> <p>3. Line printer belt image member name (up to 8 characters) _____</p> <p>4. Line printer translate table name (up to 8 characters) _____</p> <p>5. Default user library _____</p>
	<p>6.0 Spooling Parameters</p> <p>1. Spool all printers? (0-No 1-Yes) _____</p> <p>2. Spool writer buffer size? (1-4 HK) _____</p> <p>3. Autowriter? (0-No 1-Yes) _____</p> <p>4. Spool file size? (12-12800 blocks) _____</p> <p>5. Spool file segment size? (1-16 blocks) _____</p> <p>6. Spool file preferred location? (1-A1 2-A2) _____</p>
	<p>7.0 Performance Parameters</p> <p>1. Work station data management (1-Resident 2-Transient/Resident 3-Transient). _____</p> <p>2. Work station buffer size (4-64 HK for locals 8-64 HK for remotes). _____</p> <p>3. System assign/free size (6-64 HK for locals 9-64 HK for remotes). _____</p> <p>4. Trace table size (16-512 entries). _____</p>

Figure 2-3 (Part 2 of 4). System/34 Installation Planning Chart

System/34 Installation Planning Chart																																																	
Configuration	8.0 SSP Feature Support I																																																
	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;">1.</td> <td style="width: 85%;">Security support?</td> <td style="width: 10%; text-align: center;">(0-No</td> <td style="width: 10%; text-align: center;">1-Yes)</td> <td style="width: 10%; text-align: center;">_____</td> </tr> <tr> <td>2.</td> <td>Help support?</td> <td style="text-align: center;">(0-No</td> <td style="text-align: center;">1-Yes)</td> <td style="text-align: center;">_____</td> </tr> <tr> <td>3.</td> <td>System measurement facility?</td> <td style="text-align: center;">(0-No</td> <td style="text-align: center;">1-Yes)</td> <td style="text-align: center;">_____</td> </tr> <tr> <td>4.</td> <td>MICR SUBR08?</td> <td style="text-align: center;">(0-No</td> <td style="text-align: center;">1-Yes)</td> <td style="text-align: center;">_____</td> </tr> <tr> <td>5.</td> <td>MICR SUBR25?</td> <td style="text-align: center;">(0-No</td> <td style="text-align: center;">1-Yes)</td> <td style="text-align: center;">_____</td> </tr> <tr> <td>6.</td> <td>Extended disk data management?</td> <td style="text-align: center;">(0-No</td> <td style="text-align: center;">1-Yes)</td> <td style="text-align: center;">_____</td> </tr> <tr> <td>7.</td> <td>Extended index data management?</td> <td style="text-align: center;">(0-No</td> <td style="text-align: center;">1-Yes)</td> <td style="text-align: center;">_____</td> </tr> </table>	1.	Security support?	(0-No	1-Yes)	_____	2.	Help support?	(0-No	1-Yes)	_____	3.	System measurement facility?	(0-No	1-Yes)	_____	4.	MICR SUBR08?	(0-No	1-Yes)	_____	5.	MICR SUBR25?	(0-No	1-Yes)	_____	6.	Extended disk data management?	(0-No	1-Yes)	_____	7.	Extended index data management?	(0-No	1-Yes)	_____													
	1.	Security support?	(0-No	1-Yes)	_____																																												
	2.	Help support?	(0-No	1-Yes)	_____																																												
	3.	System measurement facility?	(0-No	1-Yes)	_____																																												
	4.	MICR SUBR08?	(0-No	1-Yes)	_____																																												
	5.	MICR SUBR25?	(0-No	1-Yes)	_____																																												
	6.	Extended disk data management?	(0-No	1-Yes)	_____																																												
	7.	Extended index data management?	(0-No	1-Yes)	_____																																												
	8.1 SSP Feature Support II																																																
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Figure 2-3 (Part 3 of 4). System/34 Installation Planning Chart

System/34 Installation Planning Chart

Install	1 Installation—Utilities			
	Number of utility diskettes furnished (1 or 4) _____			
	1.	DFU—Data File Utility	(0-No 1-Yes)	_____
	2.	Sort—Sort Utility	(0-No 1-Yes)	_____
	3.	WSU—Work Station Utility	(0-No 1-Yes)	_____
	4.	SEU—Source Entry Utility	(0-No 1-Yes)	_____
5.	SDA—Screen Design Aid	(0-No 1-Yes)	_____	
2 Installation—Languages				
1.	RPG—RPG II	(0-No 1-Yes)	_____	
2.	ASM—Assembler	(0-No 1-Yes)	_____	
3.	FORT—FORTRAN	(0-No 1-Yes)	_____	
4.	COBL—COBOL	(0-No 1-Yes)	_____	
5.	BASIC—BASIC	(0-No 1-Yes)	_____	
3 Installation—SSP-Interactive Communications Feature				
1.	Intra	(0-No 1-Yes)	_____	
3.	BSCCL	(0-No 1-Yes)	_____	
5.	BSC CCP	(0-No 1-Yes)	_____	
7.	SNA Peer	(0-No 1-Yes)	_____	
9.	SNA 3270	(0-No 1-Yes)	_____	
2.	BSC IMS/IRSS	(0-No 1-Yes)	_____	
4.	BSC CICS	(0-No 1-Yes)	_____	
6.	SNA Upline	(0-No 1-Yes)	_____	
8.	BSC 3270	(0-No 1-Yes)	_____	
10.	Finance	(0-No 1-Yes)	_____	
4 Installation—Program Products				
1.	B3270—BSC 3270 Emulation	(0-No 1-Yes)	_____	
2.	S3270—SNA 3270 Emulation	(0-No 1-Yes)	_____	
Installation—PTFs and Backup				
1.	Apply PTFs	(0-No 1-Yes)	_____	
2.	Backup considerations:			
	Program	Back up	Initialize	
	Product	Library	Diskettes	
		(0-No 1-Yes)	(0-No 1-Yes)	
			Number of	
			Diskettes	
			Required	
	Utilities	_____	_____	
	SSP (#LIBRARY)	_____	_____	
	RPG library	_____	_____	
	ASM library	_____	_____	
	FORTTRAN library	_____	_____	
	COBOL library	_____	_____	
	BASIC library	_____	_____	
	BSC 3270 library	_____	_____	
	SNA 3270 library	_____	_____	

Figure 2-3 (Part 4 of 4). System/34 Installation Planning Chart

Reload Parameters

Reload Parameters	Comments
Library blocks _____	_____
Library directory sectors _____	_____
History file blocks _____	_____
Task work file blocks _____	_____
Number of VTOC entries _____	_____
Delete files from VTOC _____	_____
Use backup configuration _____	_____

Minimum size requirements are shown on the reload display. A description of each of the reload parameters follows:

Library Blocks: This is the total number of active blocks allocated for your system library. Specify the number of blocks you require. You can increase or decrease the size of the system library by altering the library blocks value. When loading your system from PID (Program Information Department) diskettes, the value for library blocks is set to accommodate only the minimum SSP. If you plan to add additional program products (such as Utilities, RPG, or SSP-ICF) or optional SSP program additions (such as MRJE, BSC, SRJE, SNA/SDLC, or OLE) to the system library, you must increase the library blocks value to contain this additional support. To determine how much the value must be increased, see *Library Requirements* in Appendix A. Also, space should be allowed to contain PTFs (program temporary fixes) if necessary (see *APPLYPTF Procedure* in Appendix B).

Library Directory Sectors: This is the total number of active sectors allocated to your system directory. Each sector can contain system directory entries for nine library members. The system directory is part of the library blocks value. Specify the number of sectors you require. The maximum number of directory sectors is 256. Refer to Appendix A for the requirement for program products and SSP.

When loading your system from PID diskettes, the value for library directory sectors is set to accommodate only the minimum SSP. If you plan to add additional program products or optional SSP program additions to the system library, you must increase the library directory sectors value to accommodate this additional support. You must also increase the library blocks value. To determine how much this value must be increased, refer to *Library Requirements* in Appendix A.

For example, if you plan to install DFU, you must increase the library blocks value by 65 and the library directory sectors value by 4. You must also allow space for user programs and procedures (if you plan to have any in the system library) when establishing the library blocks and library directory sectors values. To determine how much space you should allow in the library directory, see *Making Additions to the Library Directory* in Appendix A.

Generally, you increase the size of the system library when you plan to add members to it, and you decrease the size of the system library after deleting library members or if you must recover disk space for additional files. After library members are deleted, all usable library space should be accumulated into a single area by running the CONDENSE procedure or by backing up the system library and reloading it. See the *System Support Reference Manual* for descriptions of the CONDENSE and BACKUP procedures.

History File Blocks: You can specify the size of your history file. You can select a value in the range from 12 to 996 blocks. The number you specify may be changed slightly by the system, depending on how the system arranges the history file on disk. The best value for your system depends on how you intend to use the history file. For example, if you have plenty of disk space and you want to log as much system activity as possible before printing the history file, specify the maximum value. Refer to *Overflow File Size* under *4.0 General Parameters II* in this chapter for more information on the history file.

Task Work File Blocks: You must specify the size of your task work area, which is used to hold swapped programs. You can select a value in the range of 108 to 1680 blocks. The number you specify may be changed slightly by the system, depending on how the system arranges the task work area on disk. The size of your task work area is determined by factors such as your storage size and the number of command display stations you have. See *Task Work Area Size* in Appendix A for the detailed requirements necessary to determine the proper size for your system.

Number of VTOC Entries: You can specify the number of entries that can be contained in your disk VTOC (volume table of contents). Because the VTOC is allocated by tracks, the number entered will be rounded up to the maximum number of entries that can be contained within the number of tracks allocated. For example, if you specified 350 VTOC entries needed, 2 tracks would be allocated on disk. You would therefore actually be able to have up to 440 or 472 data file entries depending on the type of disk you have. See the following table to determine how many data file entries can be specified for the number of tracks needed for the different type of disks:

Number of Entries Specified	Number of Tracks	Type of Disk
200	1	8.6, 13.2, or 27.1 Megabyte Disk
201-440	2	
441-680	3	
681-920	4	
921-1160	5	
1161-1400	6	
1401-1640	7	
1641-1880	8	
216	1	63.9, 128.4, 192.9, or 257.4 Megabyte Disk
217-472	2	
473-728	3	
729-984	4	
985-1240	5	
1241-1496	6	
1497-1752	7	
1753-2008	8	

Delete Files from VTOC:

CAUTION

If you specify Y (yes) to this function, ensure that all files and user libraries that are important to you have been saved on diskettes; otherwise, they will be lost. (See the SAVE, FROMLIBR, and SAVELIBR procedures in the *System Support Reference Manual*.)

If you reply Y (yes), the VTOC is rebuilt and all files are lost. Therefore, use extreme caution when specifying; Y (yes) should be specified when configuring a newly installed System/34 (for example, no files have been copied). N (no) means you do not want to delete the files from the VTOC. The default is N (no). This parameter will not be displayed if a security file is on the system.

Use Backup Configuration: The backup configuration refers to the configuration contained on the RELOAD diskettes. For an initial installation or a release update the RELOAD diskettes are the PID diskettes. At other times these are the backup diskettes for the current release. The default is normally N (no). However, if a Y (yes) is displayed, the release level being loaded is not compatible with the release currently residing on the disk. For example, the release currently on the disk is a later release than that being loaded. The default is N (no) except when the release level being loaded is different from that currently residing on the disk. N (no) means you want to use the current configuration that is already on the disk. Y (yes) means you want to use the configuration data to replace the current configuration that is on the disk. What will be replaced is that configuration data selected on CNFIGSSP displays 3.0, 4.0, 5.0, 6.0, and 7.0. Data relating to work station configuration (local and remote) remains unchanged. If you plan to use the release update function (option 15) of CNFIGSSP, you should specify N (no) to this prompt to avoid resetting the configuration record.

As a general rule, configuration data relating to the library being reloaded (such as selected in CNFIGSSP displays 8.0, 8.1 and 9.0) is updated in any case. Conversely, any configuration data relating to the hardware (such as work station and communications configuration data) is not changed. An exception is when the initial system is loaded and there is no configuration data on the disk. This causes default hardware configuration data to be developed.

Note: If you are loading a new release from PID, and you have a spool file with data in it, the data may not be printable after installing the new release. Check the memo-to-users to see if the spool file will be compatible from one release to another.

Total System Blocks Used: This is the total number of blocks of disk space used by the SSP. It is the sum of the following:

- System library blocks (includes library directory sectors)
- History file blocks
- Task work file blocks
- Work area for the SSP (includes VTOC)

The system assigns a work area size based on the values you enter on the Reload display.

For more information, see Appendix A, *Storage Estimates*.

Configuration Displays Overview (CNFIGSSP Procedure)

When the CNFIGSSP procedure is run, the following configuration displays are shown. The configuration portion of the planning chart contains questions that are asked on the displays. By filling in the chart, you can easily answer the questions on the displays.

```

** 1.0 SYSTEM CONFIGURATION MENU **
1 FULL SYSTEM CONFIGURATION          9 CREATE/EDIT WORK STATION PARAMETERS
2 ALTER WORK STATION ENVIRONMENT      10
3 ALTER SYSTEM PARAMETERS             11
4 ALTER WORK STATION CONFIGURATION    12
5 ALTER SNA/SDLC PARAMETERS          13
6 ALTER P/P AND COMMUNICATION SUPPORT 14 BASIC CONFIGURATION WITH DEFAULTS
7                                     15 RELEASE UPDATE
8                                     16 REVIEW CONFIGURATION PARAMETERS
ENTER SELECTION - 9                CMD KEY 9 - END
    
```

```

2C LOCAL WORK STATION
CONFIGURATION ** PRINTERS **
1. LOGICAL ID:          W1 W2 P2 W3 P3 W4 W5 P1
2. DEVICE TYPE:        D D 2P D P D D L
9. LANGUAGE GROUP #:    0      0
10. SUBCONSOLE ID:     W1      W1
11. LINES PER INCH (4,6,8): 6
CMD KEY 4/ENTER - CHANGE SETS  CMD KEY 5 - VERIFY  ROLL KEYS - PAGING
CMD KEY 9 - END                CMD KEY 19 - CANCEL  HELP - DEFINITIONS
    
```

```

CREATE/EDIT ** 2.0 WORK STATION PARAMETERS **
1. ENTER WORK STATION PARAMETER MEMBER NAME : #UNKNOWN
SELECT:
1. CREATE NEW MEMBER
2. EDIT EXISTING MEMBER
3. CREATE MEMBER FROM CURRENT WORK STATION CONFIGURATION
2. ENTER SELECTION : 2
CMD KEY 5 - VERIFY      ENTER - CONTINUE      CMD KEY 19 - CANCEL
    
```

```

2E LOCAL WORK STATION
CONFIGURATION ** SPOOL **
1. LOGICAL ID:          W1 W2 P2 W3 P3 W4 W5 P1
2. DEVICE TYPE:        D D 2P D P D D L
15. RESIDENT WRITER (0-NO 1-YES) 0
16. PRIORITY (0-NORMAL 1-HIGH) 1 0 1
17. SEPARATOR PAGES (0-3) 3 3 3
CMD KEY 4/ENTER - CHANGE SETS  CMD KEY 5 - VERIFY  ROLL KEYS - PAGING
CMD KEY 9 - END                CMD KEY 19 - CANCEL  HELP - DEFINITIONS
    
```

```

** 2.1 WORK STATION CONFIGURATION OPTIONS **
1. CONFIGURE REMOTE WORK STATIONS? (0-NO 1-YES) 0
2. REMOTE WORK STATIONS SUPPORT SWAPPABLE? (0-NO 1-YES) 1
3. NUMBER OF LOCAL WORK STATIONS?(0-LOCALS 1-8 1-LOCALS 9-16) 0
CMD KEY 5 - VERIFY      ENTER - CONTINUE      CMD KEY 19 - CANCEL
    
```

```

2A REMOTE WORK STATION
CONFIGURATION          CONTROLLER LOGICAL ID C01 W1
                      STATION ADDRESS      01
                      LINE # 1 ALTERNATIVE LINE #
1. LOGICAL ID:        A1 A2
2. DEVICE TYPE:       D D
3. UNIT ADDRESS:      00 02
4. ATTRIBUTE:         C C
5. DEFAULT PRINTER:  P1 P1
CMD KEY 4/ENTER - CHANGE SETS  CMD KEY 5 - VERIFY  ROLL KEYS - PAGING
CMD KEY 9 - END                CMD KEY 19 - CANCEL  HELP - DEFINITIONS
    
```

```

** 2.2 REMOTE WORK STATION LINE CONFIGURATION **
SPECIFY:
1. REMOTE LINE USE: (0-NO 1-YES) 1 0 0 0 0
2. REMOTE LINE SWITCHED: (0-NO 1-YES) 0 0 0 0 0
3. SWITCH TYPE: (0-NONE 1-MANUAL CALL 2-AUTO ANSWER 3-MANUAL ANSWER) 0 0 0 0 0
4. SLOW POLLING: (0-NO 1-YES) 0 0 0 0 0
CMD KEY 5 - VERIFY      ENTER - CONTINUE      CMD KEY 19 - CANCEL
    
```

```

2B REMOTE WORK STATION
CONFIGURATION          CONTROLLER LOGICAL ID C01 W1
                      STATION ADDRESS      01
                      LINE # 1 ALTERNATIVE LINE #
1. LOGICAL ID:        A1 A2
2. DEVICE TYPE:       D D
6. SCREEN SIZE:       1 1
7. MAGNETIC STRIPE:  0 0
8. AUTO ONLINE:       1 1
CMD KEY 4/ENTER - CHANGE SETS  CMD KEY 5 - VERIFY  ROLL KEYS - PAGING
CMD KEY 9 - END                CMD KEY 19 - CANCEL  HELP - DEFINITIONS
    
```

```

2A LOCAL WORK STATION
CONFIGURATION
1. LOGICAL ID:          W1 W2 P2 W3 P3 W4 W5 P1
2. DEVICE TYPE:        D D 2P D P D D L
3. UNIT ADDRESS:       00 11 10 22 21 20 30
4. ATTRIBUTE:          S A C E D
5. DEFAULT PRINTER:    P1 P2 27 P3 27
CMD KEY 4/ENTER - CHANGE SETS  CMD KEY 5 - VERIFY  ROLL KEYS - PAGING
CMD KEY 9 - END                CMD KEY 19 - CANCEL  HELP - DEFINITIONS
    
```

```

2C REMOTE WORK STATION
CONFIGURATION ** PRINTERS **          CONTROLLER LOGICAL ID C01 W1
                                      STATION ADDRESS      01
                                      LINE # 1 ALTERNATIVE LINE #
1. LOGICAL ID:          A1 A2
2. DEVICE TYPE:         D D
9. LANGUAGE GROUP #:    0
10. SUBCONSOLE ID:     0
11. LINES PER INCH (4,6,8):
CMD KEY 4/ENTER - CHANGE SETS  CMD KEY 5 - VERIFY  ROLL KEYS - PAGING
CMD KEY 9 - END                CMD KEY 19 - CANCEL  HELP - DEFINITIONS
    
```

```

2B LOCAL WORK STATION
CONFIGURATION
1. LOGICAL ID:          W1 W2 P2 W3 P3 W4 W5 P1
2. DEVICE TYPE:        D D 2P D P D D L
6. SCREEN SIZE:        1 1 1 1 1
7. MAGNETIC STRIPE:    0 0 0 0 0
CMD KEY 4/ENTER - CHANGE SETS  CMD KEY 5 - VERIFY  ROLL KEYS - PAGING
CMD KEY 9 - END                CMD KEY 19 - CANCEL  HELP - DEFINITIONS
    
```

```

2E REMOTE WORK STATION
CONFIGURATION ** SPOOL **          CONTROLLER LOGICAL ID C01 W1
                                      STATION ADDRESS      01
                                      LINE # 1 ALTERNATIVE LINE #
1. LOGICAL ID:          A1 A2 P3
2. DEVICE TYPE:         D D P
15. RESIDENT WRITER (0-NO 1-YES) 0
16. PRIORITY (0-NORMAL 1-HIGH) 0
17. SEPARATOR PAGES (0-3) 1
CMD KEY 4/ENTER - CHANGE SETS  CMD KEY 5 - VERIFY  ROLL KEYS - PAGING
CMD KEY 9 - END                CMD KEY 19 - CANCEL  HELP - DEFINITIONS
    
```

```

** 3.0 CONFIGURATION-GENERAL PARAMETERS I **                               W1
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. DATE FORMAT                               3
   (1-DDMMYY 2-HMDDYY 3-YYMMDD)
2. SINGLE PROGRAM MODE? (0-NO 1-YES)         0
3. STARTUP PROCEDURE NAME                     PROCNAME 1
4. PRINTER DEFAULT FOR RELEASED JOBS?        1
   (1-SYSTEM 2-SESSION)
5. KEEP MESSAGES AT EOJ? (0-NO 1-YES)        0

```

```

** 8.1 CONFIGURATION-SSP FEATURE SUPPORT II **                          W1
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. DUMP FILE ANALYSIS? (0-NO 1-YES) 0
2. SUBCONSOLE SUPPORT? (0-NO 1-YES) 0
3. USER ACCESS TO SPOOL FILE? (0-NO 1-YES) 0
4. I - EXCHANGE? (0-NO 1-YES) 0
5. HISTORY FILE SCROLL? (0-NO 1-YES) 0

```

```

** 4.0 CONFIGURATION-GENERAL PARAMETERS II **                           W1
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. INPUT JOB QUEUE SUPPORT? (0-NO 1-YES)     1
   IA. INPUT JOB QUEUE SIZE (20-120 JOBS)    020
   IB. START INPUT JOB QUEUE? (0-NO 1-YES)   1
2. HISTORY FILE AUTOMATIC WRAP? (0-NO 1-YES) 1
   2A. OVERFLOW FILE SIZE (1-8 MULTIPLES)    0
3. PRINT SPOOLING (0-NO 1-YES)               1

```

```

** 8.2 CONFIGURATION-SSP SUPPORT FOR PROGRAM PRODUCTS **              W1
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. OVERLAY LINKAGE EDITOR? (0-NO 1-YES) 0
2. COBOL EXECUTION TIME SUPPORT? (0-NO 1-YES) 0
3. FORTRAN EXECUTION TIME SUPPORT? (0-NO 1-YES) 0
4. CHECKPOINT/RESTART? (0-NO 1-YES) 0

```

```

** 5.0 WORK STATION ENVIRONMENT **                                       W1
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. DEFAULT FORMS ID                           0001
2. LINES PER PAGE (1-112)                     066
3. LINE PRINTER BELT IMAGE MEMBER NAME        BELT48
4. LINE PRINTER TRANSLATE TABLE NAME
5. DEFAULT USER LIBRARY

```

```

** 9.0 CONFIGURATION-COMMUNICATIONS SUPPORT **                          W1
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. BSC SUPPORT? (0-NO 1-YES) 0
2. MRJE SUPPORT? (0-NO 1-YES) 0
3. SRJE SUPPORT? (0-NO 1-YES) 0
4. SECONDARY SNA/SDLC SUPPORT? (0-NO 1-YES) 0
5. REMOTE WORK STATION SUPPORT? (0-NO 1-YES) 0
6. SSP-ICF SUPPORT? (0-NO 1-YES) 0
7. HLCA SUPPORT? (0-NO 1-YES) 0
8. AUTOCALL FEATURE SUPPORT? (0-NO 1-YES) 0

```

```

** 6.0 CONFIGURATION-SPOOLING PARAMETERS **                               W1
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. SPOOL ALL PRINTERS (0-NO 1-YES)           1
2. SPOOL WRITER BUFFER SIZE (1-4HK)          2
3. AUTOWRITER (0-NO 1-YES)                   1
4. SPOOL FILE SIZE (12-12800 BLOCKS)         12
5. SPOOL FILE SEGMENT SIZE (1-16 BLOCKS)     06
6. SPOOL FILE PREFERRED LOCATION (1-A1 2-A2) 1

```

```

** 9.2 CONFIGURATION-SSP-ICF COMMUNICATIONS SUPPORT **                  W1
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. BSC SUPPORT - IMS, BSCCL, CICS, CCP (0-NO 1-YES) 0
2. BSC SUPPORT - 3270 (0-NO 1-YES) 0
3. SNA SUPPORT - 3270 (0-NO 1-YES) 0
4. SNA SUPPORT - SNA UPLINE FACILITY (0-NO 1-YES) 0
5. SNA SUPPORT - PEER (0-NO 1-YES) 0
6. SDLC SUPPORT - FINANCE (0-NO 1-YES) 0

```

```

** 7.0 CONFIGURATION-PERFORMANCE PARAMETERS **                           W1
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. WORK STATION DATA MANAGEMENT             2
   1. RESIDENT
   2. TRANSIENT/RESIDENT
   3. TRANSIENT
2. WORK STATION BUFFER SIZE (4-64HK)         04
3. SYSTEM ASSIGN/FREE SIZE (6-64HK)          10
4. TRACE TABLE SIZE (16-512 ENTRIES)        512

```

```

** 10.0 CONFIGURATION-SNA/SDLC PARAMETERS **                             W11
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. STATION ADDRESS:                          LINE 1 2 3 4
   (2 HEX DIGITS) C1 C1 C1 C1
2. EXCHANGE ID: (5 HEX DIGITS) AAAAA AAAAA AAAAA AAAAA
3. LOGICAL UNIT MODE: (A-SINGLE B-MULTIPLE) A A A A
4. RECEIVE DATA BUFFERS: 007 007 007 007
5. TRANSMIT DATA BUFFERS: 007 007 007 007
6. SWITCH TYPE: (A-AUTO ANSWER/
   B-MANUAL ANSWER/C-MANUAL CALL/D-AUTO CALL) - - - -

```

```

** 8.0 CONFIGURATION-SSP FEATURE SUPPORT I **                             W1
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. SECURITY SUPPORT? (0-NO 1-YES) 0
2. HELP SUPPORT? (0-NO 1-YES) 0
3. SYSTEM MEASUREMENT FACILITY? (0-NO 1-YES) 0
4. MICR SUBR08? (0-NO 1-YES) 0
5. MICR SUBR25? (0-NO 1-YES) 0
6. EXTENDED DISK DATA MANAGEMENT? (0-NO 1-YES) 0
7. EXTENDED INDEX DATA MANAGEMENT? (0-NO 1-YES) 0

```


1.0 System Configuration Menu

This section of the planning chart describes each menu option you might wish to choose during the CNFIGSSP procedure.

1.0 System Configuration Menu

Option _____

The following table shows which displays are presented with each menu option:

Menu Option	Displays Presented
1. Full System Configuration	2.0, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0, 8.1, 8.2, 9.0, 9.2, 10.0
2. Alter Work Station Environment	5.0
3. Alter System Parameters	3.0, 4.0, 6.0, 7.0
4. Alter Work Station Configuration	2.0, 7.0
5. Alter SNA/SDLC Parameters	10.0
6. Alter P/P and Communication Support	8.0, 8.1, 8.2, 9.0, 9.2, 10.0
9. Create/Edit Work Station Parameters	2.0, 2.1, 2.2, 2A, 2B, 2C, 2E
14. Basic Configuration with Defaults	None
15. Release Update	None
16. Review Configuration Parameters	2.0, 2.1, 2.2, 2A, 2B, 2C, 2E, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0, 8.1, 8.2, 9.0, 9.2, 10.0
Display Titles	
2.0	Create/Edit Work Station Parameters
2.1	Work Station Configuration Options
2.2	Remote Work Station Line Configuration
2A	Local (or Remote) Work Station Configuration
2B	Local (or Remote) Work Station Configuration
2C	Local (or Remote) Work Station Configuration
2E	Local (or Remote) Work Station Configuration
3.0	Configuration-General Parameters I
4.0	Configuration-General Parameters II
5.0	Work Station Environment
6.0	Configuration-Spooling Parameters
7.0	Configuration-Performance Parameters
8.0	Configuration-SSP Feature Support I
8.1	Configuration-SSP Feature Support II
8.2	Configuration-SSP Support for Program Products
9.0	Configuration-Communications Support
9.2	Configuration-SSP-ICF Communications Support
10.0	Configuration-SNA/SDLC Parameters

A description of each option follows:

CAUTION

Whenever you select option 1, configuration default values are set for you by the system according to the number of local command display stations you have. **This option resets all system configuration and program product parameters and should be used only at initial installation time.**

Option 1. Full System Configuration: Select this menu option when doing an initial system configuration. This option updates the work station configuration from your library member in #LIBRARY and allows you to tailor the system to suit your needs. Option 1 consists of prompts for the installation of the optional SSP, and the execution of the PTF (program temporary fix) application and system library backup procedures. When doing an initial configuration select option 9 to create a library member containing your work station configuration before selecting option 1.

You can use the default values set for you by the system or you can select values of your own. The following configuration parameters are automatically assigned defaults by the system when you select option 1 or option 14:

- Input job queue
 - Input job queue size
 - Start job queue

- Print spooling
 - Autowriter
 - Spool file size
 - Spool segment size
 - Spool writer buffer size

- Work station data management mode

- Work station buffer size

- System assign/free area size

Refer to the *Option 1 and Option 14 Default Table* in Appendix A for the default values.

Option 2. Alter Work Station Environment: Select this system configuration menu option to make changes to the following work station environment items:

- Default forms ID
- Lines per page
- Line printer image member name
- Line printer translate table name
- Default user library

Note: Any of the above work station environmental items that were changed by the SET command before this configuration are changed back to their original configuration values.

If you select option 2, only display 5.0, Work Station Environment is presented.

Option 3. Alter System Parameters: Use this option to make system configuration changes. The following configuration items can be changed:

- System date format
- Single program mode
- Startup procedure name
- Printer assignment for released jobs
- Keep messages at end of job
- Input job queue
- History file automatic wrap
- Spooling parameters
- Work station data management mode
- Work station buffer size
- Assign/free area size
- Trace table size

CAUTION

You must allow the CNFIGSSP procedure to complete before performing an IPL, or the results are unpredictable.

When option 3 is selected, displays 3.0, 4.0, 7.0, and, optionally, 6.0 are presented.

Option 4. Alter Work Station Configuration: Choose this system configuration menu option to update work station parameters from a library member created through option 9. Display 2.0, Work Station Parameters, and display 7.0 Configuration-Performance Parameters, are the only displays presented.

Note: If the work station buffer size and the system assign/free size in the configuration record are below the recommended defaults (refer to the *Option 1 and Option 14 Default Table* in Appendix A), then the recommended default values will be shown on display 7.0.

Option 5. Alter SNA/SDLC Parameters: This system configuration menu option allows you to make SNA/SDLC parameter changes. When option 5 is selected, display 10.0, Configuration-SNA/SDLC Parameters is the only display presented.

Option 6. Alter P/P and Communications Support: This menu option allows you to add to the optional SSP function, the program products, and the communications support. When option 6 is selected, displays 8.0, 8.1, 8.2, 9.0, and, optionally, 9.2 and 10.0 are presented. You will be prompted for the diskettes containing the specified optional support selected for option 6.

Note: If you add an additional communications line or change any attribute(s) of the existing lines after an initial installation or release update, you must take an option 6 and recopy your communications support. Apply PTFs if necessary.

Option 9. Create/Edit Work Station Parameters: Select this system configuration menu option when doing an initial system configuration, a release update or when you need to modify the work station configuration. This enables you to configure your local and remote work stations. Displays 2.0, 2.1, 2.2, 2A, 2B, 2C, and 2E are presented. After you have completed these, the system configuration menu display returns. At this time, select option 1 (full system configuration) or option 4 (alter work station configuration) to copy the configuration member to the system configuration record.

The work station information is entered in a source entry mode. The information is diagnosed and saved in the user-specified library member. The information is not reflected in the configuration record until a 1 or 4 option is taken and the library member name is specified as the member containing the work station configuration.

During creation of the work station configuration member, the responses are diagnosed as each display is completed. Syntax errors (invalid responses) must be resolved before you can advance to additional displays or before you can terminate the session with command key 9. Command key 9 causes the work station configuration to be written back to the system library.

Relational or cross-display errors do not have to be resolved immediately. You can still go from display to display via the roll keys, command key 4, or the Enter/Rec Adv key. You can even write the member back to the library (command key 9) with an error outstanding. Any error left outstanding must be resolved through subsequent edit sessions (option 9) before the library member can be used to configure the work stations (either option 1 or option 4).

Option 14. Basic Configuration with Defaults: Option 14 is essentially the same as option 1 except that no displays are presented. You will be prompted for the diskettes containing the optional SSP support to be copied. The defaults shown under *Option 1 and Option 14 Default Table* in Appendix A are determined from the current work station configuration. Other parameters are determined from the backup diskettes or from the current configuration on disk, depending on whether the RELOAD used the backup configuration.

The local and remote work station configuration will be unchanged on disk. However, remote work stations will not be functional if the backup configuration does not contain the optional remote work station support.

If RELOAD was from user created backup diskettes, then the optional SSP (displays 8.0, 8.1, 8.2 and 9.0) that is contained on the backup configuration will be contained in the new configuration. No attempt is made to copy the optional SSP support that was previously configured. Similarly, the program product indicators are reset and no program products are copied with this option.

Note that the configuration distributed on the PID diskettes does not contain any of the optional SSP or program products.

Option 14 is best utilized if the work stations are defined (option 9) and the configuration record is updated (option 4), prior to taking option 14, because the defaults are based on the current work station configuration.

Option 15. Release Update: Option 15 is used to perform a release update. CNFIGSSP will copy the new release of the optional SSP programs and program products that are currently configured on the system.

There are no displays presented with this option. You are prompted for the diskettes containing the support to be copied. The local and remote work station configuration remain unchanged. If you plan to specify additional support, you should take an option 6 after completing option 15.

Options 1 or 14 should not be used to make configuration changes if you plan to use option 15 for a release update. These options cause all or some of the optional SSP and program product indicators to be reset. Therefore, some of the optional SSP or program products support would not be copied.

Chapter 4 contains step-by-step instructions for performing a release update.

Option 16. Review Configuration Parameters: This system configuration menu option allows you to see all currently defined configuration parameters. All configuration and install displays are shown, but none of them can be modified.

2.0 Create/Edit Work Station Parameters

2.0 Create/Edit Work Station Parameters

1. Work station parameter member name (up to 8 characters) _____
2. Enter selection: _____
(1-Create new member 2-Edit existing member
3-Create member from current work station configuration)

Work station parameter member name: Enter the name you wish to assign to your work station configuration member. The name can be up to 8 alphameric characters and must meet the conventions for naming a library member. You may want to use a special set of characters when you specify the work station library member name. Then when reviewing a directory listing, any work station library member can be easily identified.

#UNKNOWN is the reserved work station configuration member name placed in the configuration record at RELOAD time. The configuration record contains the current configuration of your system (SSP, optional SSP, and program products) and the work station configuration. The configuration record is stored in a protected area on disk. You are not allowed (during option 9) to create a work station configuration member with the name #UNKNOWN. If option 1 or 4 is taken from the configuration menu, and the display appears with #UNKNOWN, or #UNKNOWN is entered as the work station configuration member name, the current work station configuration is used.

Work station configuration parameters for both local and remote work stations are maintained as a library member in #LIBRARY.

Because the work station parameters are maintained as a library member, you can have different work station configurations in different library members. For example, one library member could contain your first shift configuration while a second library member could contain your second and third shift work station configuration. After IPL you would run the CNFIGSSP procedure taking an option 16 (review configuration parameters) to determine which configuration is currently active. For instance, if the second and third shift configuration is active and you want the first shift configuration active, take an option 4 (alter work station configuration). Change the work station parameter member name on display 2.0 Work Station Parameters to the library member name you want active and IPL when the CNFIGSSP procedure has completed. This will make your first shift configuration active.

Additionally, work station parameters could be defined for another installation and the library member containing that definition could be sent to that installation on diskette.

Enter selection: Select one of three options regarding the member name. The first option means you want to create a new member with the name specified in the first parameter. The second option means you want to change an existing member. The third option enables you to copy the current work station configuration to the member name specified in the first parameter.

2.1 Work Station Configuration Options

2.1	Work Station Configuration Options			
1.	Configure remote work stations?	(0-No	1-Yes)	_____
2.	Remote work station support swappable?	(0-No	1-Yes)	_____
3.	Number of local work stations?	(0-locals 1-8	1-locals 9-16)	_____

Configure remote work stations: This parameter allows you to define remote work stations. If you do not want to configure remote work stations, specify 0 (no). If you want to configure remote work stations, specify 1 (yes). The default is 0.

Remote work station support swappable: This parameter allows you to specify whether you want swappable SNA support for remote work stations. Specify 0 (no) if you do not, and 1 (yes) if you want swappable SNA. Nonswappable SNA for remote work stations uses 8 K of the user program area. You might experience a decrease in the response time of remote work stations if swappable SNA is specified; however, it could increase the throughput of the rest of the system. The default is 1 (yes) if remote work station support is specified.

Number of local work stations: This parameter allows you to specify how many local work stations you defined on your local work station network diagram. Specify 0 if you have from 1 to 8 local work stations defined. Specify 1 if you have from 9 to 16 local work stations defined. The default is 0 (locals 1-8).

Note: You must have Work Station Control Feature B to use more than eight local work stations. If you configure more than eight local work stations without having the feature installed, IPL will only activate the system console and the system printer.

2.2 Remote Work Station Line Configuration

2.2 Remote Work Station Line Configuration

(Used only if answer to 2.1, Work Station Configuration Options, Question 1 was Yes.)

Specify:	Line #	1	2	3	4
1. Remote line use:	(0-No 1-Yes)	___	___	___	___
2. Remote line switched:	(0-No 1-Yes)	___	___	___	___
3. Switch type:	(0-None 1-Manual call 2-Auto answer 3-Manual answer)	___	___	___	___
4. Slow polling:	(0-No 1-Yes)	___	___	___	___

Refer to the network diagrams to respond to the parameters on Displays 2A, 2B, and 2C Local Work Station Configuration and Displays 2A, 2B, and 2C Remote Work Station Configuration.

This section of the planning chart is used only if the answer to configure remote work stations was 1 (yes).

Remote line use: This parameter indicates to which line (1, 2, 3, or 4) you would like to have your remote work stations attached. You must specify 0 (no) or 1 (yes) for line 1, 2, 3, or 4. You may specify more than one line.

Remote line switched: This parameter indicates whether the lines you specified for remote work stations should be switched lines. 1 (yes) indicates the lines are switched. When you update a configuration record (options 1 or 4), the line type must match the line type that was specified for the hardware configuration.

Switch type: This parameter specifies the type of switching for your System/34 communications lines. Refer to the *5250 Planning and Site Preparation Guide* for information on specifying the switch type for remote controllers. For a nonswitched line, specify 0 (none).

Slow polling: Specify whether the remote work station controllers attached to a communications line should be slow polled by the system when communications ceases. Slow polling allows a controller to be inactive (power is off) without a time-out occurring. For instance, an attempt to vary on an inactive remote work station controller will not result in a time-out error halt. Instead, the system will periodically attempt to vary on the device until the device is made active (the power is turned on). Also, if an active work station controller is powered off and slow poll is specified for the line, the work station controller will automatically be placed in slow poll mode if all devices attached to the work station controller have been signed off. Specify 0 (no) or 1 (yes) for each communications line. Slow polling is not supported for switched lines.

If you have a multipoint line with one remote work station controller active and one inactive, a slower response time might be experienced if slow polling is specified for that multipoint line.

Note: The polling interval is no longer specified during CNFIGSSP. It is automatically determined by the system.

3.0 General Parameters I

3.0 General Parameters I	
1. Date format? (1-DDMMYY 2-MMDDYY 3-YYMMDD)	_____
2. Single program mode? (0-No 1-Yes)	_____
3. Startup procedure name? (up to 8 characters)	_____
4. Printer default for released jobs? (1-System 2-Session)	_____
5. Keep messages at EOJ? (0-No 1-Yes)	_____

Date format: This parameter allows you to specify the system date format. You can specify DDMMYY (day, month, year), MMDDYY (month, day, year), or YYMMDD (year, month, day).

Single program mode: This parameter allows you to select single program mode. If you select single program mode, you cannot have multiprogramming (the concurrent processing of two or more programs) or an input job queue. In single program mode, all display stations except the system console are designated as data display stations, even though they have been assigned another attribute.

When single program mode is removed, by reconfiguring the system or by IPL override, the assigned display station attributes become active. For more information about IPL overrides, see the *Operator's Guide*.

Startup procedure name: Specify the name of a user-written procedure to begin executing automatically after you IPL your system. If you do not specify a name, no procedure will automatically begin executing after IPL. You cannot specify a name for an initial configuration. This procedure must be resident in the system library or the default user library. For example, a procedure might be created to automatically enable SSP-ICF for a specific subsystem or series of subsystems after IPL. For further information on writing your own procedures, refer to the *System Support Reference Manual*.

Printer default for released jobs: This parameter determines where default printer output should be routed for released jobs. Specify 1 if you want output routed to the system printer. Specify 2 if you want output routed to the session printer. Default printer output is generated from an NRT (never requesting terminal) program, an evoked program, or a job placed on the input job queue. For example, you are compiling an RPG program from your remote display station and the RPG compiler output is printed on the printer assigned to your display station (which is not the system printer). After correcting some errors, you decide to compile the program again. But, this time you submit the job to the input job queue. In this situation, the RPG compiler output is printed on the system printer. By specifying a 2 (session) to this prompt, you can have that output routed to your session printer instead of to the system printer. The default is 1 (system).

Keep messages at EOJ: This parameter allows informational messages that are sent to the system console and normally purged at end-of-job, to be kept. Informational messages are messages that require no operator action. This will prevent the alarm from sounding with no apparent message being present.

4.0 General Parameters II

4.0 General Parameters II	
1.	Input job queue support? (0-No 1-Yes) _____
1A.	Input job queue size? (20 - 120 jobs) _____
1B.	Start input job queue? (0-No 1-Yes) _____
2.	History file automatic wrap? (0-No 1-Yes) _____
2A.	Overflow file size? (1-8 multiples) _____
3.	Print spooling? (0-No 1-Yes) _____

Input job queue support: This parameter allows you to select the input job queue function.

Input job queue size: This parameter allows you to specify how many jobs can be held in the job queue file. File size is determined by the volume of jobs you have and by how much disk space is available. Two sectors of disk space are needed for each job on the input job queue. The input job queue file is allocated in 10 sector increments, consequently the number of jobs you specify will be rounded up to the next multiple of five. For example, if you specified 32 jobs, the system would round that up to 35 and the size of the input job queue file would be 70 sectors.

The disk space required for the input job queue file is two sectors for every job waiting to be executed.

Start input job queue: This parameter allows you to cause the input job queue to automatically start following each IPL.

Note: At IPL override time, you can cancel the input job queue, delete the input job queue file, and change the input job queue file size, but you cannot at that time select the input job queue function.

History file automatic wrap: If automatic wrap is specified, the history file is written over once the file is full. This causes the oldest messages in the file to be lost.

Overflow file size: If automatic wrap was not specified, an overflow file size must be designated. You can specify an overflow size of from 1 to 8 multiples of the original size of the history file. The original size of the history file was specified on the Reload display (earlier in this chapter).

Print spooling: This parameter allows you to select print spooling for the system printer. You must specify print spooling for the system printer if you wish to have print spooling active for other printers (refer to *Spool all printers* in the 6.0 *Spooling Parameters* section of the planning chart). If you have only one display station, the default is 0 (no). If you have more than one display station, the default is 1 (yes). Spooling must be specified here in order to turn spooling on or off during IPL overrides. Refer to the *System Support Reference Manual* for information about how print spooling is affected by the PRINTER OCL statement.

5.0 Work Station Environment

5.0 Work Station Environment

1. Default forms ID _____
2. Lines per page (1 - 112) _____
3. Line printer belt image member name (up to 8 characters) _____
4. Line printer translate table name (up to 8 characters) _____
5. Default user library _____

Default forms ID: This parameter allows you to specify a user-defined forms ID to identify a specific printer form. The forms ID can be from 1 through 4 characters long with no embedded blanks. The forms ID is used by the system unless you specify a different forms ID in your OCL statements or in the SET command. (See the *System Support Reference Manual* for information on OCL statements and the SET command.)

Lines per page: This parameter allows you to set a default value for the number of lines per page you want your printer(s) to print. This value is determined by the type of forms you intend to use on each printer and by the 6/8 lines-per-inch switch setting on each printer. You can change the lines-per-page default value by using the SET command, the LINES command, or by OCL statements. (See the *System Support Reference Manual* for information on these commands and OCL statements.)

Line printer belt image member name: This parameter allows you to specify a print belt member for your 5211/3262 Printer. The print belt member resides in the system library, and contains the set of print characters that correspond to the print belt on your line printer. The characters in the print belt member must be the same as those on the print belt mounted on the line printer. The 5224, 5225, and 5256 Printer have no print belt, and therefore cannot be changed with this prompt.

The SSP includes the following print belt members:

Print Belt Member Name	Associated Printers
BELT48	5211/3262 Printers
BELT64	5211 Printer
BELT96	5211/3262 Printers
BELT188	5211 Printer
BELT48HN (FORTRAN)	5211/3262 Printers
BELT64B Standard	3262 Printer
BELT64C Optimized	3262 Printer
BELT188B	3262 Printer

For more information about the BELT48, BELT64, BELT96, and BELT188 print belt members, see *Print Belt Characters* in Appendix B.

Line printer translate table name: This parameter allows you to specify a translation table source member name. The translation table defines the conversion necessary to send unprintable characters to the 5211/3262 Printer and have them converted to other characters that are printable. The following translation table source member names can be used for the specified conversion:

Name	Specified Conversion
#96E48	Translates the 96-character set to the 48-character set.
#96E64	Translates the 96-character set to the 64-character set.
#188E48	Translates the multinational 188-character set to the 48-character set.
#188E64	Translates the multinational 188-character set to the 64-character set.
#188E96	Translates the multinational 188-character set to the 96-character set.
#188E188	Use this translate table name to convert any translation back to NO translation.

Default user library: This parameter allows you to specify a default user library. The specified library becomes the default user library for each configured display station. The library name must be left-adjusted, and must consist of from 1 through 8 alphameric characters, including \$, # and @. However, the first character cannot be numeric.

The default library can be changed at each display station by using the SET command (see the *System Support Reference Manual* for information on the SET command).

Note: You cannot assign a default user library at initial system configuration time. After the CNFIGSSP procedure has been run, you can build a library (see the BLDLIBR procedure in the *System Support Reference Manual* for information on building a library). Then, using option 2 of the System Configuration Menu, assign the default user library name.

6.0 Spooling Parameters

6.0 Spooling Parameters	
1.	Spool all printers? (0-No 1-Yes) _____
2.	Spool writer buffer size? (1-4 HK) _____
3.	Autowriter? (0-No 1-Yes) _____
4.	Spool file size? (12-12800 blocks) _____
5.	Spool file segment size? (1-16 blocks) _____
6.	Spool file preferred location? (1-A1 2-A2) _____

This section allows you to set parameters that affect print spooling. Complete this section only if you specified yes to print spooling in *4.0 General Parameters II*. If option 1 (full system configuration) of display 1.0, System Configuration Menu is selected, the SSP sets usable parameters for you. (See *Option 1 and Option 14 Default Table* in Appendix A for information on spooling parameters that are automatically set by the SSP.)

With Release 8, the separator pages, resident spool writer, and spool writer priority prompts can be specified for each printer. Refer to *Completing the Local Work Station Network Diagram* and *Completing the Remote Work Station Network Diagram* earlier in this chapter.

Spool all printers: If you select yes, the output of all printers will be spooled, not just the system printer. Also, the default for the spool parameter on the PRINTER OCL statement is SPOOL-YES for all printers, not just the system printer. If you select no, the default is SPOOL-NO for all printers, except the system printer. However, even if 0 (no) is specified, output can still be spooled using overrides on the PRINTER OCL statement. For more information on the PRINTER OCL statement, see the *System Support Reference Manual*.

Spool writer buffer size: You can specify the size of the spool writer buffer for the line printers (5211 and 3262) that have spooling active. If the spool writer is not resident, the spool writer buffer size can be increased to reduce the frequency of swapping the spool writer task into main storage. The value specified in this field directly affects system performance. The larger the value you specify, the longer the printer will run without the spool writer having to get control of the system. This allows more system time for concurrent jobs to run.

Autowriter: You can specify yes, which causes spooled data to start printing automatically following IPL for all form types. If you specify no, the START control command is required to start the spool writer following an IPL. (See the *Operators Guide* for a description of control commands.)

Note: Do not specify 1 (yes) to autowriter if you wish to selectively print work by form type. This can be helpful if you are trying to limit forms changes by grouping reports on the spool queue that use the same form. Use the START command and specify the form type desired.

Spool file size: You can specify your spool file size in blocks. This causes a primary spool file with the size you specify to be allocated during IPL. If more spool file space is needed, the system automatically allocates more space. Up to five more extents equal to the size you specified can be allocated. For more information on how to determine your spool file size, see *Spool File Storage Estimates* in Appendix A. The default is shown in the *Option 1 and Option 14 Default Table* in Appendix A.

Spool file segment size: You can specify the size of the segments within your spool file. You can specify a value in the range of 1 through 16 blocks. A larger segment size requires fewer segment accesses, whereas a smaller segment size tends to make more efficient use of the spool file space. The default is shown in the *Option 1 and Option 14 Default Table* in Appendix A. For more information on how to determine the segment size, refer to *Spool File Storage Estimates* in Appendix A.

Spool file preferred location: If you have more than one disk, you can specify which disk should contain the spool file. Specify 1 (A1) to put the spool file on disk A1. Specify 2 (A2) to put the spool file on disk A2. The default is 1 (A1). For systems with up to four disks, you would specify 2 (A2) to put the spool file on the second, third, or fourth disk.

7.0 Performance Parameters

7.0 Performance Parameters

1. Work station data management (1-Resident 2-Transient/Resident 3-Transient). _____
2. Work station buffer size (4-64 HK for locals 8-64 HK for remotes). _____
3. System assign/free size (6-64 HK for locals 9-64 HK for remotes). _____
4. Trace table size (16-512 entries). _____

This display allows you to specify values that affect the nucleus and user-area storage sizes. These values, therefore, also affect the performance of the system. If option 1 (full system configuration) of display 1.0 System Configuration Menu is selected, usable parameters are set for you based on the number of local command display stations you have. If option 4 (alter work station configuration) of display 1.0 System Configuration Menu is selected and the work station buffer size and system assign/free size in the configuration record are below the recommended defaults, then the recommended default values will be used. (See *Option 1 and Option 14 Default Table* in Appendix A for default parameters.)

Note: Refer to the *Planning Guide* for guidelines on selecting performance-related system configuration values.

Work station data management: You can select how you want work station data management to execute in your system. It can be resident in the nucleus (always in main storage), or it can be a transient routine (called into main storage when needed), or a combination of both.

Work station data management can be completely resident; however, this requires 4.25 K of the nucleus. This is the best choice if performance is your main concern.

You can have work station data management partially resident with some function remaining transient. This choice requires 2 K bytes of the nucleus, but performance is better than if work station data management is completely transient. This is the best choice if both performance and storage space are a concern.

If you want work station data management to be transient, no nucleus space is required. This is a good choice if storage space (not performance) is your primary concern.

If remote work stations have been configured, then the work station data management must be either resident or transient/resident. Option 3 (transient) will not be displayed if you have configured remote work stations. In addition, there is a 0.75 K increase to the nucleus requirements stated previously.

Work station buffer size: The value you select depends primarily on how many display stations are configured in your system and the size of the screen formats used by the display stations. For a system with a large amount of display station activity, increasing the work station buffer size may improve system performance. If the size of a frequently displayed format, as defined in the \$SFGR compiler output, is larger than the work station buffer size, both the work station and overall system performance will be degraded. Therefore, the work station buffer size specified should be at least as large as the largest frequently displayed user format. Remote work stations support requires a minimum increase of 4 HK. See the *Option 1 and Option 14 Default Table* in Appendix A for the default values.

System assign/free size: You can specify your assign/free area size. The assign/free area is the available space in the supervisor, that contains control information regarding each job that is active on the system. The value you choose depends primarily on how many command display stations are configured in your system. See the *Option 1 and Option 14 Default Table* in Appendix A for suggested values; see the *Planning Guide* publication for more information on assign/free area size. Remote work stations support requires a minimum increase of 3 HK. Refer to *SNA Peer and SNA Upline Assign/Free Requirements* in Appendix A for the assign/free requirements for the SNA Peer and SNA Upline subsystems.

Trace table size: This entry allows you to specify a trace table size in increments of 16 entries. System activity logged in this table is useful for diagnosing software problems. The larger the table size, the greater the number of entries and, therefore, the more complete the information for diagnostics. The trace table requires 256 bytes of user storage for every 16 entries.

Note: It is possible to have selected values for work station buffer size, assign/free area, trace table size, and so on, whose sum exceeds the assign/free address limits (18 K for 32 K; 34 K for 48 K; or 50 K for 64 K, 96 K, 128 K, and 256 K). If the assign/free address limits are exceeded, the error will be diagnosed during IPL. If the error does occur, you must run CNFIGSSP again or go through IPL overrides to reduce the values of the storage parameters. The maximum nucleus size is increased for the 96 K, 128 K, and 256 K systems by 2 K when SSP-ICF is active, and by 6 K when extended disk data management is active. For further information see the *IBM System/34 Planning Guide*, GC21-5154.

8.0 SSP Feature Support I

8.0 SSP Feature Support I

- | | | | | | |
|----|---|-------|--------|-----------|-------|
| 1. | Security support? | (0-No | 1-Yes) | | _____ |
| 2. | Help support? | (0-No | 1-Yes) | | _____ |
| 3. | System measurement facility? | (0-No | 1-Yes) | | _____ |
| 4. | MICR SUBR08? | (0-No | 1-Yes) | | _____ |
| 5. | MICR SUBR25? | (0-No | 1-Yes) | | _____ |
| 6. | Extended disk data management? | (0-No | 1-Yes) | | _____ |
| 7. | Extended index data management? | (0-No | 1-Yes) | | _____ |

This display allows you to select optional SSP program additions for your system. This display appears if you select option 1 (full system configuration) or option 6 (Alter P/P and communications support) of display 1.0, System Configuration Menu. You must provide space in the system library to accommodate any optional SSP program additions.

If additional support is required (support that was not added at an initial installation or release update) you need only to specify that additional support (by specifying a 1). Except for extended disk data management, support already installed does not need to be copied again (specify 0). You must specify 1 again for extended disk data management if you still want it active.

Security support: You must specify 1 (yes) if you want to have security support on your system.

Help Support: You must specify 1 (yes) if you want to have the Help function active on your system.

System measurement facility: The system measurement facility (SMF) is an aid in determining the cause of possible performance problems, optimizing present performance if necessary, projecting the effect of adding a new application, and determining efficient application loading. SMF can run in only multiple program mode and in any storage size system except a 32 K storage system when either BSC or SDLC is active. You need a 48 K storage system to print the report. Specify 1 (yes) if you want SMF copied, 0 (no) if not.

MICR SUBR08: Specify 1 (yes) if you want the support copied that allows an application program to read documents from the 1255 Magnetic Character Reader using subroutine SUBR08. Specify 0 (no) if you do not want SUBR08 active. Refer to the *1255 Magnetic Character Reader Reference Manual* for further information on subroutine SUBR08.

MICR SUBR25: Specify 1 (yes) if you want the support copied that allows an application program to read documents from the 1255 Magnetic Character Reader using subroutine SUBR25. If programs are to be written to control the stacker selection, you must also specify 1 (yes) to the Basic Assembler Program Product and the Device Control Language assembler macros during INSTALL. Specify 0 (no) if you do not want SUBR25 active. Refer to the *1255 Magnetic Character Reader Reference Manual* for further information on SUBR25.

Extended disk data management: Extended disk data management (EDDM) is an optional version of disk data management which includes support necessary for the processing of extendable disk files and delete capable disk files (record delete function). This support is not available unless extended disk data management is selected. Extended disk data management includes all the support available in the existing version of disk data management. Specify 1 (yes) if you want extended disk data management, 0 (no) if not. If you specify 1 (yes), the amount of main storage used by disk data management will increase by 2.5 K.

When additional support is being added, you must specify 1 again for extended disk data management if you still want it active. For more information on extended disk data management, refer to the *IBM System/34 Concepts and Design Guide*, SC21-7742.

Extended index data management: Extended index data management is optional support that is necessary for the processing of index files having the IFILE characteristics. The IFILE characteristics allows sequential processing of added records by key. Specify 1 (yes) to this prompt if you want this support. You must also specify 1 (yes) to extended disk data management if you specify 1 (yes) to extended index data management. Six K bytes of user storage are used for extended index data management. For more information on extended index data management, refer to I-File support in the *Concepts and Design Guide*.

8.1 SSP Feature Support II

8.1 SSP Feature Support II

- | | | | | | |
|----|--------------------------------------|-------|--------|-----------|-------|
| 1. | Dump file analysis? | (0-No | 1-Yes) | | _____ |
| 2. | Subconsole support? | (0-No | 1-Yes) | | _____ |
| 3. | User access to spool file? | (0-No | 1-Yes) | | _____ |
| 4. | I-Exchange? | (0-No | 1-Yes) | | _____ |
| 5. | History file scroll? | (0-No | 1-Yes) | | _____ |

If additional support is required (support that was not added at an initial installation or release update) you need only to specify that additional support (by specifying a 1). Support already installed does not need to be copied again (specify 0).

Dump file analysis: The Dump File Analysis (DFA) utility provides the customer engineer a descriptive method of interpreting the contents of a dump file. The DFA procedure causes an option menu to be displayed allowing the customer engineer to select the particular data area to be analyzed. Specify 1 (yes) if you want DFA copied, 0 (no) if not.

Subconsole support: Subconsole support allows command capable display stations specified as subconsoles to control printers assigned to that subconsole. Specify 1 (yes) if you want subconsole support, 0 (no) if not. Subconsole support must be specified:

- During an option 1, when a work station member containing subconsoles is specified or
- Prior to option 4 when a work station member containing subconsoles is specified

The work stations designated as subconsoles will not function as subconsoles until you specify 1 (yes) to this prompt.

User access to spool file: This function provides a method of copying one or more spool file entries to a user file on disk. Specify 0 (no) if spooling is not supported or not active. Specify 1 (yes) if you want this function with print spooling.

I-Exchange: You must specify 1 (yes) if you want the support copied that allows the transfer of disk files to I exchange diskette files or I exchange diskette files to disk files. Specify 0 (no) if you do not want the I exchange support copied.

History file scroll: The history file scroll function allows you to view a formatted copy of your history file entries from the display station by using the HISTCRT procedure. Specify 1 (yes) if you want to copy the HISTCRT procedure to the system library, 0 (no) if not. For more information on the history file scroll function, refer to the HISTCRT procedure in the *System Support Reference Manual*.

8.2 SSP Support for Program Products

8.2 SSP Support for Program Products

- | | | | | | |
|----|---|-------|--------|-----------|-------|
| 1. | Overlay linkage editor? | (0-No | 1-Yes) | | _____ |
| 2. | COBOL execution time support? | (0-No | 1-Yes) | | _____ |
| 3. | FORTRAN execution time support? | (0-No | 1-Yes) | | _____ |
| 4. | Checkpoint/restart? | (0-No | 1-Yes) | | _____ |

If additional support is required (support that was not added at an initial installation or release update) you need only to specify that additional support (by specifying a 1). Support already installed does not need to be copied again (specify 0).

Overlay linkage editor: You must specify 1 (yes) to overlay linkage editor if you plan to install the COBOL program product, Basic Assembler program product, or the FORTRAN IV program product. If you specify 1 (yes), the overlay linkage editor is copied to the system library from the diskette(s) that contains the optional program additions.

COBOL execution time support: You must specify 1 (yes) for the COBOL execution time support if you plan to execute COBOL programs or install the COBOL program product.

FORTRAN execution time support: You must specify 1 (yes) for the FORTRAN execution time support if you plan to execute a FORTRAN IV program or install the FORTRAN IV program product.

Checkpoint/restart: You must specify 1 (yes) to the checkpoint/restart parameter if the COBOL program product is to be installed and the COBOL RERUN clause is to be used or if the Basic Assembler program product is to be installed and the \$CKPT and \$CKEQ macroinstructions are to be used. For further information on checkpoint/restart, refer to the *System Support Reference Manual*.

To determine how many blocks are needed for the checkpoint record file, refer to *Determining the Checkpoint Record File Size* in Appendix A.

9.0 Communications Support

9.0 Communications Support

- | | | | | | |
|----|--|-------|--------|-----------|-------|
| 1. | BSC support? | (0-No | 1-Yes) | | _____ |
| 2. | MRJE support? | (0-No | 1-Yes) | | _____ |
| 3. | SRJE support? | (0-No | 1-Yes) | | _____ |
| 4. | Secondary SNA/SDLC support? | (0-No | 1-Yes) | | _____ |
| 5. | Remote work station support? | (0-No | 1-Yes) | | _____ |
| 6. | SSP-ICF support? | (0-No | 1-Yes) | | _____ |
| 7. | MLCA support? | (0-No | 1-Yes) | | _____ |
| 8. | Autocall feature support? | (0-No | 1-Yes) | | _____ |

This section allows you to define what communications support you want on your system.

If you have the X.21 hardware feature installed on your system, refer to Appendix D for instructions on installing the X.21 software support.

If additional support is required (support that was not added at an initial installation or release update) you need only to specify that additional support (by specifying a 1). Support already installed does not need to be copied again (specify 0).

BSC support: This parameter allows you to indicate whether you plan to have RPG II or basic assembler BSC support on your system. If you specify 1 (yes), all necessary BSC support is copied to the system library from the diskette(s) that contains the optional program additions.

Note: See the *Data Communications Reference Manual* for more information about BSC.

MRJE support: This parameter allows you to select MRJE (MULTI-LEAVING¹ remote job entry) if you plan to have BSC-MRJE on your system. If you specify 1 (yes), all necessary MRJE support is copied to the system library from the diskette(s) that contains the optional program additions.

Note: It is not necessary to select BSC for MRJE support. When you select MRJE, all necessary support is included.

SRJE support: This parameter allows you to select SRJE (SNA remote job entry) if you plan to have SRJE on your system. If you specify 1 (yes), the SRJE support is copied to the system library from the diskette(s) that contains the optional program additions.

SRJE requires that the secondary SNA/SDLC support be present on the system.

Secondary SNA/SDLC support: This parameter allows you to indicate whether you want secondary SNA/SDLC support on your system. If you specify 1 (yes), the secondary SNA/SDLC support is copied to the system library from the diskette that contains the optional program additions. If 1 (yes) is specified, display 10.0, SNA/SDLC Parameters, will be presented.

Note: You must respond yes if SRJE has been specified.

¹Trademark of IBM

Remote work station support: This parameter allows you to indicate whether you want remote work station support on your system. If you specify 1 (yes), the remote work station support is copied to the system library from the diskette(s) that contains the optional program additions. Note that the remote work station support must be copied before any remote work stations can be used.

Note: It is not necessary to select SNA/SDLC for remote work station support.

SSP-ICF support: You must specify 1 (yes) if you intend to have the Interactive Communications Feature on your system. If you specify yes, the general SSP-ICF support will be copied to the system library from the diskette(s) that contains the optional program additions. This support includes the CNFIGICF procedure which is used to configure the individual subsystems. If you specify 1 (yes), display 9.2 SSP-ICF communications support will be displayed. On display 9.2, specify the communications necessary for the subsystems you plan to install. The minimum main storage required to run this support with communications and multiprogramming is 64 K bytes. Support for communications between programs residing in the same System/34 (intra support) will run in 48 K bytes of main storage. The SSP-ICF subsystems are copied using the INSTALL procedure. Refer to Chapter 9. *Installation and Configuration of the Interactive Communications Feature* for a discussion on installing the Interactive Communications Feature.

Note: It is not necessary to select BSC or SNA/SDLC from this section for interactive communications.

MLCA support: If you have the multiline communications adapter on your system, specify 1 (yes). If you specify 1 (yes), the support for the multiline communications adapter is copied to the system library.

Autocall feature support: If you have the Autocall feature on your system, specify 1 (yes). If you specify 1 (yes) to this prompt, you must have specified 1 (yes) to MLCA support. If you specify 1 (yes), the support for the Autocall feature is copied to the system library.

9.2 SSP-ICF Communications Support

9.2 SSP-ICF Communications Support	
1.	BSC support – IMS, BSCEL, CICS, CCP (0-No 1-Yes) _____
2.	BSC support – 3270 (0-No 1-Yes) _____
3.	SNA support – 3270 (0-No 1-Yes) _____
4.	SNA support – SNA upline facility (0-No 1-Yes) _____
5.	SNA support – Peer (0-No 1-Yes) _____
6.	SDLC support – Finance (0-No 1-Yes) _____

You should fill out this section of the planning chart only if 1 (yes) was specified for SSP-ICF support in the previous section. This section allows you to define the communications support necessary for the subsystems you plan to install.

Note: If you require support in addition to support added at an initial installation or release update, you need only specify that additional support (by specifying a 1). Support already installed does not need to be specified again (specify 0).

BSC support—IMS, BSCEL, CICS, CCP: If you plan to install the BSC IMS/IRSS, BSCEL, BSC, CICS, or the BSC CCP subsystem, specify 1 (yes) for this parameter. By specifying 1 (yes), the BSC support necessary for these subsystems is copied to the system.

BSC support—3270 If you plan to install the BSC 3270 subsystem, specify 1 (yes) for this parameter. By specifying 1 (yes), the BSC support necessary for the BSC 3270 subsystem is copied to the system.

SNA support—3270: If you plan to install the SNA 3270 subsystem, specify 1 (yes) for this parameter. By specifying 1 (yes), the SNA support necessary for the SNA 3270 subsystem is copied to the system.

SNA support—SNA upline facility: If you plan to install the SNA upline facility subsystem, specify 1 (yes) for this parameter. By specifying 1 (yes), the SNA support necessary for the SNA upline facility subsystem is copied to the system.

SNA support—Peer: If you plan to install the SNA Peer subsystem, specify 1 (yes) for this parameter. By specifying 1 (yes), the SNA support necessary for the SNA Peer subsystem is copied to the system.

SDLC support—Finance: If you plan to install the Finance subsystem, specify 1 (yes) for this parameter. If 1 (yes) is specified, the SDLC support necessary for the Finance subsystem is copied to the system.

10.0 SNA/SDLC Parameters

10.0 SNA/SDLC Parameters		Line	1	2	3	4
1.	Station address? (Two hexadecimal digits) . .	_____	_____	_____	_____	_____
2.	Exchange ID? (Five hexadecimal digits) . .	_____	_____	_____	_____	_____
3.	Logical unit mode? (A-Single B-Multiple) . .	_____	_____	_____	_____	_____
4.	Receive data buffers?	_____	_____	_____	_____	_____
5.	Transmit data buffers?	_____	_____	_____	_____	_____
6.	Switch type? . . . (A-Auto answer B-Manual answer . . . C-Manual call D-Autocall)	_____	_____	_____	_____	_____

Refer to the *Data Communications Reference Manual* for further information on SNA/SDLC parameters.

Station address: The secondary SDLC station address is the means by which a physical unit (communication line) on the System/34 is known to the network control program (NCP) or primary station. It is by this address that the SDLC hardware determines that data is destined for its station. You must specify 2 hexadecimal characters for each line configured. The default is C1.

Exchange ID: A character sequence that uniquely identifies a particular secondary station to the primary station at a link level. This is required primarily for use on switched networks to provide station identification. You must specify 5 hexadecimal characters for each line configured. The default is AAAAA.

Note: The value specified must be the same as that specified for the IDNUM parameter in the PU (physical unit) statement of the switched mode definition at the host.

Logical unit mode: Single logical unit mode indicates to the SNA task that System/32 mode of operation is desired or that only one program will be using the SNA/SDLC capability and SIMLOGON messages may be received from the primary station. Multiple logical unit mode indicates there will be multiple users of the SNA task and that SIMLOGON messages from the primary are not allowed. You must specify A (single) or B (multiple) for each line configured, with the default being A-single.

Receive data buffers: The number of SDLC receive buffers to be allocated from nonswappable main storage to be used for all active programs. This number should be the sum of the buffer requirements for all planned concurrent active sessions and should be calculated based on the host's receive pacing count (n) expected for each session. The number of receive buffers should equal $2n + 1$ for each session. The default value is 007.

Transmit data buffers: The number of transmit buffers to be allocated from nonswappable main storage to be used by all active programs. The default value is 007.

Note: Each receive and transmit buffer is 272 bytes in length.

Switch type: For switched line connections between the secondary physical unit and the primary station, it is necessary to specify the switch type for the System/34. The type can be auto answer, manual call, manual answer, or autocal. The prompts do not appear if your communications lines are nonswitched.

Install

This portion of the planning chart contains questions regarding program product installation, PTFs (program temporary fixes), and backup.

System/34 Installation Planning Chart

Install	1 Installation—Utilities			
	Number of utility diskettes furnished (1 or 4) _____			
	1.	DFU—Data File Utility	(0-No 1-Yes)	_____
	2.	Sort—Sort Utility	(0-No 1-Yes)	_____
	3.	WSU—Work Station Utility	(0-No 1-Yes)	_____
	4.	SEU—Source Entry Utility	(0-No 1-Yes)	_____
2 Installation—Languages				
1.	RPG—RPG II	(0-No 1-Yes)	_____	
2.	ASM—Assembler	(0-No 1-Yes)	_____	
3.	FORT—FORTRAN	(0-No 1-Yes)	_____	
4.	COBL—COBOL	(0-No 1-Yes)	_____	
5.	BASIC—BASIC	(0-No 1-Yes)	_____	
3 Installation—SSP-Interactive Communications Feature				
1.	Intra	(0-No 1-Yes)	_____	
3.	BSCEL	(0-No 1-Yes)	_____	
5.	BSC CCP	(0-No 1-Yes)	_____	
7.	SNA Peer	(0-No 1-Yes)	_____	
9.	SNA 3270	(0-No 1-Yes)	_____	
2.	BSC IMS/IRSS	(0-No 1-Yes)	_____	
4.	BSC CICS	(0-No 1-Yes)	_____	
6.	SNA Upline	(0-No 1-Yes)	_____	
8.	BSC 3270	(0-No 1-Yes)	_____	
10.	Finance	(0-No 1-Yes)	_____	
4 Installation—Program Products				
1.	B3270—BSC 3270 Emulation	(0-No 1-Yes)	_____	
2.	S3270—SNA 3270 Emulation	(0-No 1-Yes)	_____	
Installation—PTFs and Backup				
1.	Apply PTFs	(0-No 1-Yes)	_____	
2.	Backup considerations:			
	Back up Library (0-No 1-Yes)	Initialize Diskettes (0-No 1-Yes)	Number of Diskettes Required	
	_____	_____	_____	
	Utilities	_____	_____	
	SSP (#LIBRARY)	_____	_____	
	RPG library	_____	_____	
	ASM library	_____	_____	
	FORTTRAN library	_____	_____	
	COBOL library	_____	_____	
	BASIC library	_____	_____	
	BSC 3270 library	_____	_____	
	SNA 3270 library	_____	_____	

Installation Displays Overview (INSTALL Procedure)

You add program products and features to your system by running the INSTALL procedure, which initiates the following installation displays. The Install portion of the planning chart contains questions that are asked on the displays. By filling in the chart, you can easily answer the questions on the displays. Specify only those program products and features that you had previously ordered. You will not have any diskettes for support that you did not previously order.

**** 1 INSTALLATION-UTILITIES **** W1
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:

NUMBER OF UTILITIES DISKETTES FURNISHED (1 OR 4)		4
1. DFU - DATA FILE UTILITY	(0-NO 1-YES)	0
2. SORT - SORT UTILITY	(0-NO 1-YES)	0
3. WSU - WORK STATION UTILITY	(0-NO 1-YES)	0
4. SEU - SOURCE ENTRY UTILITY	(0-NO 1-YES)	0
5. SDA - SCREEN DESIGN AID	(0-NO 1-YES)	0

**** 2 INSTALLATION-LANGUAGES **** W1
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:

1. RPG - RPG II	(0-NO 1-YES)	0
2. ASM - ASSEMBLER	(0-NO 1-YES)	0
3. FORT - FORTRAN	(0-NO 1-YES)	0
4. COBL - COBOL	(0-NO 1-YES)	0
5. BASIC - BASIC	(0-NO 1-YES)	0

**** 3 INSTALLATION-SSP-INTERACTIVE COMMUNICATIONS FEATURE **** W1
KEY ANY CHANGES 0-NO 1-YES AND PRESS ENTER TO CONTINUE:

1. INTRA	0	2. BSC IMS/IRSS	0
3. BSCCL	0	4. BSC CICS	0
5. BSC CCP	0	6. SNA UPLINE	0
7. SNA PEER	0	8. BSC 3270	0
9. SNA 3270	0	10. FINANCE	0

**** 4 INSTALLATION-PROGRAM PRODUCTS **** W1
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:

1. B3270 - BSC 3270 EMULATION	(0-NO 1-YES)	0
2. S3270 - SNA 3270 EMULATION	(0-NO 1-YES)	0

1 Installation-Utilities

1 Installation-Utilities	
Number of utility diskettes furnished (1 or 4)	_____
1. DFU—Data File Utility (0-No 1-Yes)	_____
2. Sort—Sort Utility (0-No 1-Yes)	_____
3. WSU—Work Station Utility (0-No 1-Yes)	_____
4. SEU—Source Entry Utility (0-No 1-Yes)	_____
5. SDA—Screen Design Aid (0-No 1-Yes)	_____

Specify whether the Utilities Program Product is contained on four 1 type diskettes or one 2D type diskette.

Following is a list of the utilities available to you if you ordered the Utilities Program Product:

1. DFU The data file utility function of the System/34 Utilities Program Product
2. SORT The sort function of the System/34 Utilities Program Product
3. WSU The work station utility function of the System/34 Utilities Program Product
4. SEU The source entry utility function of the System/34 Utilities Program Product
5. SDA The screen design aid function of the System/34 Utilities Program Product

The utilities selected for installation are copied to the system library. You will be prompted for the appropriate diskettes as they are needed. Refer to the *Planning Guide* for a description of each of the utilities.

2 Installation-Languages

2 Installation-Languages	
1. RPG-RPG II	(0-No 1-Yes) _____
2. ASM-Assembler	(0-No 1-Yes) _____
3. FORT-FORTRAN	(0-No 1-Yes) _____
4. COBL-COBOL	(0-No 1-Yes) _____
5. BASIC-BASIC	(0-No 1-Yes) _____

Following is a list of the programming languages available for System/34.

1. RPG The RPG II compiler and linkage editor are copied to a library named #RPGLIB, if selected.
2. ASM (Basic Assembler) The assembler, assembler macro instructions, and macroprocessor are copied to a library named #ASMLIB, if selected.
3. FORT (FORTRAN IV) The FORTRAN IV compiler is copied to a library named #FORTLIB, if selected.
4. COBL (COBOL) The COBOL compiler is copied to a library named #COBLIB, if selected.
5. BASIC The BASIC edit and execution modules are copied to a library named #BLLIB, if selected.

Assembler, FORTRAN IV, and COBOL require some optional SSP support for installation and proper execution. If you select one of these three languages and you did not copy the required SSP support to the system library during CNFIGSSP, you are prompted for the support by the install procedure. An example of the display follows:

```

** 8.2 CONFIGURATION-SSP SUPPORT FOR PROGRAM PRODUCTS **           W1
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:

1. OVERLAY LINKAGE EDITOR?      (0-NO 1-YES)    1
2. COBOL EXECUTION TIME SUPPORT? (0-NO 1-YES)  1
3. FORTRAN EXECUTION TIME SUPPORT? (0-NO 1-YES) 1

PROGRAM PRODUCTS SELECTED REQUIRE THE ABOVE SSP SUPPORT

```

You will be prompted for the appropriate diskettes as they are needed. If you have the diskette magazine drive and use diskette 1 type diskettes, insert each diskette into slot S1 as prompted. Slot S1 should always be used when installing the language program products.

3 Installation-SSP-Interactive Communications Feature

3 Installation-SSP-Interactive Communications Feature		
1. Intra	(0-No 1-Yes) _____	2. BSC IMS/IRSS . . . (0-No 1-Yes) _____
3. BSC EL	(0-No 1-Yes) _____	4. BSC CICS (0-No 1-Yes) _____
5. BSC CCP	(0-No 1-Yes) _____	6. SNA Upline (0-No 1-Yes) _____
7. SNA Peer	(0-No 1-Yes) _____	8. BSC 3270 (0-No 1-Yes) _____
9. SNA 3270	(0-No 1-Yes) _____	10. Finance (0-No 1-Yes) _____

Do not fill out this section unless you plan to have SSP-ICF support on your system.

The following is a list of the SSP-ICF subsystems available for System/34:

1. Intra
2. BSC IMS/IRSS
3. BSC EL
4. BSC CICS
5. BSC CCP
6. SNA Upline
7. SNA Peer
8. BSC 3270
9. SNA 3270
10. Finance

If you select any of these subsystems, they are copied to the system library.

All the subsystems, except Intra, require some communications support for installation and execution. If you select one of these subsystems and you did not copy the required communications support to the system library during CNFIGSSP, you are prompted for the support by the install procedure. An example of the display follows:

```

** 9.2 CONFIGURATION-SSP-ICF COMMUNICATIONS SUPPORT **
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:

1. BSC SUPPORT - IMS, BSC EL, CICS, CCP      (0-NO 1-YES)    0
2. BSC SUPPORT - 3270                        (0-NO 1-YES)    0
3. SNA SUPPORT - 3270                        (0-NO 1-YES)    0
4. SNA SUPPORT - SNA UPLINE FACILITY         (0-NO 1-YES)    0
5. SNA SUPPORT - PEER                        (0-NO 1-YES)    0
6. SDLC SUPPORT - FINANCE                    (0-NO 1-YES)    0
    
```

4 Installation-Program Products

4	Installation-Program Products
1.	B3270-BSC 3270 Emulation (0-No 1-Yes) _____
2.	S3270-SNA 3270 Emulation (0-No 1-Yes) _____

Do not fill out this section unless you plan to have SSP-ICF support on your system.

Following is a list of the versions available to you for the 3270 Device Emulation Program Product. You may select either the BSC version or the SNA version, or both versions:

B3270 BSC 3270 device emulation runs under the control of the System/34 SSP. The Interactive Communications Feature must be on the system and, specifically the BSC 3270 subsystem must be configured and active to run the BSC 3270 device emulation program. If you select this support, it is copied to #EM71LIB.

S3270 SNA 3270 device emulation runs under the control of the System/34 SSP. The Interactive Communications Feature must be on the system and, specifically, the SNA 3270 subsystem must be configured and active to run the SNA 3270 device emulation program. If you select this support, it is copied to #ES74LIB.

You must have Work Station Control Feature A or B to use 3270 device emulation. When using a System/34 with the 3270 Device Emulation Program Product to communicate with a host, you should notify the host operation's group that a System/34 is being used as a 3270.

Installation—PTFs and Backup

Installation—PTFs and Backup			
1. Apply PTFs (0-No 1-Yes) _____			
2. Backup considerations:			
Program Product	Back up Library (0-No 1-Yes)	Initialize Diskettes (0-No 1-Yes)	Number of Diskettes Required
Utilities	_____	_____	_____
SSP (#LIBRARY)	_____	_____	_____
RPG library	_____	_____	_____
ASM library	_____	_____	_____
FORTRAN library	_____	_____	_____
COBOL library	_____	_____	_____
BASIC library	_____	_____	_____
BSC 3270 library	_____	_____	_____
SNA 3270 library	_____	_____	_____

Indicate which program products you would like to back up. You will be prompted to initialize diskettes for those you intend to back up.

Indicate whether you wish to apply PTFs to the program products you intend to install. If you specify 1 (yes), you will need a PTF diskette. There will be only one prompt for PTF application. PTFs will be applied to all program products that you install. If you do not have a PTF diskette or for some reason you do not want some PTFs installed, specify 0 (no) to the prompt and apply PTFs later using the APPLYPTF procedure. For further information on the APPLYPTF procedure, see *APPLYPTF Procedure* in Appendix B.

DISKETTES REQUIRED FOR SOFTWARE INSTALLATION

The diskettes required to perform software installation and configuration are:

- The PID (Program Information Department) distribution diskettes that contain the base SSP.
- PID distribution diskettes that contain the optional SSP programs.
- PID distribution diskettes that contain any other program products and features ordered.
- If needed, a diskette that contains PTFs (program temporary fixes) for the SSP and other program products. This diskette is called the master PTF diskette. If this diskette is required, it is provided by the IBM customer engineer.

Diskettes should be available to:

- Back up the program products and features installed
- Back up the SSP with optional SSP and Utilities Program Product installed (system library)
- Back up your files, libraries, and programs

PID Diskette Packaging

The PID (Program Information Department) diskettes are either diskette 1 type diskettes using the 512-byte-per-sector format or diskette 2D type diskettes using the 1024-byte-per-sector format. The following table indicates how the program product diskettes are packaged when you receive them from PID:

Program Product	Volume Sequence Number		Volume ID
	Diskette 1	Diskette 2D	
SSP base	1, 2, 3, 4, 5	1, 2	PID001
SSP optional	5, 6, 7, 8, 9, 10	2, 3	PID001
Utilities ¹	1, 2, 3, 4	1	PPUTIL
RPG II	1, 2	1	RPGRPG
Basic Assembler	1, 2	1	PPASM
FORTRAN IV	1	1	PPFORT
COBOL	1, 2	1	PPCOBL
BASIC	1, 2	1	PPBA1
SSP-ICF ²	1	1	PPICF
3270 Device Emulation	1	1	PPEM1
Finance	1	1	PPSFS

¹The Utilities Program Product consists of DFU (Data File Utility), Sort, WSU (Work Station Utility), SEU (Source Entry Utility), and SDA (Screen Design Aid).

²The Interactive Communications Feature contains SSP-ICF control and consists of the following subsystems: Intra, BSC IMS/IRSS, BSCCL, BSC CICS, BSC CCP, BSC 3270, SNA 3270, SNA Upline, SNA Peer.

PREPARING TO INSTALL PROGRAM PRODUCTS AND FEATURES

Before installing any program products and features, you should:

- Have enough diskettes to contain backup copies of each installed program product and feature.
- Have determined how much the system library must be expanded to contain the program products and features. The program product utilities that are placed in the system library are DFU, sort, WSU, SEU, and SDA. Also, the SSP-ICF subsystems (Intra, BSC EL, BSC CCP, BSC IMS/IRSS, BSC CICS, BSC 3270, SNA 3270, SNA Upline, SNA Peer, and Finance) are placed in the system library. See *Library Requirements* in Appendix A to determine how much the system library must be expanded to contain additional program products and features. RPG II, basic assembler, FORTRAN IV, COBOL, BASIC, and 3270 Device Emulation Program Products each allocate their own libraries.
- Obtain the PTF diskette, if applicable.

Chapter 3. Initial SSP Installation Steps

Use the following steps for initial installation.

1. Gather your planning information and materials:
 - a. A completed planning chart and work station network diagrams
 - b. SSP PID diskettes
 - c. Sufficient number of diskettes for backup use

Note: If the microcode installed on your system is not the proper level for your SSP, the microcode update diskette may be used (beginning with release 6 microcode) to update the current level of microcode. Perform step 1 in the Implementation section of Chapter 4 to update the microcode, then return to step 2 of this chapter.

2. Load the first diskette:
 - a. Insert the first SSP PID distribution diskette.
 - b. Set the MSIPL switch on the CE panel to the Diskette position. (The CSIPL switch should be set to the Disk position.)
 - c. Press the Load switch on the system unit.
 - d. The following message is displayed:

ERROR IN SSP-MUST DELETE FILES FROM VTOC

Note: This error message occurs because the disk is checked for a VTOC and, at this time, there is no VTOC. This message occurs before the initial Reload display.

- e. Ignore the message, press the Enter/Rec Adv key, and the following message is displayed with the initial Reload display:

CAUTION, FILE DELETION REQUEST RECEIVED

3. The Reload display appears. You cannot use the Print key to record the Reload display data. The Print key is not supported by Reload.
 - a. Using your planning chart, enter the values and responses requested on the Reload display. (The total-system-blocks-used value is supplied by the system.) Keep your planning chart for future reference.
 - b. Press the Enter/Rec Adv key to continue.

Note: As long as Reload display parameters are being changed and you press the Enter/Rec Adv key once, the Reload display continues to appear. You must make your last change and press the Enter/Rec Adv key twice to initiate reloading of the system library.

4. Load the remaining SSP PID distribution diskettes:
 - a. Insert each SSP PID diskette as prompted.
 - b. Press the Enter/Rec Adv key after inserting each diskette. After each diskette (except the last one) is copied to disk, the following display appears:

PRESS ENTER TO CONTINUE

INSERT DISKETTE VOLUME WITH
FILE LABEL - #LIBRARY
FILE DATE - 730116
SEQUENCE NUMBER - 00N

SYS-3907 END OF VOLUME--INSERT NEXT DISKETTE

5. When the last PID diskette is copied to disk, the following display appears:

PRESS ENTER TO CONTINUE

REMOVE DISKETTE VOLUME

Remove the PID diskettes.

6. Press the Enter/Rec Adv key and the following display appears:

```
RELOAD COMPLETED---IPL FROM DISK REQUIRED
```

7. Return the MSIPL switch to the Disk position and perform a system IPL (press the Load switch). The following display appears:

```
IPL SIGN ON
```

```
USER ID.....  
MENU (OPTIONAL).....  
LIBRARY.....  
DATE (YYMMDD).....  
TIME (HHMMSS).....  
OVERRIDES? (Y,N)....N
```

8. Sign on the system:
 - a. Enter the user ID, the system date, and the system time.
 - b. To print all of the system configuration commands and messages that follow on the system printer, you must use single program mode. If you want these commands and messages to print, specify Y (yes) to the overrides parameter. If you do not want these commands and messages to print, specify N (no) to the overrides parameter.
 - c. Press the Enter/Rec Adv key. (For more information about signing on, see the *System/34 Operator's Guide*.)

9. The IPL File Rebuild display appears:

```
IPL FILE REBUILD-SYSTEM OPTIONS

1. EXAMINE AND VERIFY THE DISK VTOC? (Y,N)  Y
2. DELETE FILES IN ERROR?             (Y,N)  N
3. EXAMINE OLD FILES ALSO?            (Y,N)  Y
4. DISPLAY FILE LABELS IN ERROR?      (Y,N)  Y
```

Press the Enter/Rec Adv key. If you specified N (no) to the overrides parameter on the sign on display, go to step 12. If you specified Y (yes), go to the next step.

10. The IPL Overrides-General System Parameters display appears:

```
IPL OVERRIDES-GENERAL SYSTEM PARAMETERS

1. DATE FORMAT          (A,B,C)      C
   A=DDMMYY  B=MMDDYY  C=YYMMDD

2. SINGLE PROGRAM MODE  (Y,N)        N

3. STARTUP PROCEDURE NAME
```

- a. Reply Y (yes) to item 2, single program mode.
- b. Press the Enter/Rec Adv key to each of the IPL Overrides displays that follow until the Command display appears.

11. The Command display appears:

```
COMMAND W1

ENTER COMMAND OR OCL STATEMENT <- READY
```

a. Enter:

LOG PRINTER

b. Press the Enter/Rec Adv key.

Note: Entry of LOG PRINTER on the Command display causes all system configuration commands and messages to be printed on the system printer as a record of actions taken during system configuration. You can print each system configuration display also; to do so, press the Print key for each display. When the display is printed, press the Error Reset key and then the Enter/Rec Adv key to continue. The PID diskettes have a print belt source member of BELT48. If your print belt differs, use the SET command to alter the print belt image for your work station before using the Print key (see the SET command in the *System Support Reference Manual*).

14. Display 2.0, Create/Edit Work Station Parameters, appears:

```
CREATE/EDIT                ** 2.0 WORK STATION PARAMETERS **           W1
  1. ENTER WORK STATION PARAMETER MEMBER NAME :   SYSCNFG
    SELECT:
      1. CREATE NEW MEMBER
      2. EDIT EXISTING MEMBER
      3. CREATE MEMBER FROM CURRENT WORK STATION CONFIGURATION
  2. ENTER SELECTION:      1

CMD KEY 5 - VERIFY      ENTER- CONTINUE          CMD KEY 19 - CANCEL
```

- a. Enter a library member name (up to 8 alphanumeric characters).
- b. Select option 1.
- c. Press the Enter/Rec Adv key.

15. Display 2.1, Work Station Configuration Options, appears:

```
                ** 2.1 WORK STATION CONFIGURATION OPTIONS **           W1
  1. CONFIGURE REMOTE WORK STATIONS ?           (0-NO 1-YES) 1
  2. REMOTE WORK STATIONS SUPPORT SWAPPABLE ?   (0-NO 1-YES) 1
  3. NUMBER OF LOCAL WORK STATIONS (0-LOCALS 1-8 1-LOCALS 9-16) 0

CMD KEY 5 - VERIFY      ENTER - CONTINUE          CMD KEY 19 - CANCEL
```

- a. Enter 0 if you do not want remote work station support. Enter 1 if you do want remote work station support.
- b. Enter 1 if you want your remote work station support swappable, 0 if you do not.
- c. Enter 0 if you have from 1 to 8 local work stations specified on your local work station network diagram. Enter 1 if you have from 9 to 16 local work stations specified.
- d. Press the Enter/Rec Adv key.

16. If you responded with a 0 (no) to remote work station support, go to step 17. If you responded with a 1 (yes) to remote work station support, display 2.2, Remote Work Station Line Configuration, appears:

** 2.2 REMOTE WORK STATION LINE CONFIGURATION **						WI
SPECIFY:		LINE #:	1	2	3	4
1. REMOTE LINE USE:	(0-NO 1-YES)		1	0	0	0
2. REMOTE LINE SWITCHED:	(0-NO 1-YES)		0	0	0	0
3. SWITCH TYPE:	(0-NONE 1-MANUAL CALL 2-AUTO ANSWER 3-MANUAL ANSWER)		0	0	0	0
4. SLOW POLLING:	(0-NO 1-YES)		0	0	0	0
CMD KEY 5-VERIFY		ENTER- CONTINUE	CMD KEY 19 - CANCEL			

- Indicate your line usage by entering a 1 (yes) in the proper column(s).
- Indicate if the remote line is switched by entering a 1 (yes) in the proper column(s).
- Specify the type of line switch you want for your remote work stations. This entry must be 0 for a nonswitched line.
- Indicate if you want slow polling by entering a 1 (yes) in the proper column(s).
- Press the Enter/Rec Adv key.

17. Display 2A, Local Work Station Configuration, appears:

2A LOCAL WORK STATION CONFIGURATION								W1
1. LOGICAL ID:	W1	W2	P2	W3	P3	W4	W5	P1
2. DEVICE TYPE:	D	D	2P	D	P	D	D	L
3. UNIT ADDRESS:	00	11	10	22	21	20	30	
4. ATTRIBUTE:	S	A		C		E	D	S
5. DEFAULT PRINTER:	P1	P2		27		P3	27	

CMD KEY 4/ENTER - CHANGE SETS CMD KEY 5 - VERIFY ROLL KEYS - PAGING
 CMD KEY 9 - END CMD KEY 19 - CANCEL HELP - DEFINITIONS

- a. Define your configuration on this display according to the configuration you defined on your Local Work Station Network Diagram.
- b. If you want to specify any of the following support, press the Roll Up key:
 - 960-character display
 - Magnetic stripe reader
 - Language group different from the default (0-Multilingual set)
 - Subconsole IDs
 - Lines per inch (5224 Printer and 5225 Printer only)
 - Resident writer (spooling)
 - Priority (spooling)
 - Separator pages (spooling).

Otherwise, select one of the following:

- If 9 to 16 local work stations are to be configured, press the Enter/Rec Adv key and repeat steps 17 through 20.
- If remote work station support was not specified, press command key 9 and go to step 26.
- If remote work station support was specified, press the Enter/Rec Adv key and go to step 21.

18. Display 2B, Local Work Station Configuration, appears:

2B LOCAL WORK STATION CONFIGURATION								
1. LOGICAL ID:	W1	W2	P2	W3	P3	W4	W5	P1
2. DEVICE TYPE:	D	D	2P	D	P	D	D	L
6. SCREEN SIZE:	1	1		1		1	1	
7. MAGNETIC STRIPE:	0	0		0		0	0	

CMD KEY 4/ENTER - CHANGE SETS CMD KEY 5 - VERIFY ROLL KEYS - PCSI
CMD KEY 9 - END CMD KEY 19 - CANCEL HELP - DEFINITIO

- a. Enter a 9 for 960-character display; the default is 1 (1920-character display).
- b. Enter a 1 (yes) if you want magnetic stripe reader support; the default is 0 (no).
- c. If you want to specify any of the following support, press the Roll Up key:
 - Language group different from the default (0-Multilingual set)
 - Subconsole IDs
 - Lines per inch (5224 Printer and 5225 Printer only)
 - Resident writer (spooling)
 - Priority (spooling)
 - Separator pages (spooling)

Otherwise, select one of the following:

- If 9 to 16 local work stations are to be configured, press the Enter/Rec Adv key and repeat steps 17 through 20.
- If remote work station support was not specified, press command key 9 and go to step 26.
- If remote work station support was specified, press the Enter/Rec Adv key and go to step 21.

19. Display 2C, Local Work Station Configuration, appears:

```

2C LOCAL WORK STATION                                     W1
CONFIGURATION ** PRINTERS **
  1. LOGICAL ID:           W1 W2 P2 W3 P3 W4 W5 P1
  2. DEVICE TYPE:         D  D 2P D  P  D  D  L
  9. LANGUAGE GROUP #:    0          0
 10. SUBCONSOLE ID:       W1      W4      W1
 11. LINES PER INCH (4,6,8): 6

```

CMD KEY 4/ENTER - CHANGE SETS CMD KEY 5 - VERIFY ROLL KEYS - PAGING
 CMD KEY 9 - END CMD KEY 19 - CANCEL HELP - DEFINITIONS

- a. Enter the language group number, the subconsole IDs, and/or lines per inch you specified on the local work station network diagram.
- b. If you want to specify any of the following support, press the Roll Up key:
 - Resident writer (spooling)
 - Priority (spooling)
 - Separator pages (spooling)

Otherwise, select one of the following:

- If 9 to 16 local work stations are to be configured, press the Enter/Rec Adv key and repeat steps 17 through 20.
- If remote work station support was not specified, press command key 9 and go to step 26.
- If remote work station support was specified, press the Enter/Rec Adv key and go to step 21.

20. Display 2E, Local Work Station Configuration, appears:

```

2E LOCAL WORK STATION                                     W1
CONFIGURATION ** SPOOL **
  1. LOGICAL ID:           W1 W2 P2 W3 P3 W4 W5 P1
  2. DEVICE TYPE:         D  D 2P D  P  D  D  L
 15. RESIDENT WRITER:    0          0          1
 16. PRIORITY:           1          0          1
 17. SEPARATOR PAGES:    3          3          3

```

CMD KEY 4/ENTER - CHANGE SETS CMD KEY 5 - VERIFY ROLL KEYS - PAGING
 CMD KEY 9 - END CMD KEY 19 - CANCEL HELP - DEFINITIONS

- a. Enter the resident writers, priority, and separator pages values for your work station printers. Obtain the values from the local work station network diagram.
- b. If remote work station support was not specified, and:
 - You have no more local work stations to configure, press command key 9 and go to step 26.
 - You have 9 to 16 local work stations to configure, press the Enter/Rec Adv key and repeat steps 17 through 20.

If remote work station support was specified, press the Enter/Rec Adv key.

21. Display 2A, Remote Work Station Configuration, appears:

2A REMOTE WORK STATION CONFIGURATION	CONTROLLER LOGICAL ID STATION ADDRESS	C01 01	W1
	LINE # 1	ALTERNATIVE LINE #	
1. LOGICAL ID:	A1 A2 P3		
2. DEVICE TYPE:	D D P		
3. UNIT ADDRESS:	00 02 03		
4. ATTRIBUTE:	C C		
5. DEFAULT PRINTER:	F1 P3		
CMD KEY 4/ENTER - CHANGE SETS	CMD KEY 5 - VERIFY	ROLL KEYS - PAGING	
CMD KEY 9 - END	CMD KEY 19 - CANCEL	HELP - DEFINITIONS	

- a. Define your remote work stations on this display according to the configuration you defined on your Remote Work Station Network Diagram.
- b. If you want to specify any of the following support, press the Roll Up key:
 - 960-character displays
 - Magnetic stripe readers
 - Auto online
 - Language group different from the default (0-Multilingual set)
 - Subconsole IDs
 - Lines per inch (5224 Printer and 5225 Printer only)
 - Resident writer (spooling)
 - Priority (spooling)
 - Separator pages (spooling)

Otherwise, go to step 25.

22. Display 2B, Remote Work Station Configuration, appears:

2B REMOTE WORK STATION CONFIGURATION	CONTROLLER LOGICAL ID STATION ADDRESS	C01 01	W1
	LINE # 1	ALTERNATIVE LINE #	
1. LOGICAL ID:	A1 A2 P3		
2. DEVICE TYPE:	D D P		
6. SCREEN SIZE:	1 1		
7. MAGNETIC STRIPE:	0 0		
8. AUTO ONLINE:	1 1 1		
CMD KEY 4/ENTER - CHANGE SETS	CMD KEY 5 - VERIFY	ROLL KEYS - PAGING	
CMD KEY 9 - END	CMD KEY 19 - CANCEL	HELP - DEFINITIONS	

- a. Enter a 9 if you have 960-character displays; the default is 1 (1920-character displays).
- b. Enter a 1 (yes) if you want magnetic stripe reader support; the default is 0 (no).
- c. Enter a 1 (yes) if you want auto online support; the default is 0 (no).
- d. If you want to specify any of the following support, press the Roll Up key:
 - Language group different from the default (0-Multilingual set)
 - Subconsole IDs
 - Lines per inch (5224 Printer and 5225 Printer only)
 - Resident writer (spooling)
 - Priority (spooling)
 - Separator pages (spooling)

Otherwise, go to step 25.

23. Display 2C, Remote Work Station Configuration, appears:

```

2C REMOTE WORK STATION          CONTROLLER LOGICAL ID      C01  W1
CONFIGURATION  ** PRINTERS **  STATION ADDRESS           01
                                LINE # 1  ALTERNATIVE LINE #
1. LOGICAL ID:                   A1  A2  P3
2. DEVICE TYPE:                   D   D   P
9. LANGUAGE GROUP #:              1
10. SUBCONSOLE ID:                W1
11. LINES PER INCH (4,6,8):

CMD KEY 4/ENTER - CHANGE SETS    CMD KEY 5 - VERIFY    ROLL KEYS - PAGING
CMD KEY 9 - END                  CMD KEY 19 - CANCEL  HELP - DEFINITIONS

```

- a. Enter the language group number, subconsole ID, and/or lines per inch you specified on the remote work station network diagram.
- b. If you want to specify any of the following support, press the Roll Up key:
 - Resident writer (spooling)
 - Priority (spooling)
 - Separator pages (spooling)

Otherwise, go to step 25.

24. Display 2E, Remote Work Station Configuration, appears:

```

2E REMOTE WORK STATION          CONTROLLER LOGICAL ID      C01  W1
CONFIGURATION  ** SPOOL **    STATION ADDRESS           01
                                LINE # 1  ALTERNATIVE LINE #
1. LOGICAL ID:                   A1  A2  P3
2. DEVICE TYPE:                   D   D   P
15. RESIDENT WRITER:              0
16. PRIORITY:                     0
17. SEPARATOR PAGES:              1

CMD KEY 4/ENTER - CHANGE SETS    CMD KEY 5 - VERIFY    ROLL KEYS  PAGING
CMD KEY 9 - END                  CMD KEY 19 - CANCEL  HELP - DEFINITIONS

```

- a. Enter the resident writers, priority, and separator pages values for your work station printers. Obtain the values from the local work station network diagram.

25. If you have not configured all of your remote work stations, press the Enter/Rec Adv key and go back to step 21. If you have configured all of your remote work stations, press command key 9.
26. Display 1, System Configuration Menu, appears:
 - a. Select option 1 (full system configuration).
 - b. Press the Enter/Rec Adv key

Note: When option 1 is selected, the following message is displayed:

PARAMETERS THAT AFFECT NUCLEUS SIZE WILL BE RESET
CHOOSE ANOTHER OPTION OR PRESS ENTER TO CONTINUE

This warning message is important during installation of a release update, but has no significance during initial system configuration. Press the Enter/Rec Adv key to continue.

27. The following display appears:

** 2.0 WORK STATION PARAMETERS ** W1

1. ENTER WORK STATION PARAMETER MEMBER NAME : SYSCNFG

CMD KEY 5 - VERIFY ENTER - CONTINUE CMD KEY 19 - CANCEL

- a. Enter your work station library member name (the one you created using option 9 in step 14).
 - b. Press the Enter/Rec Adv key.
28. Reply to the appropriate prompts that appear on the remaining configuration displays according to the entries on your planning chart. They will appear in the following order:

** 3.0 CONFIGURATION-GENERAL PARAMETERS I ** W1

KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:

1. DATE FORMAT	3
(1-DDMMYY 2-MMDDYY 3-YYMMDD)	
2. SINGLE PROGRAM MODE? (0-NO 1-YES)	0
3. STARTUP PROCEDURE NAME	PROCNAME
4. PRINTER DEFAULT FOR RELEASED JOBS?	1
(1-SYSTEM 2-SESSION)	
5. KEEP MESSAGES AT EOJ? (0-NO 1-YES)	0

**** 4.0 CONFIGURATION-GENERAL PARAMETERS II ****

W1

KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:

1. INPUT JOB QUEUE SUPPORT?	(0-NO 1-YES)	1
1A. INPUT JOB QUEUE SIZE	(20-120 JOBS)	020
1B. START INPUT JOB QUEUE?	(0-NO 1-YES)	1
2. HISTORY FILE AUTOMATIC WRAP?	(0-NO 1-YES)	1
2A. OVERFLOW FILE SIZE	(1-8 MULTIPLES)	1
3. PRINT SPOOLING	(0-NO 1-YES)	1

**** 5.0 WORK STATION ENVIRONMENT ****

W1

KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:

1. DEFAULT FORMS ID	0001
2. LINES PER PAGE (1-112)	055
3. LINE PRINTER BELT IMAGE MEMBER NAME	BELT4S
4. LINE PRINTER TRANSLATE TABLE NAME	
5. DEFAULT USER LIBRARY	

**** 6.0 CONFIGURATION-SPOOLING PARAMETERS ****

W1

KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:

1. SPOOL ALL PRINTERS	(0-NO 1-YES)	1
2. SPOOL WRITER BUFFER SIZE	(1-4HK)	2
3. AUTOWRITER	(0-NO 1-YES)	1
4. SPOOL FILE SIZE	(12-12800 BLOCKS)	12
5. SPOOL FILE SEGMENT SIZE	(1-16 BLOCKS)	06
6. SPOOL FILE PREFERRED LOCATION	(1-A1 2-A2)	1

**** 7.0 CONFIGURATION-PERFORMANCE PARAMETERS ****

W1

KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:

1. WORK STATION DATA MANAGEMENT		2
1. RESIDENT		
2. TRANSIENT/RESIDENT		
3. TRANSIENT		
2. WORK STATION BUFFER SIZE	(4-64HK)	04
3. SYSTEM ASSIGN/FREE SIZE	(6-64HK)	10
4. TRACE TABLE SIZE	(16-512 ENTRIES)	512

W1

** 8.0 CONFIGURATION-SSP FEATURE SUPPORT I **

KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:

1. SECURITY SUPPORT?	(0-NO 1-YES)	0
2. HELP SUPPORT?	(0-NO 1-YES)	0
3. SYSTEM MEASUREMENT FACILITY?	(0-NO 1-YES)	0
4. MICR SUBR08?	(0-NO 1-YES)	0
5. MICR SUBR25?	(0-NO 1-YES)	0
6. EXTENDED DISK DATA MANAGEMENT?	(0-NO 1-YES)	0
7. EXTENDED INDEX DATA MANAGEMENT?	(0-NO 1-YES)	0

W1

** 8.1 CONFIGURATION-SSP FEATURE SUPPORT II **

KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:

1. DUMP FILE ANALYSIS?	(0-NO 1-YES)	0
2. SUBCONSOLE SUPPORT?	(0-NO 1-YES)	0
3. USER ACCESS TO SPOOL FILE?	(0-NO 1-YES)	0
4. I - EXCHANGE?	(0-NO 1-YES)	0
5. HISTORY FILE SCROLL?	(0-NO 1-YES)	0

W1

** 8.2 CONFIGURATION-SSP SUPPORT FOR PROGRAM PRODUCTS **

KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:

1. OVERLAY LINKAGE EDITOR?	(0-NO 1-YES)	1
2. COBOL EXECUTION TIME SUPPORT?	(0-NO 1-YES)	1
3. FORTRAN EXECUTION TIME SUPPORT?	(0-NO 1-YES)	1
4. CHECKPOINT/RESTART?	(0-NO 1-YES)	1

W1

** 9.0 CONFIGURATION-COMMUNICATIONS SUPPORT **

KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:

1. BSC SUPPORT?	(0-NO 1-YES)	1
2. MRJE SUPPORT?	(0-NO 1-YES)	1
3. SRJE SUPPORT?	(0-NO 1-YES)	0
4. SECONDARY SNA/SDLC SUPPORT?	(0-NO 1-YES)	0
5. REMOTE WORK STATION SUPPORT?	(0-NO 1-YES)	1
6. SSP-ICF SUPPORT?	(0-NO 1-YES)	0
7. MLCA SUPPORT?	(0-NO 1-YES)	0
8. AUTOCALL FEATURE SUPPORT?	(0-NO 1-YES)	0

**** 9.2 CONFIGURATION-SSP-ICF COMMUNICATIONS SUPPORT ****
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:

- | | | |
|--|--------------|---|
| 1. BSC SUPPORT - IMS, BSCCL, CICS, CCP | (0-NO 1-YES) | 0 |
| 2. BSC SUPPORT - 3270 | (0-NO 1-YES) | 0 |
| 3. SNA SUPPORT - 3270 | (0-NO 1-YES) | 0 |
| 4. SNA SUPPORT - SNA UPLINE FACILITY | (0-NO 1-YES) | 0 |
| 5. SNA SUPPORT - PEER | (0-NO 1-YES) | 0 |
| 6. SDLC SUPPORT - FINANCE | (0-NO 1-YES) | 0 |

**** 10.0 CONFIGURATION-SNA/SDLC PARAMETERS ****
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:

W1

	LINE	1	2	3	4
1. STATION ADDRESS:	(2 HEX DIGITS)	C1	C1	C1	C1
2. EXCHANGE ID:	(5 HEX DIGITS)	AAAAA	AAAAA	AAAAA	AAAAA
3. LOGICAL UNIT MODE:	(A-SINGLE B-MULTIPLE)	A	A	A	A
4. RECEIVE DATA BUFFERS:		007	007	007	007
5. TRANSMIT DATA BUFFERS:		007	007	007	007
6. SWITCH TYPE:	(A-AUTO ANSWER/ B-MANUAL ANSWER/C-MANUAL CALL/D-AUTO CALL)	-	-	-	-

29. Optional SSP:

If you replied yes to any of the optional SSP prompts (CNFIGSSP displays 8.0, 8.1, 8.2, 9.0, and 9.2), you will be prompted to insert an optional SSP diskette.

Note: If your SSP came on diskette 1 type diskettes, optional SSP programs are on volume sequence numbers 5, 6, 7, 8, 9, and 10. If your SSP came on diskette 2D type diskettes, all optional SSP programs are on volume sequence numbers 2 and 3. All the SSP diskettes might not be used, depending upon the configuration options chosen.

30. Apply SSP PTFs:

You will be prompted for application of SSP PTFs. If you have a PTF diskette, reply yes and continue. You will then be prompted to insert the PTF diskette. If you have no PTF diskette or do not desire to apply PTFs, reply no and PTF application is bypassed. PTFs can also be applied using the APPLYPTF command.

31. Decide whether to back up the system library:

You will be prompted for backup of the system library. Reply yes if you wish to back up the library at this time. You will then be prompted for diskettes to be initialized and formatted. If you wish to back up the system library at INSTALL time or some later period, reply no. The backup procedure will be bypassed.

32. The following message is displayed:

**SYSTEM CONFIGURATION COMPLETE
PRESS THE ENTER/REC ADV KEY - THEN IPL FROM DISK**

- a. Make sure that the MSIPL switch on the CE panel is set to the Disk position.
- b. Press the Enter/Rec Adv key and then the Load switch on the system unit to perform IPL; this installs the specified parameters in the system.

33. Verification:

Verify your work station configuration by determining that the system is communicating with your configured work stations.

- a. Press the Sys Req key with the Shift key and then the Enter/Rec Adv key on each configured display station. If the Sign On display appears, the system is communicating with the display station. Remote work stations will need to be varied online if you did not select automatic online.
- b. Sign on at each display station and press the Print key. If the display is printed on the printer(s) assigned to accept output from each display station, the printer(s) is properly configured. If you selected the print spooling function during configuration, the spool writer must be started for the output to be printed.
- c. If you have configured a printer that is not assigned to accept output from a display station, you can verify it by entering:

SET ,,,,, (desired printer id) to set to desired printer
(Press the PRINT key)

SET ,,,,, (configured printer id) to reset to original printer

For example, you want to verify printer P3 from your display station, but printer P2 is the printer assigned to accept output from your display station. To verify printer P3, do the following:

SET ,,,,,P3 (To set to desired printer)

Press the PRINT key

SET ,,,,,P2 (To reset to original printer)

- d. If you complete steps 33a through 33c and find problems, complete steps 33e through 33h.
- e. Verify that the unit addresses you specified on Display 2A, Local Work Station Configuration, and Display 2A, Remote Work Station Configuration, are correct. To do this, enter CNFIGSSP and take option 9 or option 16.
- f. Verify the settings of the Address switches and the setting of the Terminator switch on each work station device. (See the appropriate device setup manuals.)
- g. Check all cable connections for your work station devices to make sure they are properly positioned and tightened.
- h. After any corrections are made, retry the verification steps 33a through 33c for each work station.

If verification of your system is successful, you are ready to install other program products. (See Chapter 6. *Adding Other Program Products.*) If verification of your system is not successful, call your IBM representative.

Chapter 4. Installing a System/34 Release Update

Use the following steps as a guide for installing a System/34 release update. The steps are in three sections: preparing for the release update, implementing the release update, and verifying the release update. A checklist has been provided at the end of this chapter. The checklist can be used as a guide during the release update. It also can be used to ensure that each step has been completed.

Make sure you have the latest edition of this manual when doing your release update. The edition notice located at the front of the manual tells you to which release the manual pertains.

PREPARING FOR THE RELEASE UPDATE

A release update must be done from the system console and takes two to four hours to complete. Nothing else can run on the system during the update.

1. Let your SE (systems engineer) know when you will be doing your update.
2. Let your CE (customer engineer) know:
 - a. When your update is scheduled. There may be PTFs (program temporary fixes) that need to be applied to the release you are about to install.
 - b. If you plan to update the microcode yourself or if you want the CE to update it. If you want the CE to update your microcode, make arrangements with your CE Service Branch Office.

Have your CE update the microcode if you are planning to do any of the following during a release update. These items require additional updating of the microcode that can be done only by the CE:

- Update from a level of microcode that is two or more releases old. For example, updating from microcode release 8 (SSP release 6) to microcode release 10 (SSP release 8).
- Add more main storage to your system. For example, upgrading from 64 K main storage to 128 K main storage.
- Add more disk storage to your system. For example, upgrading from a 27.1 MB disk storage system to a 63.9 MB disk storage system.
- Add a Magnetic Character Reader to your system.
- Add the diskette magazine drive to your system.
- Add a work station expansion feature to your system.
- Change the system console screen size.

- Add a communications line to your system. For example, adding a communications line for the first time or adding another communications line to your system.
- Update the microcode configuration to set any of the following communications line parameters:

Line type (LINE parameter)
 Switched network backup (SLINE parameter)
 Bits-per-second rate (BRATE parameter)
 Programmed clocking facility (CLOCK parameter)
 IBM modem test (TEST parameter)

These parameters can be set temporarily by the ALTERBSC, ALTERSDL, OVERRIDE, and SPECIFY procedures. However, when you reload the system, the specified parameters set by these procedures are reset to the values in the microcode configuration. Therefore, setting the values for these parameters in the microcode configuration will not change them to different values when reloading the system.

- Add the X.21 feature to your system.
- Change or add a line printer (5211/3262). For example, changing from a 5211 Printer to a 3262 Printer.

The most important factor for you to consider, however, is time. If you want the current release on your system sooner than when the CEs are available, you can update your microcode now with the diskette provided by PID. Then when the CEs are available, they can further update the microcode with any changes you desire.

Steps 1 through 9 of this section should be completed prior to loading the microcode update. If you choose to schedule a CE to do your microcode update, figure the time you need to complete steps 1 through 9 into your update schedule.

3. Make sure the input job queue is empty:
 - a. First, enter in console mode:

```
START JOBQ
(S)      (J)
```

- b. Then, to know when all jobs have finished executing from the input job queue, enter in console mode:

```
STATUS  USERS
(D)      (U)
```

4. Make sure the spool file is empty:
 - a. First, enter in console mode:

```
START PRT,,ALL
(S)    (P)
```

- b. Then, to know when all jobs have finished printing from the spool file, enter in console mode:

```
STATUS PRT
(D)    (P)
```

5. Compress the disk.

If you plan to increase the size of the system library (#LIBRARY), task work area, or history file on the Reload display, compress the disk, by entering the following OCL statements from command mode:

```
// LOAD $FREE
// RUN
// COMPRESS DISK-A1, FREE-LOW
// END
```

6. Obtain a copy of your current configuration.

You can use your planning forms (System/34 Installation Planning Chart, Local Work Station Network Diagram, and Remote Work Station Network Diagram) if you filled them out for your initial configuration and have kept them up to date. If you are not sure the planning forms reflect what is currently in your configuration, you can use the following steps to obtain a copy of your current configuration record:

- a. To obtain the reload parameters (from the Reload section of the System/34 Installation Planning Chart):

Enter in command mode:

```
LISTLIBR DIR,SYSTEM
```

The following listing is printed:

#LIBRARY STATUS	DATE	10/08/81	TIME	15.05
START SECTOR OF LIBRARY		17351/0043C7		
END SECTOR OF LIBRARY		46350/00B50E		
TOTAL NUMBER OF LIBRARY BLOCKS		2900/000B54		
START SECTOR OF DIRECTORY		17352/0043C8		
END SECTOR OF DIRECTORY		17600/0044C0		
NUMBER OF DIRECTORY SECTORS		250/0000FA		
ACTIVE DIRECTORY ENTRIES		1743/0006CF		
AVAILABLE DIRECTORY ENTRIES		497/0001F1		
START SECTOR OF LIBRARY MEMBERS		17601/0044C1		
END SECTOR OF LIBRARY MEMBERS		46350/00B50E		
ACTIVE LIBRARY MEMBER SECTORS		19236/004B24		
AVAILABLE MEMBER SECTORS		9140/0023B4		
NEXT AVAILABLE MEMBER SECTOR		37211/00915B		

You can get the number of library blocks and library directory sectors specified for the system library (#LIBRARY) from this listing. Take a copy of the System/34 Installation Planning Chart and enter these values in the Reload section.

Enter in command mode:

CATALOG

The following listing is printed:

PACK - QASCP		OWNER ID - 811001		DISK VTOC DISPLAY				DATE - 10/08/81						
DEVICE CAPACITY - 128.4 MEGABYTES				BY LOCATION				TIME - 15.06						
STATUS CODES		0 - CHECKPOINTED FILE OR LIBRARY		1 - DELETE CAPABLE FILE		2 - IMMEDIATE ACCESS FILE								
		3 - SECURED FILE OR LIBRARY		4 - PREVIOUSLY SECURED FILE OR LIBR										
LABEL	DATE	RETAIN	ORG	TYPE	STATUS	LOCATION	AMOUNT	FORMAT	PREF	RECORD LENGTH	USED	AVAILABLE	POS	LEN
#SYSWORK	10/01/81	P		SYSTEM		292	260 RECORDS			256				
#SYSWST	10/01/81	P		SYSTEM		318	2130 RECORDS			256				
#SYSTASK	10/01/81	P		SYSTEM		531	12040 RECORDS			256				
#LIBRARY	00/00/00	P		SYSTEM		1735	2900 BLOCKS			0				
DCMLIB	00/00/00	P		LIBRARY		4635	300 BLOCKS			0				
X29	00/00/00	P		LIBRARY		4935	100 BLOCKS	A2		0				
SFROCLIB	00/00/00	P		LIBRARY		5035	50 BLOCKS			0				
SASMLIB	00/00/00	P		LIBRARY		5085	350 BLOCKS	A2		0				
YEARS	10/28/80	T	I			5435	150 RECORDS	A1		80	4	165	1	6
BPFR1	05/22/80	P	I			5441	50 RECORDS	A1		256	11	46	2	6
BPUR1	05/22/80	P	I			5447	50 RECORDS	A1		512	23	30	2	11
BPMTG1	11/19/80	P	I		1	5458	500 RECORDS			256	186	316	1	11
BPDEP1	10/17/80	P	I			5511	50 RECORDS			128	29	27	3	3
BPDEPT	10/17/80	P	I			5514	50 RECORDS			128	29	27	3	3
BPDEFEN	10/28/80	P	I		1	5517	50 RECORDS			512	4	47	2	29
#BL0H8	06/25/80	T	D		1	5528	554 RECORDS			80	576	0		
PUBSHIST	01/29/81	T	S			5546	500 RECORDS			100	7	505		
#BL0H7	06/23/80	T	D		1	5566	554 RECORDS			80	576	0		
SASRPG	00/00/00	P		LIBRARY		5584	200 BLOCKS	A2		0				
TSTSLOG	00/00/00	P		LIBRARY		50316	20 BLOCKS	A2		0				
KLW	00/00/00	P		LIBRARY		50336	20 BLOCKS	A2		0				
CNFIGLIB	00/00/00	P		LIBRARY		50356	50 BLOCKS	A2		0				

S

USER VTOC ENTRIES - USED 266/ AVAILABLE 206
 ***** END OF VTOC DISPLAY *****

From this listing you can get the number of history file blocks (#SYSHIST), task work area blocks (#SYSTASK), and VTOC entries (used + available). Divide the number of records by 10 to convert the value to blocks. Enter these values in the Reload section of the System/34 Installation Planning Chart.

Save this listing; you will need to compare it to the listing produced in step 2 of *Verifying the Release Update* later in this chapter to verify the program product configuration.

- b. To obtain the configuration parameters and program products installed.

Enter in command mode:

CNFIGSSP

Select option 16 (review configuration parameters) from the system configuration menu.

As each display is presented press the:

Print key
Error Reset key
Enter/Rec Adv key

When display 2A, Local Work Station Configuration, appears, use the following keys:

Key	Function
Roll Up	Advances from display 2A to display 2B and from display 2B to display 2C and so on.
Enter/Rec Adv	Advances to the next set of local work stations (if you have 9 to 16 local work stations) or advances to the first and subsequent sets of remote work station displays.
Cmd key 9	Ends the review of the work station configuration displays and advances to display 3.0, General Parameters I.

Remember to press the Print key and Error Reset key for each display.

The four program product installation screens are also displayed. They tell you which utilities, languages, subsystems, and other features and program products you have installed.

Using the printouts just produced for displays 2.0 through 10.0, fill in the values for each section on the System/34 Installation Planning Chart. Also, you can fill out the local and remote (if applicable) network diagrams from screens 2A through 2E. These values reflect the master configuration record on your system.

A discrepancy in the values of your master configuration record may occur if you use the TOLIBR procedure to install a program product. For example, you may have RPG on your system, but it may not be reflected in the master configuration record if you applied it with the TOLIBR procedure. The INSTALL procedure rather than the TOLIBR procedure affects the master configuration record. When you reload your system, you will not be prompted to insert the diskette for any program products that were put on the system with the TOLIBR procedure. Therefore, you should avoid using the TOLIBR procedure for these purposes when the INSTALL procedure can be used just as conveniently.

Also, the support on your system may not match the master configuration record if option 1 of the CNFIGSSP procedure has been run (other than initially). This option causes all or some of the optional SSP and program product indicators to be reset. Consequently, some of the optional SSP and program products that had been configured would not be reflected in the master configuration record.

The SET procedure can change the following configuration parameters for a specific work station:

- Associated printer
- Date format
- Default user library
- Forms ID
- Lines per page
- Print belt image

When the SET procedure is used to change a value for one of these items, it *does not* change the master configuration record. Therefore, when you reload your system, the values that exist in the master configuration record will be used, not those values from the SET procedure. You can use the STATUS command (with the PRINT key) at each display station to record the values.

Pages missing from original

After pressing of the Enter/Rec Adv key, the following display appears:

```
RELOAD COMPLETED--IPL FROM DISK REQUIRED
```

After removal of the last PID diskette and completion of IPL, the following display appears:

```
IPL SIGN ON
```

```
USER ID.....  
MENU (OPTIONAL).....  
LIBRARY.....  
  
DATE (YYMMDD).....  
TIME (HHMMSS).....  
OVERRIDES? (Y,N)....N
```

After sign-on procedures are finished, the IPL File Rebuild display appears:

IPL FILE REBUILD-SYSTEM OPTIONS		
1. EXAMINE AND VERIFY THE DISK VTOC?	(Y,N)	Y
2. DELETE FILES IN ERROR?	(Y,N)	N
3. EXAMINE OLD FILES ALSO?	(Y,N)	Y
4. DISPLAY FILE LABELS IN ERROR?	(Y,N)	Y

Press the Enter/Rec Adv key in response to the IPL File Rebuild display. The Command display appears when the file rebuild function is completed.

COMMAND	W1
ENTER COMMAND OR OCL STATEMENT	
← READY	

Enter CNFIGSSP to start installation of the SSP.

Display 1.0 System Configuration Menu

```

** 1.0 SYSTEM CONFIGURATION MENU **
1 FULL SYSTEM CONFIGURATION          9 CREATE/EDIT WORK STATION PARAMETERS
2 ALTER WORK STATION ENVIRONMENT     10
3 ALTER SYSTEM PARAMETERS            11
4 ALTER WORK STATION CONFIGURATION   12
5 ALTER SNA/SDLC PARAMETERS         13
6 ALTER P/P AND COMMUNICATION SUPPORT 14 BASIC CONFIGURATION WITH DEFAULTS
7                                     15 RELEASE UPDATE
8                                     16 REVIEW CONFIGURATION PARAMETERS
ENTER SELECTION - 9                  CMD KEY 9 - END

```

```

1.0 System Configuration Menu
Option  9 , 1

```

Select option 9 to create the work station parameter library member name.

Display 2.0 Create/Edit Work Station Parameters

```
CREATE/EDIT                ** 2.0 WORK STATION PARAMETERS **                W1
  1. ENTER WORK STATION PARAMETER MEMBER NAME :   SYSCNFG
    SELECT:
      1. CREATE NEW MEMBER
      2. EDIT EXISTING MEMBER
      3. CREATE MEMBER FROM CURRENT WORK STATION CONFIGURATION
  2. ENTER SELECTION:      1

CMD KEY 5 - VERIFY      ENTER- CONTINUE      CMD KEY 19 - CANCEL
```

2.0 Create/Edit Work Station Parameters

1. Work station parameter member name (up to 8 characters) S Y S C N F G _
2. Enter selection: 1
(1-Create new member 2-Edit existing member
3-Create member from current work station configuration)

Enter a work station parameter library member name (up to 8 alphanumeric characters). Select option 1 (create new member).

Display 2.1 Work Station Configuration Options

** 2.1 WORK STATION CONFIGURATION OPTIONS **		W1
1. CONFIGURE REMOTE WORK STATIONS ?	(0-NO 1-YES)	1
2. REMOTE WORK STATIONS SUPPORT SWAPPABLE ?	(0-NO 1-YES)	1
3. NUMBER OF LOCAL WORK STATIONS (0-LOCALS 1-8 1-LOCALS 9-16)		0
CMD KEY 5 - VERIFY ENTER - CONTINUE CMD KEY 19 - CANCEL		

2.1	Work Station Configuration Options		
1.	Configure remote work stations?	(0-No 1-Yes)	<u> 1 </u>
2.	Remote work station support swappable?	(0-No 1-Yes)	<u> 1 </u>
3.	Number of local work stations?	(0-locals 1-8 1-locals 9-16)	<u> 0 </u>

Enter 1 (yes) for remote work station support. Enter 1 (yes) for remote work stations support swappable.

Display 2.2 Remote Work Station Line Configuration

```

** 2.2 REMOTE WORK STATION LINE CONFIGURATION **
                                                    W1
SPECIFY:
1. REMOTE LINE USE:                (0-NO 1-YES)    1  2  3  4
2. REMOTE LINE SWITCHED:           (0-NO 1-YES)    1  0  0  0
3. SWITCH TYPE: (0-NONE            1-MANUAL CALL    1  0  0  0
                   2-AUTO ANSWER   3-MANUAL ANSWER)
4. SLOW POLLING:                   (0-NO 1-YES)    0  0  0  0

CMD KEY 5 - VERIFY      ENTER - CONTINUE      CMD KEY 19 - CANCEL
  
```

2.2 Remote Work Station Line Configuration
 (Used only if answer to 2.1, Work Station Configuration Options, Question 1 was Yes.)

Specify:		Line #	1	2	3	4
1. Remote line use:	(0-No 1-Yes)		<u>1</u>	<u>Ø</u>	<u>Ø</u>	<u>Ø</u>
2. Remote line switched:	(0-No 1-Yes)		<u>1</u>	<u>Ø</u>	<u>Ø</u>	<u>Ø</u>
3. Switch type:	(0-None 2-Auto answer 1-Manual call 3-Manual answer)		<u>1</u>	<u>Ø</u>	<u>Ø</u>	<u>Ø</u>
4. Slow polling:	(0-No 1-Yes)		<u>Ø</u>	<u>Ø</u>	<u>Ø</u>	<u>Ø</u>

Refer to the network diagrams to respond to the parameters on Displays 2A, 2B, 2C, and 2E Local Work Station Configuration and Displays 2A, 2B, 2C, and 2E Remote Work Station Configuration.

Specify yes for parameters 1 and 2 under line 1 and no for each option under lines 2, 3, and 4. Specify switch type 1 (manual call) for line 1.

Display 2A Local Work Station Configuration

2A LOCAL WORK STATION CONFIGURATION										W1
1. LOGICAL ID:		W1	W2	P2	W3	P3	W4	W5	P1	
2. DEVICE TYPE:		D	D	P	D	P	D	D	L	
3. UNIT ADDRESS:		00	11	10	22	21	20	30		
4. ATTRIBUTE:		S	A		C		C	D	S	
5. DEFAULT PRINTER:		P1	P2		27		P3	27		

CMD KEY 4/ENTER - CHANGE SETS CMD KEY 5 - VERIFY ROLL KEYS - PAGING
CMD KEY 9 - END CMD KEY 19 - CANCEL HELP - DEFINITIONS

Enter local work station configuration data according to the information defined on the Local Work Station Network Diagram.

Display 2B Local Work Station Configuration

2B LOCAL WORK STATION CONFIGURATION										W1
1. LOGICAL ID:		W1	W2	P2	W3	P3	W4	W5	P1	
2. DEVICE TYPE:		D	D	P	D	P	D	D	L	
6. SCREEN SIZE:		1	1		1		1	1		
7. MAGNETIC STRIPE:		0	0		0		0	0		

CMD KEY 4/ENTER - CHANGE SETS CMD KEY 5 - VERIFY ROLL KEYS - PAGING
CMD KEY 9 - END CMD KEY 19 - CANCEL HELP - DEFINITIONS

Use displayed system defaults for screen size (1920) and magnetic stripe support (no).

Display 2C Local Work Station Configuration

2C LOCAL WORK STATION										W1
CONFIGURATION ** PRINTERS **										
1. LOGICAL ID:	W1	W2	P2	W3	P3	W4	W5	P1		
2. DEVICE TYPE:	D	D	P	D	P	D	D	L		
9. LANGUAGE GROUP #:			0		0					
10. SUBCONSOLE ID:			W1		W1				W1	
11. LINES PER INCH (4,6,8):										
CMD KEY 4/ENTER - CHANGE SETS			CMD KEY 5 - VERIFY			ROLL KEYS - PAGING				
CMD KEY 9 - END			CMD KEY 19 - CANCEL			HELP - DEFINITIONS				

For the 5256 printers, use the displayed system defaults for the language group number (0) and subconsole ID (W1).

Display 2E Local Work Station Configuration

2E LOCAL WORK STATION										W1
CONFIGURATION ** SPOOL **										
1. LOGICAL ID:	W1	W2	P2	W3	P3	W4	W5	P1		
2. DEVICE TYPE:	D	D	P	D	P	D	D	L		
15. RESIDENT WRITER:			0		0			0		
16. PRIORITY:			0		0			0		
17. SEPARATOR PAGES:			1		1			1		
CMD KEY 4/ENTER - CHANGE SETS			CMD KEY 5 - VERIFY			ROLL KEYS - PAGING				
CMD KEY 9 - END			CMD KEY 19 - CANCEL			HELP - DEFINITIONS				

For the printers, use the system defaults for resident writer (0-No) and spooling priority (0-Normal). Specify 1 for the separator pages value.

Display 2A Remote Work Station Configuration

2A REMOTE WORK STATION				CONTROLLER LOGICAL ID		C01	W1
CONFIGURATION				STATION ADDRESS		01	
	LINE # 1	ALTERNATIVE LINE #					
1. LOGICAL ID:	A1	A2					
2. DEVICE TYPE:	D	D					
3. UNIT ADDRESS:	00	02					
4. ATTRIBUTE:	C	C					
5. DEFAULT PRINTER:	P1	P1					
CMD KEY 4/ENTER - CHANGE SETS		CMD KEY 5 - VERIFY		ROLL KEYS - PAGING			
CMD KEY 9 - END		CMD KEY 19 - CANCEL		HELP - DEFINITIONS			

Enter remote work station configuration data according to the information defined on the Remote Work Station Network Diagram.

Display 2B Remote Work Station Configuration

```
2B REMOTE WORK STATION          CONTROLLER LOGICAL ID      C01  W1
CONFIGURATION                    STATION ADDRESS           01
                                LINE # 1  ALTERNATE LINE #
1. LOGICAL ID:                   A1  A2
2. DEVICE TYPE:                   D   D
6. SCREEN SIZE:                   1   1
7. MAGNETIC STRIPE:               0   0
8. AUTO ONLINE:                   1   1

CMD KEY 4/ENTER - CHANGE SETS  CMD KEY 5 - VERIFY    ROLL KEYS - PAGING
CMD KEY 9 - END                CMD KEY 19 - CANCEL   HELP - DEFINITIONS
```

Use system defaults for screen size (1920) and magnetic stripe support (no).
Specify 1 (yes) for auto online. Press the Enter/Rec Adv key to advance to the
next set of work stations.

Display 2A Remote Work Station Configuration

```
2A REMOTE WORK STATION          CONTROLLER LOGICAL ID      C02  W1
CONFIGURATION                    STATION ADDRESS           02
                                LINE # 1  ALTERNATE LINE #
1. LOGICAL ID:                   B1  P4
2. DEVICE TYPE:                   D   P
3. UNIT ADDRESS:                   00  02
4. ATTRIBUTES:                     C
5. DEFAULT PRINTER:               P4

CMD KEY 4/ENTER - CHANGE SETS  CMD KEY 5 - VERIFY    ROLL KEYS - PAGING
CMD KEY 9 - END                CMD KEY 19 - CANCEL   HELP - DEFINITIONS
```

Enter remote work station data according to the information defined on the
Remote Work Station Network Diagram.

Display 2B Remote Work Station Configuration

2B REMOTE WORK STATION CONFIGURATION		CONTROLLER LOGICAL ID STATION ADDRESS	C02 W1 02
	LINE # 1	ALTERNATE LINE #	
1. LOGICAL ID:	B1	P4	
2. DEVICE TYPE:	D	P	
6. SCREEN SIZE:	1		
7. MAGNETIC STRIPE:	0		
8. AUTO ONLINE:	1	1	

CMD KEY 4/ENTER - CHANGE SETS CMD KEY 5 - VERIFY ROLL KEYS - PAGING
 CMD KEY 9 - END CMD KEY 19 - CANCEL HELP - DEFINITIONS

Use system defaults for screen size (1920) and magnetic stripe support (no).
 Specify 1 (yes) for auto online.

Display 2C Remote Work Station Configuration

2C REMOTE WORK STATION CONFIGURATION ** PRINTERS **		CONTROLLER LOGICAL ID STATION ADDRESS	C02 W1 02
	LINE # 1	ALTERNATIVE LINE #	
1. LOGICAL ID:	B1	P4	
2. DEVICE TYPE:	D	P	
9. LANGUAGE GROUP #:		0	
10. SUBCONSOLE ID:		W1	
11. LINES PER INCH (4,6,8):			

CMD KEY 4/ENTER - CHANGE SETS CMD KEY 5 - VERIFY ROLL KEYS - PAGING
 CMD KEY 9 - END CMD KEY 19 - CANCEL HELP - DEFINITIONS

For the 5256 printers, use the system default for the language group number
 (0) and subconsole ID (W1).

Display 2E Remote Work Station Configuration

2E REMOTE WORK STATION CONFIGURATION ** SPOOL **		CONTROLLER LOGICAL ID STATION ADDRESS	C02 W1 02
	LINE # 1	ALTERNATIVE LINE #	
1. LOGICAL ID:	B1	P4	
2. DEVICE TYPE:	D	P	
15. RESIDENT WRITER:		0	
16. PRIORITY:		0	
17. SEPARATOR PAGES:		1	

CMD KEY 4/ENTER - CHANGE SETS CMD KEY 5 - VERIFY ROLL KEYS - PAGING
 CMD KEY 9 - END CMD KEY 19 - CANCEL HELP - DEFINITIONS

For the 5256 printers, use the system defaults for resident writer (0-No) and
 spooling priority (0-Normal). Specify 1 for the separator pages value. Press
 command key 9 to place the work station configuration into the library member
 SYSCNFG.

Display 1.0 System Configuration Menu

```

** 1.0 SYSTEM CONFIGURATION MENU **
1 FULL SYSTEM CONFIGURATION          9 CREATE/EDIT WORK STATION PARAMETERS
2 ALTER WORK STATION ENVIRONMENT     10
3 ALTER SYSTEM PARAMETERS            11
4 ALTER WORK STATION CONFIGURATION   12
5 ALTER SNA/SDLC PARAMETERS         13
6 ALTER P/P AND COMMUNICATION SUPPORT 14 BASIC CONFIGURATION WITH DEFAULTS
7                                     15 RELEASE UPDATE
8                                     16 REVIEW CONFIGURATION PARAMETERS
ENTER SELECTION - 1                  CMD KEY 9 - END

```

Enter option 1 to perform a full system configuration.

Display 2.0 Create/Edit Work Station Parameters

```

** 2.0 WORK STATION PARAMETERS **
1. ENTER WORK STATION PARAMETER MEMBER NAME : SYSCNFG

```

CMD KEY 5 - VERIFY ENTER - CONTINUE CMD KEY 19 - CANCEL

Enter the previously defined work station parameter member name (SYSCNFG).

Display 3.0 Configuration-General Parameters I

```

** 3.0 CONFIGURATION-GENERAL PARAMETERS I **
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. DATE FORMAT . . . . . 3
   (1-DDMMYY 2-MMDDYY 3-YYMMDD)
2. SINGLE PROGRAM MODE? (0-NO 1-YES) . . . . . 0
3. STARTUP PROCEDURE NAME
4. PRINTER DEFAULT FOR RELEASED JOBS? . . . . . 1
   (1-SYSTEM 2-SESSION)
5. KEEP MESSAGES AT EOJ? (0-NO 1-YES) . . . . . 0

```

3.0 General Parameters I		
1.	Date format? (1-DDMMYY 2-MMDDYY 3-YYMMDD)	<u>3</u>
2.	Single program mode? (0-No 1-Yes)	<u>0</u>
3.	Startup procedure name? (up to 8 characters)	<u></u>
4.	Printer default for released jobs? (1-System 2-Session)	<u>1</u>
5.	Keep messages at EOJ? (0-No 1-Yes)	<u>0</u>

Enter general parameters according to the values specified on the planning chart.

Display 4.0 Configuration-General Parameters II

```

** 4.0 CONFIGURATION-GENERAL PARAMETERS II **
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. INPUT JOB QUEUE SUPPORT? (0-NO 1-YES) 1
   1A. INPUT JOB QUEUE SIZE (20-120 JOBS) 020
   1B. START INPUT JOB QUEUE? (0-NO 1-YES) 1
2. HISTORY FILE AUTOMATIC WRAP? (0-NO 1-YES) 1
   2A. OVERFLOW FILE SIZE (1-8 MULTIPLES) 0
3. PRINT SPOOLING (0-NO 1-YES) 1
    
```

4.0 General Parameters II	
1. Input job queue support?	(0-No 1-Yes) <u>1</u>
1A. Input job queue size?	(20 - 120 jobs) <u>020</u>
1B. Start input job queue?	(0-No 1-Yes) <u>1</u>
2. History file automatic wrap?	(0-No 1-Yes) <u>1</u>
2A. Overflow file size?	(1-8 multiples) <u>0</u>
3. Print spooling?	(0-No 1-Yes) <u>1</u>

Select input job queue support with space for 20 jobs. Select the auto-start function for the input job queue, automatic wrap for the history file, and print spooling.

Display 5.0 Work Station Environment

** 5.0 WORK STATION ENVIRONMENT **		W1
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:		
1. DEFAULT FORMS ID	0001	
2. LINES PER PAGE (1-112)	066	
3. LINE PRINTER BELT IMAGE MEMBER NAME	BELT48	
4. LINE PRINTER TRANSLATE TABLE NAME		
5. DEFAULT USER LIBRARY		

5.0	Work Station Environment	
1.	Default forms ID	<u>0001</u>
2.	Lines per page (1 - 112)	<u>066</u>
3.	Line printer belt image member name (up to 8 characters)	<u>BELT48</u>
4.	Line printer translate table name (up to 8 characters)	_____
5.	Default user library	_____

Enter the work station environment parameters as specified on the planning chart. You cannot assign a default user library at initial system configuration.

Display 6.0 Configuration-Spooling Parameters

** 6.0 CONFIGURATION-SPOOLING PARAMETERS **			W1
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:			
1. SPOOL ALL PRINTERS	(0-NO 1-YES)		1
2. SPOOL WRITER BUFFER SIZE	(1-4HK)		1
3. AUTOWRITER	(0-NO 1-YES)		0
4. SPOOL FILE SIZE	(12-12800 BLOCKS)		30
5. SPOOL FILE SEGMENT SIZE	(1-16 BLOCKS)		06
6. SPOOL FILE PREFERRED LOCATION	(1-A1 2-A2)		1

6.0	Spooling Parameters	
1.	Spool all printers? (0-No 1-Yes)	<u>1</u>
2.	Spool writer buffer size? (1-4 HK)	<u>1</u>
3.	Autowriter? (0-No 1-Yes)	<u>0</u>
4.	Spool file size? (12-12800 blocks)	<u>30</u>
5.	Spool file segment size? (1-16 blocks)	<u>6</u>
6.	Spool file preferred location? (1-A1 2-A2)	<u>1</u>

Enter the spooling parameter values as specified on the planning chart.

Display 7.0 Configuration-Performance Parameters

```

** 7.0 CONFIGURATION-PERFORMANCE PARAMETERS **
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. WORK STATION DATA MANAGEMENT                2
  1. RESIDENT
  2. TRANSIENT/RESIDENT
  3. TRANSIENT
2. WORK STATION BUFFER SIZE      (4-16HK)        08
3. SYSTEM ASSIGN/FREE SIZE      (6-64HK)        10
4. TRACE TABLE SIZE      (16-512 ENTRIES)      32

```

7.0 Performance Parameters	
1. Work station data management (1-Resident 2-Transient/Resident 3-Transient).	<u>2</u>
2. Work station buffer size (4-64 HK for locals 8-64 HK for remotes).	<u>8</u>
3. System assign/free size (6-64 HK for locals 9-64 HK for remotes).	<u>10</u>
4. Trace table size (16-512 entries).	<u>32</u>

Use displayed system default values for performance parameters. For the trace table size, specify 32 entries.

Display 8.0 Configuration-SSP Feature Support I

```

** 8.0 CONFIGURATION-SSP FEATURE SUPPORT I **
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. SECURITY SUPPORT? (0-NO 1-YES) 1
2. HELP SUPPORT? (0-NO 1-YES) 0
3. SYSTEM MEASUREMENT FACILITY? (0-NO 1-YES) 0
4. MICR SUBR08? (0-NO 1-YES) 0
5. MICR SUBR25? (0-NO 1-YES) 0
6. EXTENDED DISK DATA MANAGEMENT? (0-NO 1-YES) 0
7. EXTENDED INDEX DATA MANAGEMENT? (0-NO 1-YES) 0
    
```

8.0	SSP Feature Support I			
1.	Security support?	(0-No	1-Yes)	<u>1</u>
2.	Help support?	(0-No	1-Yes)	<u>0</u>
3.	System measurement facility?	(0-No	1-Yes)	<u>0</u>
4.	MICR SUBR08?	(0-No	1-Yes)	<u>0</u>
5.	MICR SUBR25?	(0-No	1-Yes)	<u>0</u>
6.	Extended disk data management?	(0-No	1-Yes)	<u>0</u>
7.	Extended index data management?	(0-No	1-Yes)	<u>0</u>

Select security support.

Display 8.1 Configuration-SSP Feature Support II

```

** 8.1 CONFIGURATION-SSP.FEATURE SUPPORT II **
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. DUMP FILE ANALYSIS?          (0-NO 1-YES) 0
2. SUBCONSOLE SUPPORT?         (0-NO 1-YES) 0
3. USER ACCESS TO SPOOL FILE?  (0-NO 1-YES) 0
4. I - EXCHANGE?               (0-NO 1-YES) 0
5. HISTORY FILE SCROLL?        (0-NO 1-YES) 0
    
```

8.1	SSP Feature Support II			
1.	Dump file analysis?	(0-No	1-Yes)	<u>0</u>
2.	Subconsole support?	(0-No	1-Yes)	<u>0</u>
3.	User access to spool file?	(0-No	1-Yes)	<u>0</u>
4.	I-Exchange?	(0-No	1-Yes)	<u>0</u>
5.	History file scroll?	(0-No	1-Yes)	<u>0</u>

Display 8.2 Configuration-SSP Support for Program Products

```

** 8.2 CONFIGURATION-SSP SUPPORT FOR PROGRAM PRODUCTS **           W1
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. OVERLAY LINKAGE EDITOR?      (0-NO 1-YES) 1
2. COBOL EXECUTION TIME SUPPORT? (0-NO 1-YES) 0
3. FORTRAN EXECUTION TIME SUPPORT? (0-NO 1-YES) 1
4. CHECKPOINT/RESTART?        (0-NO 1-YES) 0

```

8.2	SSP Support for Program Products		
1.	Overlay linkage editor?	(<u>0</u> -No 1-Yes)	<u>1</u>
2.	COBOL execution time support?	(<u>0</u> -No 1-Yes)	<u>0</u>
3.	FORTRAN execution time support?	(<u>0</u> -No 1-Yes)	<u>1</u>
4.	Checkpoint/restart?	(<u>0</u> -No 1-Yes)	<u>0</u>

Select overlay linkage editor and FORTRAN execution time support because FORTRAN IV will be installed later.

Display 9.0 Configuration-Communications Support

```

** 9.0 CONFIGURATION-COMMUNICATIONS SUPPORT **
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. BSC SUPPORT? (0-NO 1-YES) 1
2. MRJE SUPPORT? (0-NO 1-YES) 1
3. SRJE SUPPORT? (0-NO 1-YES) 0
4. SECONDARY SNA/SDLC SUPPORT? (0-NO 1-YES) 0
5. REMOTE WORK STATION SUPPORT? (0-NO 1-YES) 1
6. SSP-ICF SUPPORT? (0-NO 1-YES) 0
7. MLCA SUPPORT? (0-NO 1-YES) 0
8. AUTOCALL FEATURE SUPPORT? (0-NO 1-YES) 0
    
```

9.0 Communications Support	
1. BSC support?	(0-No 1-Yes) <u>1</u>
2. MRJE support?	(0-No 1-Yes) <u>1</u>
3. SRJE support?	(0-No 1-Yes) <u>0</u>
4. Secondary SNA/SDLC support?	(0-No 1-Yes) <u>0</u>
5. Remote work station support?	(0-No 1-Yes) <u>1</u>
6. SSP-ICF support?	(0-No 1-Yes) <u>0</u>
7. MLCA support?	(0-No 1-Yes) <u>0</u>
8. Autocall feature support?	(0-No 1-Yes) <u>0</u>

Select BSC, MRJE, and remote work station support only.

1 Installation-Utilities

```

** 1 INSTALLATION-UTILITIES **
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
NUMBER OF UTILITIES DISKETTES FURNISHED (1 OR 4) 4
1. DFU - DATA FILE UTILITY (0-NO 1-YES) 1
2. SORT - SORT UTILITY (0-NO 1-YES) 1
3. WSU - WORK STATION UTILITY (0-NO 1-YES) 1
4. SEU - SOURCE ENTRY UTILITY (0-NO 1-YES) 1
5. SDA - SCREEN DESIGN AID (0-NO 1-YES) 1
    
```

1 Installation-Utilities		
Number of utility diskettes furnished (1 or 4)		<u>4</u>
1.	DFU—Data File Utility (0-No 1-Yes)	<u>1</u>
2.	Sort—Sort Utility (0-No 1-Yes)	<u>1</u>
3.	WSU—Work Station Utility (0-No 1-Yes)	<u>1</u>
4.	SEU—Source Entry Utility (0-No 1-Yes)	<u>1</u>
5.	SDA—Screen Design Aid (0-No 1-Yes)	<u>1</u>

Select all five utilities as indicated on the planning chart.

2 Installation—Languages

** 2 INSTALLATION-LANGUAGES **			W1
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:			
1. RPG	- RPG II	(0-NO 1-YES)	1
2. ASM	- ASSEMBLER	(0-NO 1-YES)	0
3. FORT	- FORTRAN	(0-NO 1-YES)	1
4. COBL	- COBOL	(0-NO 1-YES)	0
5. BASIC	- BASIC	(0-NO 1-YES)	0

2 Installation—Languages			
1.	RPG—RPG II	(0-No 1-Yes)	<u>1</u>
2.	ASM—Assembler	(0-No 1-Yes)	<u>0</u>
3.	FORT—FORTRAN	(0-No 1-Yes)	<u>1</u>
4.	COBL—COBOL	(0-No 1-Yes)	<u>0</u>
5.	BASIC—BASIC	(0-No 1-Yes)	<u>0</u>

Select RPG and FORTRAN IV as indicated on the planning chart.

4 Installation—Program Products

W1

** 4 INSTALLATION-PROGRAM PRODUCTS **
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. B3270 - BSC 3270 EMULATION (0-NO 1-YES) 0
2. S3270 - SNA 3270 EMULATION (0-NO 1-YES) 0

4	Installation—Program Products		
1.	B3270—BSC 3270 Emulation	(0-No 1-Yes)	<u>0</u>
2.	S3270—SNA 3270 Emulation	(0-No 1-Yes)	<u>0</u>

Installation—PTFs and Backup

Installation—PTFs and Backup

1. Apply PTFs (0-No 1-Yes) 1
 2. Backup considerations:

Program Product	Back up Library (0-No 1-Yes)	Initialize Diskettes (0-No 1-Yes)	Number of Diskettes Required
Utilities	<u>1</u>	<u>1</u>	<u>4</u>
SSP (#LIBRARY)	<u>1</u>	<u>1</u>	<u>9</u>
RPG library	<u>0</u>	<u>0</u>	<u>-</u>
ASM library	<u>-</u>	<u>-</u>	<u>-</u>
FORTRAN library	<u>0</u>	<u>0</u>	<u>-</u>
COBOL library	<u>-</u>	<u>-</u>	<u>-</u>
BASIC library	<u>-</u>	<u>-</u>	<u>-</u>
BSC 3270 library	<u>-</u>	<u>-</u>	<u>-</u>
SNA 3270 library	<u>-</u>	<u>-</u>	<u>-</u>

You will be prompted to apply PTFs and back up the program product support you installed. Respond to the prompts as indicated on the planning chart.

The Install portion of the planning chart was completed as indicated. The number of diskettes required to back up the system library is:

$$\frac{(99 + 9591) + 48}{1184} = 8.22 \text{ or } 9 \text{ diskettes}$$

This calculation is made for Diskette 1 diskettes with the 512 bytes per sector format and based on *active* directory sectors and *active* library member sectors obtained from a library status listing. For more information about calculating the number of diskettes required to back up the system library, see *Calculating the Number of Backup Diskettes Required for the System Library* in Chapter 7.

Chapter 9. Installation and Configuration of the Interactive Communications Feature

If you plan to have the Interactive Communications Feature (SSP-ICF) on your system, do the following:

1. During CNFIGSSP, specify 1 (yes) to SSP-ICF support to copy the general SSP-ICF support to the system.
2. During CNFIGSSP, specify the communications support for the SSP-ICF subsystems you plan to install.
3. Fill out the interactive communications feature planning charts for each subsystem you plan to install.
4. Define the subsystem configurations (CNFIGICF).
5. Run the INSTALL procedure to copy the SSP-ICF subsystem support to the system.

SPECIFYING SSP-ICF DURING CNFIGSSP

When doing a configuration, you are prompted to specify 1 (yes) or 0 (no) for SSP-ICF support on display 9.0, Communications Support. When you specify 1 (yes) for SSP-ICF support, the general support is copied to the system library. Display 9.2, SSP-ICF Communications Support, also appears. Specify 1 (yes) to the support that is necessary for the SSP-ICF subsystems that you are planning to install in step 5. That support will then be copied to the system library.

FILLING OUT THE INTERACTIVE COMMUNICATIONS FEATURE PLANNING CHARTS

Each subsystem has its own planning chart. Refer to the *Interactive Communications Feature Reference Manual*, SC21-7751, for the information needed to fill out these planning charts. Refer to the *3270 Device Emulation User's Guide*, SC21-7868, for the information needed to fill out the planning charts for 3270 Device Emulation. Copies of the subsystem planning charts are at the back of this manual.

DEFINING THE SUBSYSTEM CONFIGURATION (CNFIGICF)

Before running the CNFIGICF procedure you should complete the Interactive Communications Feature Planning Chart and run the CNFIGSSP procedure. The CNFIGSSP procedure copies the optional SSP-ICF support to the system library. The CNFIGICF procedure defines the subsystem configuration. After entering the CNFIGICF command the following display appears:

```
CREATE/EDIT                **1.0 SUBSYSTEM MEMBER CONFIGURATION **           W1
 1. SUBSYSTEM CONFIGURATION MEMBER NAME:
 2. SUBSYSTEM LIBRARY NAME:      -----
    SELECT:
      1. CREATE NEW MEMBER                4. DELETE A MEMBER
      2. EDIT EXISTING MEMBER            5. REVIEW A MEMBER
      3. CREATE NEW MEMBER FROM EXISTING MEMBER
 3. ENTER SELECTION:      ---
 4. EXISTING MEMBER NAME:  -----
 5. EXISTING MEMBER LIBRARY NAME: -----
ENTER - CONTINUE                CND KEY 9 - END
```

Enter the values you specified on the planning chart for the appropriate prompts on this display.

Press the Enter/Rec Adv key and the following display appears:

```
                ** 2.0 COMMON SSP-ICF PARAMETERS FOR EACH SUBSYSTEM **           W1
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
 1. SSP-ICF COMMON QUEUE SPACE:      (2 - 42K)      --
 2. DEFINE THE SUBSYSTEM TYPE:      -----
      1 INTRA                                2 BSC IMS/IRSS
      3 BSCCL                                4 BSC CICS
      5 BSC CCP                               6 SNA UPLINE
      7 SNA PEER                             8 BSC 3270
      9 SNA 3270                            10 FINANCE
```

Enter the values you specified on the planning chart for the appropriate prompts on this display.

Press the Enter/Rec Adv key. The display screens that follow depend upon the type of subsystem you are creating. The following table shows which screens will be displayed for each type of subsystem. Figure 9-1 shows an example of each display.

Subsystem	Displays Presented
Intra	1.0, 2.0, 3.0
BSC IMS/IRSS	1.0, 2.0, 3.0, 5.0, 7.0, 12.0
BSC EL	1.0, 2.0, 3.0, 4.0, 5.0, 5.1, 6.0
BSC CICS/VS	1.0, 2.0, 3.0, 4.0, 5.0, 5.1, 7.0, 10.0
BSC CCP	1.0, 2.0, 3.0, 4.0, 5.0, 5.1, 10.0, 11.0
SNA Upline	1.0, 2.0, 3.0, 4.0, 7.0, 8.0, 9.0, 9.1
SNA Peer	1.0, 2.0, 3.0, 3.1, 4.0, 13.0
BSC 3270	1.0, 2.0, 3.0, 4.0, 14.0, 15.0
SNA 3270	1.0, 2.0, 3.0, 4.0, 8.0, 9.1, 16.0
Finance	1.0, 2.0, 3.0, 3.1, 4.0, 17.0

Display Names	
1.0	Subsystem Member Configuration
2.0	Common SSP-ICF Parameters for Each Subsystem
3.0	General Subsystem Parameters
3.1	SDLC General Subsystem Parameters
4.0	Line Information for SSP-ICF Subsystem
5.0	BSC General Subsystem Parameters I
5.1	BSC General Subsystem Parameters II
6.0	BSC EL Subsystem Parameters
7.0	Subsystem Inactive Destination Messages
8.0	SNA General Subsystem Parameters
9.0	SNA Upline Subsystem Parameters
9.1	SNA Upline/3270 Station Parameters
10.0	BSC Multipoint Session Addresses
11.0	BSC CCP Subsystem Parameters
12.0	BSC IMS/IRSS Subsystem PTERMS
13.0	SNA Peer Subsystem Parameters
14.0	BSC 3270 Subsystem General Parameters
15.0	BSC 3270 Subsystem Device Parameters
16.0	SNA 3270 Subsystem Device Parameters
17.0	Finance Subsystem Parameters

After the last display screen is presented for a particular subsystem, the CNFIGICF procedure presents the first display screen. You are then ready to create another subsystem configuration. After the last subsystem is created, press command key 9 to terminate the CNFIGICF procedure. If 1 (yes) was specified for the multiple remote IDs parameter for a BSC EL subsystem, the DEFINEID procedure begins executing.

```

CREATE/EDIT          **1.0 SUBSYSTEM MEMBER CONFIGURATION **      M1
1. SUBSYSTEM CONFIGURATION MEMBER NAME:
2. SUBSYSTEM LIBRARY NAME: -----
   SELECT:
   1. CREATE NEW MEMBER          4. DELETE A MEMBER
   2. EDIT EXISTING MEMBER       5. REVIEW A MEMBER
   3. CREATE NEW MEMBER FROM EXISTING MEMBER
3. ENTER SELECTION:
4. EXISTING MEMBER NAME: -----
5. EXISTING MEMBER LIBRARY NAME: -----
ENTER - CONTINUE      CID KEY 9 - END

```

```

** 5.0 BSC GENERAL SUBSYSTEM PARAMETERS I **      M1
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. EBCDIC/ASCII:      (1-EBCDIC 2-ASCII)
2. LOCAL STATION ADDRESS: (2-HEX)
3. WAIT TIME:        (1 - 999 SECONDS)
4. TRANSPARENCY:     (0-NO 1-YES)
5. MULTIPLE REMOTE IDS: (0-NO 1-YES)
6. REMOTE ID: -----
7. LOCAL ID: -----

```

```

** 2.0 COMMON SSP-ICF PARAMETERS FOR EACH SUBSYSTEM **      M1
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE
1. SSP-ICF COMMON QUEUE SPACE: (2 - 42K)
2. DEFINE THE SUBSYSTEM TYPE:
   1 INTRA          2 BSC IHS/IRSS
   3 BSCCL          4 BSC CICS
   5 BSC CCP        6 SNA UPLINE
   7 SNA PEER       8 BSC 3270
   9 SNA 3270      10 FINANCE

```

```

** 5.1 BSC GENERAL SUBSYSTEM PARAMETERS II **
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. PHONE LIST NAME
2. REFRESH (0-NO 1-YES)
3. BLOCK LENGTH (0 - 4075)
4. RECORD SEPARATOR (HEXADECIMAL)
5. ITB MODE (0-NO 1-YES)
6. BLANK (0-NO, 1-COMPRESSION, 2-TRUNCATION)
7. 3740 MULTIPLE FILES (0-NO 1-YES)

```

```

** 3.0 GENERAL SUBSYSTEM PARAMETERS **      M1
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. LOCATION NAME: -----
2. SUBSYSTEM QUEUE SPACE: (0-40K)
3. SUBSYSTEM SUPPORT SHAPPABLE? (0-NO 1-YES)
4. MAXIMUM USER RECORD LENGTH: (1 - 4075)

```

```

** 6.0 BSCCL SUBSYSTEM PARAMETERS **      M1
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. PARTNER: (1-NORM 2-ATTR)

```

```

** 3.1 SDLC GENERAL SUBSYSTEM PARAMETERS **      M1
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. SDLC PROTOCOL: (1-PRIMARY 2-SECONDARY)
2. SDLC RECEIVE BUFFER SIZE: (2 OR 4K)
3. SDLC TRANSMIT BUFFER SIZE: (2 OR 4K)
4. MAXIMUM RECEIVE PACING COUNT: (1 - 63)

```

```

** 7.0 SUBSYSTEM INACTIVE DESTINATION MESSAGES **      M1
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. SUBSYSTEM PROCEDURE NAME: -----
2. SUBSYSTEM PROCEDURE LIBRARY NAME: -----

```

```

** 4.0 LINE INFORMATION FOR SSP-ICF SUBSYSTEM **      M1
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. LINE TYPE:
   1 MULTIPPOINT
   2 NONSWITCHED PT-PT
   3 SWITCHED PT-PT
2. LOCAL STATION ADDRESS: (2 HEX)
3. SWITCH TYPE:
   1 MANUAL CALL
   2 AUTO ANSWER
   3 MANUAL ANSWER
4. AUTO-DISCONNECT: (0-NO 1-YES)
5. STAY OPERATIONAL: (0-NO 1-YES)

```

```

** 8.0 SNA GENERAL SUBSYSTEM PARAMETERS **      M1
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. SDLC BUFFER POOL SIZE: (2-8K)
2. NUMBER OF TRANSMIT BUFFERS: (1-15)
3. MAXIMUM NUMBER OF ACTIVE SESSIONS: (1-32)
4. MAXIMUM RECEIVE PACING COUNT: (1-63)
5. LOCAL ID: (HEXADECIMAL)
6. LU CONFIGURATION LIBRARY NAME: -----
7. LU CONFIGURATION MEMBER NAME: -----

```

Note: Certain prompts on these displays will not be shown for some subsystems.

Figure 9-1 (Part 1 of 2). Displays Presented During the CNFIGICF Procedure

```

** 9.0 SNA UPLINE SUBSYSTEM PARAMETERS **
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. SUBSYSTEM APPLICATION ID:
2. SUBSYSTEM HOST NAME:
   (1-OTHER 2-IMS/V5 3-CICS/VS)

```

```

** 13.0 SNA PEER SUBSYSTEM PARAMETERS **
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. REMOTE STATION ADDRESS: (01 - FE HEXADECIMAL)
2. REMOTE LOCATION NAME:
3. MAXIMUM NUMBER OF ACTIVE SESSIONS: (1 - 64)
4. NUMBER OF PRE-ESTABLISHED SESSIONS:
5. MAXIMUM NUMBER OF I-FRAMES: (1 - 7)
6. LOCATION ACTIVATED: (0-NO 1-YES)
7. SLOW POLL: (0 - 5)
8. PHONE LIST NAME:

```

CMD KEY 2 - DELETE CMD KEY 4 - BACKWARD PAGE CMD KEY 9 - END EDIT

```

** 9.1 SNA UPLINE/3270 STATION PARAMETERS **
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. REMOTE LOCATION NAME
2. SSCPID (0 - 65535)
3. PHONE LIST NAME
4. LOCATION ACTIVATED (0-NO 1-YES)

```

CMD KEY 2 - DELETE CMD KEY 4 - BACKWARD PAGE CMD KEY 9 - END EDIT

```

** 14.0 3270 SUBSYSTEM GENERAL PARAMETERS **
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. LINE BUFFER SIZE: (256 - 4096)
2. DELAY COUNT: (0 - 255)

```

```

** 10.0 BSC MULTIPOINT SESSION ADDRESSES **
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
DEFINE SESSION ADDRESSES:
0 - ADDRESS NOT DEFINED 1 - ADDRESS IN POOL
2 - ADDRESS RESERVED
INCOMING - SPECIFY 0 OR 2
OUTGOING - SPECIFY 0, 1, OR 2

```

(BLANK)	A	B	C	D	E
	F	G	H	I	J
	K	L	M	N	O

```

** 15.0 3270 SUBSYSTEM DEVICE PARAMETERS **
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. DEVICE ADDRESS: 40 C1 C2 C3 C4 C5 C6 C7 C8 C9 4A 4B 4C 4D 4E 4F
2. DEVICE TYPE: (1, 2, 3, or 5)
3. S/34 LOGICAL ID:
4. LOWER CASE: (0-NO 1-YES)
5. DEVICE ADDRESS: 50 D1 D2 D3 D4 D5 D6 D7 D8 D9 5A 5B 5C 5D 5E 5F
6. DEVICE TYPE: (1, 2, 3, or 5)
7. S/34 LOGICAL ID:
8. LOWER CASE: (0-NO 1-YES)
* 1-PROGRAM 2-3277 DISPLAY 3-3277 WITH NUMERIC LOCK 5-3288 PRINTER

```

```

** 11.0 BSC CCP SUBSYSTEM PARAMETERS **
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. DISPOSITION OF UNSOLICITED HOST MESSAGES:
   (1-SYSTEM CONSOLE 2-HISTORY FILE 3-IGNORE)
2. DATA MODE ESCAPE CHARACTERS: (HEXADECIMAL)
3. SIGN ON OPTION: (1-ENABLE 2-ACQUIRE)
4. QUEUING: (0-NO 1-YES)
5. CCP PASSWORD SECURITY: (0-NO 1-YES)
6. SPECIFY CCP PASSWORD:
7. REQUESTOR LOCAL ID:
8. REQUESTOR LOCAL ID:

```

```

** 16.0 SNA 3270 SUBSYSTEM DEVICE PARAMETERS **
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. LOGICAL UNIT ADDRESS:
2. DEVICE TYPE: (2, 3, or 5)
3. S/34 LOGICAL ID:
4. LOWER CASE (0-NO 1-YES)
5. LOGICAL UNIT ADDRESS:
6. DEVICE TYPE: (2, 3, or 5)
7. S/34 LOGICAL ID:
8. LOWER CASE: (0-NO 1-YES)
* 2-3277 DISPLAY 3-3277 WITH NUMERIC LOCK 5-3288 PRINTER

```

```

** 12.0 BSC IMS/IRSS SUBSYSTEM PTERMS (INPUT IN HEXADECIMAL) **
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. SUBSYSTEM REMOTE PROGRAM START PTERM:
2. SUBSYSTEM LOCAL PTERMS:

```

```

** 17.0 FINANCE SUBSYSTEM PARAMETERS **
KEY ANY CHANGES AND PRESS ENTER TO CONTINUE:
1. REMOTE STATION ADDRESS (01 - FE HEXADECIMAL)
2. REMOTE LOCATION NAME
3. NUMBER OF LOGICAL WORK STATIONS (1 - 30)
4. DELAYED ENTRY? (0-NO 1-YES)
5. AUTOMATIC RECOVERY? (0-NO 1-YES)
6. LOCATION ACTIVATED (0-NO 1-YES)
7. EXCHANGE ID (5 HEXADECIMAL)
8. SYSTEM MONITOR SESSION (0-NO 1-YES)

```

CMD KEY 2 - DELETE CMD KEY 4 - BACKWARD PAGE CMD KEY 9 - END EDIT

Note: Certain prompts on these displays will not be shown for some subsystems.

Figure 9-1 (Part 2 of 2). Displays Presented During the CNFIGICF Procedure

USING INSTALL TO COPY SSP-ICF SUBSYSTEM SUPPORT

You copy the support necessary for each subsystem configuration created by running the INSTALL procedure. You can run the INSTALL procedure to copy this support any time after the SSP-ICF support has been copied to the system library using CNFIGSSP. The following display is presented during the INSTALL procedure:

```

** 3 INSTALLATION-SSP-INTERACTIVE COMMUNICATIONS FEATURE **      W1
KEY ANY CHANGES 0-NO 1-YES AND PRESS ENTER TO CONTINUE:
1. INTRA          -          2. BSC IMS/IRSS          -
3. BSCSEL         -          4. BSC CICS           -
5. BSC CCP        -          6. SNA UPLINE         -
7. SNA PEER       -          8. BSC 3270           -
9. SNA 3270       -          10. FINANCE            -
```

Select which subsystem(s) support you want to install by indicating a 0 (no) or 1 (yes) for each subsystem. You are prompted to insert diskettes into the system unit. These diskettes contain the necessary support for each subsystem you have selected.

The SSP-ICF subsystems are distributed on one 1 type diskette or one 2D type diskette. The volume ID is PPICF.

After the support is copied to the system library, you are prompted to apply PTFs and back up the system library. If you want to apply PTFs be sure to have the PTF diskette available. If you want to back up the system library, make sure you have enough initialized diskettes to contain a backup copy of the system library.

Chapter 10. Program Product Installation Verification Programs

RPG II Installation Verification

Sample programs are provided with the IBM System/34 RPG II Program Product. After RPG II is installed, these programs can be loaded from the distribution diskette and executed by entering the command statement `RPGSAMPL`. This command statement causes three RPG II and two auto-report programs to be compiled, executed, and then deleted from the disk. The first RPG II program prompts the operator for the following information:

1. Enter 123 for KEY prompt. Press the Field Exit key.
2. Enter DRESS for DESC prompt. Press the Field Exit key.
3. Enter 10 for VALUEA prompt. Press the Field Exit key.
4. Enter 30 for VALUEB prompt. Press the Field Exit key.
5. Enter 20 for VALUEC prompt. Press the Field Exit key.
6. Press the Enter/Rec Adv key.
7. Enter 124 for KEY prompt. Press the Field Exit key.
8. Enter COAT for DESC prompt. Press the Field Exit key.
9. Enter 40 for VALUEA prompt. Press the Field Exit key.
10. Enter 50 for VALUEB prompt. Press the Field Exit key.
11. Enter 30 for VALUEC prompt. Press the Field Exit key.
12. Press the Enter/Rec Adv key.

After the 10 fields are entered, the operator must press Cmd key 12 to indicate the end of input.

If RPG II is properly installed, output of the five sample programs is:

1. NO TRANSACTIONS LOADED
2 MASTERS LOADED

2. DATE IBM SYSTEM/34 PAGE 0001
SAMPLE UPDATE PROGRAM

KEY	DESCRIPTION	NEW VALUE A	NEW VALUE B	NEW VALUE C
-----	-------------	-------------	-------------	-------------

NO TRANSACTION RECORDS ENTERED

3. DATE IBM SYSTEM/34 PAGE 0001
SAMPLE INDEXED FILE LISTING

KEY	DESCRIPTION	VALUE A	VALUE B	VALUE C	TOTAL A+B-C
123	DRESS	10	30	20	20
124	COAT	40	50	30	60
	FINAL TOTAL	50	80	50	80

4. DATA FOR SAMPLE PROGRAM

11243	JONES HARDWARE	27541123199	2375CASH	47	47	2328123199
11352	NU-STYLE CLOTHIERS	27987123199	8707CASH	174		4000123199
11886	MIDI FASHIONS INC	15771123199	10722CASH	214	214	10508123199
12874	ULOOK INTERIORS	25622123199	6795CASH	136		6795123199
18274	STREAMLINE PAPER INC	29703123199	27403	548	238	17055123199
23347	RITE-BEST PENS CO	20842123199	1580	31		1000123199
25521	IMPORTS OF NM	29273123199	79740	1593	1193	58547123199
26723	ALRIGHT CLEANERS	19473123199	46200CASH	924		46200123199
28622	NORTH CENTRAL SUPPLY	17816123199	7597CASH	152		7597123199
29871	FERGUSON DEALERS	27229123199	6191CASH	124		6191123199
30755	FASTWAY AIRLINES	26158123199	74272CASH	1495	1685	72587123199
31275	ENVIRONMENT CONCERNS	20451123199	2943	59		1500123199
32457	B SOLE SILOS	27425123199	11005CASH	220		11005123199
37945	SHOFFTA BREAKS INC	18276123199	4723CASH	94		4723123199
42622	EASTLAKE GRAVEL CO	16429123199	2937CASH	58		2937123199

5.

DATE		CASH RECEIPTS REGISTER							PAGE	1
REGION	ACCOUNT NUMBER	ACCOUNT NAME	INVOICE NUMBER	INVOICE DATE	DATE PAID	AMOUNT OWED	DISCOUNT TAKEN	AMOUNT PAID	BALANCE DUE	EXCESS DISCOUNT
1	11243	JONES HARDWARE	27541	12/31/99	12/31/99	23.75	.47	23.28		
1	11352	NU-STYLE CLOTHIERS	27987	12/31/99	12/31/99	87.07		40.00	47.07	
1	11886	MIDI FASHIONS INC	15771	12/31/99	12/31/99	107.22	2.14	105.08		
1	12874	ULOOK INTERIORS	25622	12/31/99	12/31/99	67.95		67.95		
1	18274	STREAMLINE PAPER INC	29703	12/31/99	12/31/99	274.03	2.38	170.55	101.10	
REGION TOTALS						560.02	4.99	406.86	148.17	
2	23347	RITE-BEST PENS CO	20842	12/31/99	12/31/99	15.80		10.00	5.80	
2	25521	IMPORTS OF NM	29273	12/31/99	12/31/99	797.40	11.93	585.47	200.00	
2	26723	ALRIGHT CLEANERS	19473	12/31/99	12/31/99	462.00		462.00		
2	28622	NORTH CENTRAL SUPPLY	17816	12/31/99	12/31/99	75.97		75.97		
2	29871	FERGUSON DEALERS	27229	12/31/99	12/31/99	61.91		61.91		
REGION TOTALS						1,413.08	11.93	1,195.35	205.80	
3	30755	FASTWAY AIRLINES	26158	12/31/99	12/31/99	742.72	16.85	725.87		1.90
3	31275	ENVIRONMENT CONCERNS	20451	12/31/99	12/31/99	29.43		15.00	14.43	
3	32457	S SOLE SILOS	27425	12/31/99	12/31/99	110.05		110.05		
3	37945	HOFFTA BREAKS INC	18276	12/31/99	12/31/99	47.23		47.23		
REGION TOTALS						929.43	16.85	898.15	14.43	1.90
4	42622	EASTLAKE GRAVEL CO	16429	12/31/99	12/31/99	29.37		29.37		
REGION TOTALS						29.37		29.37		
COMPANY TOTALS						2,931.90	33.77	2,529.73	368.40	1.90

Basic Assembler Installation Verification

A sample program (ASSMPL), input data file (INPUT), and procedure (ASMSAMPL) are provided with the IBM System/34 Basic Assembler Program Product. After basic assembler is installed, sign on by indicating #ASMLIB for library. Enter the command statement ASMSAMPL, and you will be prompted to insert the assembler program product diskette (PPASM).

```
ASMSAMPL
  INSERT ASSEMBLER PROGRAM PRODUCT
  DISKETTE
  SYS-1162 OPTIONS 0
  PAUSE--WHEN READY, ENTER 0 TO CONTINUE
```

The ASMSAMPL procedure then copies to disk from diskette the ASSMPL source program and the input data file. The ASSMPL program is then assembled, link edited, and executed.

```
ASSMPL WILL BE ASSEMBLED, LINKED,
AND EXECUTED. AT EXECUTION TIME A
FILE WILL BE READ AND PUT TO THE
PRINTER.
ASM PROCEDURE EXECUTING
MACRO PROCESSOR EXECUTING
```

After execution, the ASSMPL source, object, and load modules, the input data file, and the ASMSAMPL procedure are deleted from the disk.

The printed output from this verification sample is: a list of options, an external symbol list, source statement list, cross reference list, overlay linkage editor map, and the message THE ASSEMBLER SAMPLE PROGRAM IS EXECUTING PROPERLY. After this message is printed, the display screen will display EOF ON SYSIN and will then appear as follows:

```
VERIFICATION IS COMPLETE. THE
FOLLOWING WILL NOW BE DELETED
ASSMPL SOURCE, OBJECT, AND LOAD
MODULE - THE INPUT FILE - AND
THE ASMSAMPL PROCEDURE.
REMOVE PROCEDURE EXECUTING
DELETE PROCEDURE EXECUTING
REMOVE PROCEDURE EXECUTING
```

The following is a sample of the source statement listing and the final printed message of the properly installed Basic Assembler Program Product.

```

IBM SYSTEM/34 BASIC ASSEMBLER-MACRO PROCESSOR                                RELEASE
ASSMPL DISK FILE TO PRINTER (80/80 LIST PROGRAM)
ERR LOC  OBJECT CODE      ADDR STMT  SOURCE STATEMENT                                TIME 01.47  PAGE  3
5 *****
6 * THIS PROGRAM READS A FILE FROM THE DISK AND LISTS IT                        * 00070000
7 * ON THE PRINTER.                                                            * 00080000
8 *                                                                              * 00090000
9 *   THERE ARE THREE POSSIBLE MESSAGES ISSUED BY THIS PROGRAM:                * 00100000
10 *   MESSAGE                                                                    MEANING                    * 00110000
11 *   'EOF ON SYSIN'                      END OF FILE ENCOUNTERED FROM DISK READ. * 00120000
12 *   AND GOES TO EQU.                    THE PROGRAM ISSUES THE MESSAGE    * 00130000
13 *   'PRINTER ERROR'                     THERE HAS BEEN A PERMANENT PRINTER * 00140000
14 *   ERROR. THE PROGRAM ISSUES THE      MESSAGE AND GOES TO END OF JOB.    * 00150000
15 *   MESSAGE AND GOES TO END OF JOB.    * 00160000
16 *   'SYSIN ERROR'                       THERE HAS BEEN A PERMANENT READ   * 00170000
17 *   ERROR. THE PROGRAM ISSUES THE     MESSAGE AND GOES TO END OF JOB.   * 00180000
18 *   MESSAGE AND GOES TO END OF JOB.   * 00190000
19 *                                                                              * 00200000
20 *****
0800      22 ASSMPL START X*0800*                                                00230000
24 * PREPARE THE FILES FOR USE (DTFS ARE CHAINED)                               00250000
26 *           $ALDC DTF-DISKDTF                ALLOCATE ALL FILES            00270000
33 *           $OPEN DTF-DISKDTF                OPEN ALL FILES                00290000
0810      40 * READ FROM SYSTEM SOURCE LIBRARY AND PRINT RECORDS UNTIL END OF FILE 00310000
41 REDAGN EQU *
42 *           $GETD DTF-DISKDTF,ERR-SYSER,EOF-EOF,OP-NGET 00330000
0829 B5 02 09      54 L           $FIWKB(XR2),XR2                POINT TO RETRIEVED RECORDS 00350000
082C 2C 4F 0B47 4F 55 MVC          DSKREC(80),79(XR2)          MOVE DATA TO PRINT BUFFER 00360000
56 *           $PUTP DTF-PRDTF,ERR-PRNERR,SPACEA-1,PRINT-Y 00370000
0846 C0 87 0810    67 B           REDAGN                        BRANCH BACK AND READ AGAIN 00390000

```

```

IBM SYSTEM/34 BASIC ASSEMBLER-MACRO PROCESSOR                                RELEASE
ASSMPL DISK FILE TO PRINTER (80/80 LIST PROGRAM)
ERR LOC  OBJECT CODE      ADDR STMT  SOURCE STATEMENT                                TIME 01.47  PAGE  4
69 * END OF FILE ON SYSIN
70 EOF LA          EOFMSG,LOG
71 *           $LOG
76 *           B           EQU
084A C2 02 08D4    70 * EOF MESSAGE
0852 C0 87 0869    76 * INVALID REPLY, TRY AGAIN
0856 C2 02 08DC    78 * ERROR ON DISK READ
79 SYSER LA        SERMSG,LOG
80 *           $LOG
85 *           J           EQU
085E F2 87 08      85 * DISK READ ERROR MESSAGE
87 * ERROR ON PRINTER
88 PRNERR LA       PERMSG,LOG
89 *           $LOG
0861 C2 02 08E4    87 * PRINTER ERROR MESSAGE
95 * END OF JOB ROUTINE
96 EQU *
97 *           $CLOSE DTF-DISKDTF
103 *          $EQU
0869      95 * CLOSE ALL FILES
96 EQU *
97 *           $CLOSE DTF-DISKDTF
103 *          $EQU
109 * CONSTANTS AND DATA AREAS
111 * DISK FILE TABLES ETC.
112 *SKDTF $DTFD ACCESS-CG,RECL-80,NAME-INPUT,BLKL-512,IOAREA-INBUF,
113 *      CHAIN-PRDTF,RCAD-INRCRD
08D1      158 * BUFFER AND WORK AREAS FOR DISK INPUT INTERFACE
08F7      159 INBUF EQU *
08F8      160 IOB DS CL39
0AF7      161 INAREA DS 2CL256
0AF8      162 INCRD EQU *
0847      163 DSKREC DS CL80
08D1      165 * PRINT FILE TABLES ETC.
08F8      166 *RTDTF $DTFP RCAD-INRCRD,IOAREA-OUTPUT,RECL-80,NAME-FILENAME
0871      196 * BUFFER AND WORK AREAS FOR PRINTER INTERFACE
08D3      197 OUTPUT EQU *
198 IOAREA DS CL99
200 * SYSTEM LOG TABLES
202 *OFMSG $LMSG TYPE-2,SPACE-2,MSGLN-15,MSGAD-EOFMGC,#RSTE-N X00820000

```

ASSMPL DISK FILE TO PRINTER (80/80 LIST PROGRAM)

ERR LOC	OBJECT CODE	ADDR	STMT	SOURCE STATEMENT	TIME	01.47	PAGE	5
		219	*ERMSG	\$LMSG TYPE-2,SPACE-2,MSGLN-15,MSGAD-SERMGC,#RSTE-N				X00840000
		236	*ERMSG	\$LMSG TYPE-2,SPACE-2,MSGLN-15,MSGAD-PERMGC,#RSTE-N				X00860000
08EC	C5D6C640D6D540E2	08EC 08FA	253 254	EOFMGC EQU * DC CL15*EDF ON SYSIN *				00880000 00890000
08FB	E2E8E2C9D540C5D9	08FB 0C09	256 257	SERMGC EQU * DC CL15*SYSIN ERROR *				00910000 00920000
0C0A	D7D9C9D5E3C5D940	0C0A 0C18	259 260	PERMGC EQU * DC CL15*PRINTER ERROR *				00940000 00950000
		262	* OFFSETS FOR ALL DTFS DEFINED IN THIS PROGRAM					00970000
		264	* \$DTFO DISK-Y,PRT-Y,FIELD-Y					00990000
		611	* REGISTER LABELS					01010000
0002		612	\$DTF EQU 2					01020000
0002		613	SYS EQU 2					01030000
0002		614	LOG EQU 2					01040000
0002		615	XR2 EQU 2					01050000
		0800	617	END ASSMPL				01070000
TOTAL STATEMENTS IN ERROR IN THIS ASSEMBLY-- 0								
TOTAL SEQUENCE ERRORS IN THIS ASSEMBLY-- 0								

```

*****
*
* THE ASSEMBLER SAMPLE PROGRAM IS EXECUTING PROPERLY.
* THIS IS THE PRINTED OUTPUT FROM THE LOAD MODULE OF ASSMPL
*
*****
    
```

FORTRAN IV Installation Verification

Sample program modules are provided with the IBM System/34 FORTRAN IV Program Product. When FORTRAN IV was installed, these modules were loaded from the PID program product distribution diskette (PPFORT) and are executed by entering the command statement FORTSMPL. This command statement causes two FORTRAN IV programs (KBINCO and SAMPLE) to be compiled, executed, and then deleted from disk. A program listing, compiler storage map, informational messages, overlay linkage editor map, and the output of the sample program are printed on the printer.

Following is an example of the printed output from the FORTSMPL procedure using a 48-character FORTRAN print belt. Each compiler printed page heading shows the current release number, page number, date, and time. The sample includes:

- 1** The source module listing
- 2** The compiler storage map
- 3** The informational messages
- 4** The overlay linkage editor map
- 5** The sample program output

*PROCESS MAP

```

C
C *****
C * KBINCO COMPUTES THE BINOMIAL COEFFICIENT, *
C *  $C(N,K) = (N*(N-1)*...*(N-K+1))/(K*K-1)*...1$ , *
C * WHERE N AND K ARE THE INTEGER ARGUMENTS TO THE *
C * FUNCTION. INTERMEDIATE CALCULATIONS ARE PER- *
C * FORMED IN REAL ARITHMETIC. IN THE CASE WHERE *
C * K .GT. N, A VALUE OF ZERO IS RETURNED. THE VAL- *
C * UES OF N AND K ARE LEFT UNCHANGED. THE FUNCTION *
C * HAS BEEN CHECKED FOR ALL COMBINATIONS OF *
C * N=1,2,...,20 AND K=1,2,...,10. *
C *****
C
1 FUNCTION KBINCO(N,K)
2 CHECK FOR TRIVIAL CASES
3 IF ( K .GT. N ) GOTO 50
4 IF ( K .EQ. 0 ) GOTO 60
5 IF ( K .EQ. N ) GOTO 60
6 IF ( K .EQ. 1 ) GOTO 70
7 IF ( N-K .EQ. 1 ) GOTO 70
8 CONVERT TO REAL FOR CALCULATIONS
9 P = N
10 Q = K
11 CHECK FOR LOWER DENOMINATOR
12 IF ( P-Q .LT. 0 ) Q = P-Q
13 CALCULATE DENOMINATOR
14 MAX = Q
15 BOT = 1.0
16 DO 30 I=2,MAX
17 BOT = I * BOT
18 30 CONTINUE
19 COMPUTE NUMERATOR
20 MAX = P
21 MIN = P - Q + 1.0
22 TOP = 1.0
23 DO 40 I=MIN,MAX
24 TOP = I * TOP
25 40 CONTINUE
26 CALCULATE AND ROUND BINOMIAL COEFFICIENT
27 KBINCO = TOP / BOT + 0.5
28 RETURN
29 50 KBINCO = 0
30 RETURN
31 60 KBINCO = 1
32 RETURN
33 70 KBINCO = N
34 RETURN
35 END

```


2 { VARIABLE ALLOCATION MAP
 NAME AT HEX1 DEC1 HEX2 DEC2 NAME AT HEX1 DEC1 HEX2 DEC2
 KBINCO I 0005 00005 N I 000A 00010
 K I 000E 00014 P R 0012 00018
 Q R 0016 00022 MAX I 001A 00026
 BOT R 001E 00030 I I 0022 00034
 MIN I 0026 00038 TOP R 002A 00042

3 000 TOTAL ERRORS FOR THIS COMPILATION

2 STATEMENT ALLOCATIONS
 30 =0153 40 =0197 50 =01AF 60 =018B 70 =01C7

3 { SYS-3133 I KBINCO MODULE IS CATALOGED AS A SUBROUTINE MEMBER
 #LIBRARY IS THE LIBRARY NAME
 4 TOTAL NUMBER OF LIBRARY SECTORS
 020 CATEGORY NUMBER
 SYS-3135 I KBINCO MODULE'S CODE LENGTH IS
 467 DECIMAL

1 { *PROCESS MAP
 1 PROGRAM SAMPLE
 C *****
 C *
 C * THIS PROGRAM IS A TEST CASE TO VERIFY THAT THE S/34 FORTRAN IV *
 C * COMPILER AND LIBRARY HAVE BEEN PROPERLY INSTALLED IN YOUR SYSTEM.*
 C * THE PROGRAM GENERATES A TABLE OF BINOMIAL COEFFICIENTS WHICH IS *
 C * THEN PRINTED. ALL DATA IS PROGRAM GENERATED. *
 C *
 C *****
 2 DIMENSION NBYK(20,10)
 3 INTEGER DJT
 4 DATA DJT/3/
 5 DO 10 K=1,10
 6 NBYK(1,K) = <
 7 10 CONTINUE
 8 WRITE (DJT,2)
 9 WRITE (DJT,3) (NBYK(1,K),K=1,10)
 10 DO 30 N=1,20
 11 DO 20 K=1,10
 12 NBYK(N,K) = <KBINCO(N,K)
 13 20 CONTINUE
 14 WRITE (DJT,4) N,(NBYK(N,K),K=1,10)
 15 30 CONTINUE
 16 WRITE (DJT,5)
 17 STOP
 18 2 FORMAT('1 SYSTEM/34 FORTRAN IV SAMPLE TEST CASE'////////)
 19 3 FORMAT('7,' I',57('---'),' I'/T7,' I',T35,' K',T65,' I'/T2,' I'---I',
 * 57('---'),' I'/T2,' I' N I',I2,I4,2I5,3I6,3I7,' I'/T2,
 * 'I'---I',57('---'),' I')
 20 4 FORMAT(' I',I3,' I',I3,I4,2I5,3I6,3I7,' I')
 21 5 FORMAT(' I'---I',57('---'),' I')
 22 END

2 { VARIABLE ALLOCATION MAP
 NAME AT HEX1 DEC1 HEX2 DEC2 NAME AT HEX1 DEC1 HEX2 DEC2
 OUT I 01AD 00429 NBYK I 0181 00433 J400 01232
 K I 04D1 01233 N I 04D5 01237

000 TOTAL ERRORS FOR THIS COMPILATION

2 STATEMENT ALLOCATIONS
 5 =058E 4 =05A7 3 =05E8 2 =0678 10 =0687 20 =0733 30 =0763

OVERLAY LINKAGE EDITOR STORAGE USAGE MAP AND CROSS REFERENCE LIST

DATE XX/XX/XX

START ADDRESS	OVERLAY NUMBER AREA	CATEGORY	NAME AND ENTRY	CODE HEXADECIMAL	LENGTH DECIMAL	REFERENCED BY
0000		0	SAMPLE	078A	1930	
0780			#UNITB			@FOE0
0120			#ERBUF			@F0D7 @FOIC
0090			#IOBUF			@FOI3
078A		0	@FOE0	014C	332	SAMPLE @F0D7 KBINCO @FOI3 @FOIO
						@F0B2 @F0B1
0874			#MNTY			SAMPLE KBINCO
08A0			#SNTRY			SAMPLE KBINCO
08A7			#RNTRY			SAMPLE KBINCO
078A			#D			@F0D7 @FOI3
08AA			#RETRY			KBINCO
08AD			DLDIRG			@FOIO @F0B2 @F0B1
08AD			RESUME			
08D6		0	@F0B1	0063	99	@FOE0 SAMPLE
0907			#DED4			@F0B2
0929			#DEDZ0			@F0C3
0939		0	@FOIO	0107	263	@F0B2 @F0B1 @FOE0 SAMPLE @F0D7
						@F0B8 @FOI3 @FOI8 @FOIC
						SAMPLE @F0B8
09D1			#ELST			
09DD			#ELST2			
09C2			#DERR			
09B2			#IDINT			
099E			#IOCOM			@FOI3
09EA			#ENDEQ			
09F2			#ERREQ			
0A08			#JUTBL			@F0B2
09FA			#INTBL			@F0B2
0A16			#IO@@@			@F0B2 @FOI3
0A17			#FLRP2			@F0B2
0A40		5	@F0B2	0137	311	SAMPLE @FOIO
0B44			#FRET			@F0C3
0B4C			@F0B2A			@FOIO
0AC4			@F0B2B			@FOIO
0B56			@F0B2C			@FOIO
0B77		5	@F0C3	00AD	173	SAMPLE @FOIO
0C24		5	@F0B8	004E	78	@F0B2
0C72		5	@F0B9	0018	24	@F0B2
0C8A		5	@F0BA	0010	29	@F0C3 @F0B2
0CA7		5	@F0CA	002B	43	@F0C3
0CD2		5	@FOIC	006B	107	SAMPLE @F0D7
0D0F			#ERTST			
0D3D		6	@FOIB	007E	126	@FOIC @FOIO SAMPLE @FOVP
0DBB		6	@FOI3	00AF	175	@FOIC SAMPLE
0DC1			#FOI3A			@FOIO
0E4D			#FOI3			@FOIC
0E6A		6	@FOVP	0018	24	SAMPLE @F0B8
0E82		6	@F0B8	003C	60	@FOI3 @FOIC @FOIO @FOE0
0E8E		8	@F0D7	012C	300	@F0B8 @FOIC
0FEA		20	KBINCO	0103	467	SAMPLE

4

3

SYS-3130 I SAMPLE MODULE'S MAIN STORAGE SIZE IS
 4541 DECIMAL
 SYS-3131 I 0000 IS THE START CONTROL ADDRESS OF THIS MODULE
 SYS-3134 I SAMPLE MODULE IS CATALOGED AS A LOAD MEMBER
 #LIBRARY IS THE LIBRARY NAME
 20 TOTAL NUMBER OF LIBRARY SECTORS

SYSTEM/34 FORTRAN IV SAMPLE TEST CASE

5

I-----I													
I													
I-----I													
I													
I-----I													
I	N	I	1	2	3	4	5	6	7	8	9	10	I
I-----I													
I	1	I	1	0	0	0	0	0	0	0	0	0	I
I	2	I	2	1	0	0	0	0	0	0	0	0	I
I	3	I	3	3	1	0	0	0	0	0	0	0	I
I	4	I	4	6	4	1	0	0	0	0	0	0	I
I	5	I	5	10	10	5	1	0	0	0	0	0	I
I	6	I	6	15	20	15	5	1	0	0	0	0	I
I	7	I	7	21	35	35	21	7	1	0	0	0	I
I	8	I	8	28	56	70	56	28	8	1	0	0	I
I	9	I	9	35	84	125	125	84	36	9	1	0	I
I	10	I	10	45	120	210	252	210	120	45	10	1	I
I	11	I	11	55	165	330	462	462	330	165	55	11	I
I	12	I	12	66	220	495	792	924	792	495	220	66	I
I	13	I	13	78	286	715	1287	1716	1716	1287	715	286	I
I	14	I	14	91	364	1001	2002	3003	3432	3003	2002	1001	I
I	15	I	15	105	455	1365	3003	5005	6435	6435	5005	3003	I
I	16	I	16	120	560	1820	4368	8008	11440	12870	11440	8008	I
I	17	I	17	136	680	2380	6188	12376	19448	24310	24310	19448	I
I	18	I	18	153	816	3060	8568	18564	31824	43758	48620	43758	I
I	19	I	19	171	969	3875	11528	27132	50388	75582	92378	92378	I
I	20	I	20	190	1140	4845	15504	38760	77520	125970	167960	184756	I
I-----I													

COBOL Installation Verification

A sample program (COBOLSMP) is provided with IBM System/34 COBOL. Insert the PID COBOL diskette (sequence number two for diskette 1 type diskettes), then enter the COBOLSMP command. This command causes the COBOL sample program to be copied to the system, then compiled, then executed. After successful execution, the sample program source and object modules and the COBOLSMP procedure are removed from the system. The following listings will be produced from this program:

- 1** The source module listing
- 2** The compiler storage map
- 3** The informational messages
- 4** The overlay linkage editor storage map
- 5** The sample program output

START ADDRESS	OVERLAY NUMBER	AREA	CATEGORY	NAME AND ENTRY	CODE LENGTH HEXADECIMAL	CODE LENGTH DECIMAL	REFERENCED BY
0000			0	CBLSMP	02C5	709	
0000				CBLSMP			
02C5			0	CB420	0206	518	CBLSMP
02D5				CB421			CBLSMP
02DC				CB422			CBLSMP
02E3				CB423			
02E4				CB424			
02F1				CB425			CBLSMP
04CB			0	CB520	0003	13	CBLSMP @CB600
04DB				CB610	0067	103	CBLSMP
053E			0	CB620	0141	321	CBLSMP @CB600 @CB150
0632				CB621			CBLSMP
0626				CB5AV			CBLSMP
0650				CB629			CBLSMP @CB600
0680			0	CB150	00C4	196	CBLSMP @CB420
06C5				CBVLL			CBLSMP @CB420
06CC				CBVL2			
0697				CBNUM			
0687				CBIX1			@CB420
0689				CBIX2			@CB420
068B				CBARR			@CB420
068D				CBLEN			@CB420
068F				CBADR			
0691				CBADL			@CB420
0696				CBNDD			
0744			0	CB500	00E3	227	@CB620

4

SYS-3130 I CBLSMP MODULE'S MAIN STORAGE SIZE IS 2087 DECIMAL
 SYS-3131 I 0000 IS THE START CONTROL ADDRESS OF THIS MODULE
 SYS-3134 I CBLSMP MODULE IS CATALOGED AS A LOAD MEMBER
 #LIBRARY IS THE LIBRARY NAME
 !O TOTAL NUMBER OF LIBRARY SECTORS

```
*****
*****
*****

THE COROL SAMPLE PROGRAM EXECUTES
DISPLAYS TO THE PRINTER & CONSOLE.
THIS IS DONE TO REDUCE THE AMOUNT
OF OPERATOR INTERVENTION . . . . .

*****
*****
*****
```

5

BASIC Installation Verification

A sample program (BASICSMP) is provided with the BASIC Program Product. When BASIC is installed, the sample program and procedure are loaded from the PID program product distribution diskette (PPBA1). BASIC installation is verified by entering the command statement BASICSMP. This command statement loads the command mode version of BASIC. When the message appears indicating BASIC is ready, enter the following BASIC commands:

- LOAD BASICSMP,#LIBRARY,SOURCE
- LISTP
- RUN
- OFF

The first command loads the sample BASIC program. The second command lists the program on the printer (see 1). The third command runs the program, which produces output on the printer (see 2). The fourth command terminates BASIC and continues with the BASICSMP procedure, which removes the sample program and procedure from the system.

```

PROGRAM NAME: BASICSMF
SYSTEM/34 BASIC -- RELEASE 05
LISTP

```

```

00010 !*****
00020 !
00030 !           PRINT PASCAL'S TRIANGLE           *
00040 !
00050 !*****
00060 PRINT #255: NEWPAGE;TAB(60);"PASCAL'S TRIANGLE"
00070 FOR ROW=0 TO 15
00080     PRINT #255: PRINT #255:
00090     FOR COL=0 TO ROW
00100         PRINT #255: TAB(67-3*ROW+6*COL);FNBINOM(ROW, COL);
00110     NEXT COL
00120 NEXT ROW
00130 !*****
00140 !
00150 !           CALCULATE A BINOMIAL COEFFICIENT       *
00160 !
00170 !*****
00180 DEF FNBINOM(N,M)
00190     FNBINOM=FNFAC(N)/(FNFAC(M)*FNFAC(N-M))
00200 FNEND
00210 !*****
00220 !
00230 !           CALCULATE N FACTORIAL                 *
00240 !
00250 !*****
00260 DEF FNFAC(N)
00270     FAC=1
00280     FOR I=1 TO N
00290         FAC=FAC*I
00300     NEXT I
00310     FNFAC=FAC
00320 FNEND

```

PASCAL'S TRIANGLE

```

          1
         1 1
        1 2 1
       1 3 3 1
      1 4 6 4 1
     1 5 10 10 5 1
    1 6 15 20 15 6 1
   1 7 21 35 35 21 7 1
  1 8 28 56 70 56 28 8 1
 1 9 36 84 126 126 84 36 9 1
1 10 45 120 210 252 210 120 45 10 1
 1 11 55 165 330 462 462 330 165 55 11 1
 1 12 66 220 495 792 924 792 495 220 66 12 1
 1 13 78 286 715 1287 1716 1716 1287 715 286 78 13 1
 1 14 91 364 1001 2002 3003 3432 3003 2002 1001 364 91 14 1
 1 15 105 455 1365 3003 5005 6435 6435 5005 3003 1365 455 105 15 1

```


Security Overview

System/34 provides two types of security functions: security at sign-on time and file and library security. Security at sign-on time controls operator access to the system and restrictions to certain menus. File and library security controls operator access to files and libraries.

SECURITY AT SIGN-ON TIME

There are three types of security at sign-on time to the System/34. They are:

- Password security
- Badge security
- Menu security

Password Security

Password security helps prevent unauthorized use of a display station. To begin a session, an operator must enter his password into a nondisplay field on the Sign On display. (Nondisplay means that the entered characters do not appear on the screen.) Following is an example of the Sign On display showing the location of the password security field:

SIGN ON	W1
USER ID	
PASSWORD	
MENU (OPTIONAL)	
LIBRARY	

If the operator does not enter the correct password in the password field, he cannot begin his session.

Badge Security

Badge security is an additional type of security at sign-on time. If badge security is active and the display station has a magnetic stripe reader, an operator must run a special coded badge through the magnetic stripe reader as well as enter his password in order to sign on to a display station. Following is an example of the Sign On display showing the location of the badge security field:

```
SIGN ON                                     WI  
  
ENTER BADGE . . . . .  
USER ID . . . . .  
PASSWORD . . . . .  
MENU (OPTIONAL) . . . . .  
LIBRARY . . . . .
```

If the operator does not enter the correct badge and password, he cannot begin his session.

Menu Security

A security officer can assign a specific menu and library to each user. The assigned menu and library values are treated as if they were entered on the Sign On display. If the security officer defines the assigned menu as being mandatory, the user is not allowed to sign on with any other menu or library. When the user signs on, the assigned menu automatically appears on the display screen. The user can select one of the items from the menu (1 through 24), enter the OFF command, or enter the MSG command. Any one of the menu items can direct the user to another menu, thereby allowing access to possibly many items that were intended to be secure.

If the assigned menu is not mandatory, the user can override the assigned menu and library values at sign on by entering zeros in the menu field.

How Security Works at Sign-On Time

Passwords are located in a disk file called the password security file. The password security file contains a profile for each person that is authorized to use the system.

The following table reflects the contents of a user profile:

User ID	Up to 8 characters	Required
Password	Must be 4 characters	Required
User class	Class code	Required
Badge ID	Must be 8 digits	Optional
Service aid authorization	Authorization code	Required
Sign-on menu	Up to 6 characters	Optional
Mandatory menu	Mandatory code	Optional
Sign-on library	Up to 8 characters	Optional
Comment field	Up to 20 characters	Optional

Users can be assigned the following classes:

- Master security officer. The master security officer is assigned during the initial definition of password security. A master security officer can:
 - Define password and badge security
 - Add, delete, or edit profiles of security officers, system operators, subconsole operators, and display station operators
 - Change his own password and badge ID
 - Act as a system operator, subconsole operator, or display station operator
 - Save and restore security file
- Security officer. Security officers are assigned by the master security officer. A security officer can:
 - Add, delete, or edit profiles of system operators, subconsole operators, and display station operators
 - Change his own password and badge ID
 - Act as a system operator, subconsole operator, or display station operator

A security officer cannot run the utility programs (\$PRSV and \$PRST) that save and restore the security files.

- **System operator.** System operators are assigned by the master security officer or by a security officer. An operator assigned as a system operator can operate any display station, including the display station designated as the system console and any display station in subconsole mode. An operator assigned as a system operator cannot run the security utility programs (\$PRES, \$PROF, \$PRMN, \$PRST, and \$PRSV).
- **Subconsole operator.** Subconsole operators are assigned by the master security officer or by a security officer. An operator assigned as a subconsole operator can operate any display station except the system console and can operate in subconsole mode, but cannot run the security utility programs (\$PRES, \$PRMN, \$PROF, \$PRST, and \$PRSV).
- **Display station operator.** Display station operators are assigned by the master security office or by a security officer. An operator assigned as a display station operator can operate any display station except the display stations designated as the system console or subconsoles. An operator assigned as a display station operator cannot run the security utility programs (\$PRES, \$PRMN, \$PROF, \$PRST, and \$PRSV).

RESOURCE SECURITY

File and Library Security

File and library security helps prevent unauthorized use of files and libraries, and can be used only if password security is active. File and library security uses a file called the resource security file to store information about each protected file or library. The resource security file contains a record for each protected file and library. The record contains the user IDs of the authorized users of the file or library. For each authorized user, the record contains an access code that identifies the user category.

For files and libraries, the authority of a user can be limited to any of the following categories:

Execute	The user is allowed to execute members from a secured library.
Read	The user has execute level access and additionally can display the contents of a file or library member.
Change	The user has read level access and additionally can create/delete files, libraries, and library members. Also, the user can change the contents of files and library members.
Owner	The owner has change level access. Also, the owner can grant access to other users and rename the file or library.

A public access level can also be specified. This level can be: none (blank), execute only (E), read only (R), change (G), or owner (O). For example, if execute only is specified as the public access level for a user library, all system users can execute members from that library. However, only those users specified in the access list can read or change it, and only users defined in the access list as owners can update the access list. No user can be restricted to a level of access lower than the public access level.

An entry for a file or library can be placed in the resource security file before the file or library is created. When an attempt is made to create a new file or library for which an entry exists in the resource security file and resource security is active, the system checks the user ID of the operator against the access list. If the operator is authorized to change the contents of the file or library, the system creates the file or library and sets a flag in the VTOC entry indicating that the file or library is protected. If the operator is not authorized to change the file or library, the system displays an error message at both the requesting display station and at the system console; the display station operator must cancel the job.

If files exist with this label when the entry is placed into the resource security file, the security indicator is set in the VTOC entry for each file with this label.

If a user attempts to delete a file or library with an entry, the user must be authorized to change the file or library. If the user is authorized, the file or library is deleted. The entry is not deleted from the resource security file.

When an attempt is made to use a protected file or library, the system ensures that the operator at the display station is authorized to use the file or library. When a program attempts to add to or update information in a file, the system checks that the operator is authorized to add or update the file. When a program attempts to read or change the contents of a protected library, the system checks that the operator is authorized to perform the requested operation. If the operator is not an authorized user, or if an attempt is made to perform an operation that the operator is not authorized to perform, the system displays an error message at both the requesting display station and at the system console; the display station operator must cancel the job step or the job.

The system makes special checks before allowing a display station to attach to an MRT program. The system checks that the operator at the display station is authorized to execute programs from all libraries being used by the MRT program. If the MRT program has allocated disk files, the system checks that the operator is authorized to use those files. If the operator is not authorized to use the library or one or more of the files, the system displays an error message and does not allow the display station to attach to the MRT program. If the MRT program later requests a file to which the display station operator is not authorized access, the security function displays a message at the system console and the system operator must cancel the job step or the job.

Note: Operators of display stations attached to MRJE need not be authorized for all files and libraries used by MRJE; they must be cleared for only those files and libraries they use.

If a program attempts to acquire a display station, the system checks that the operator at the display station is authorized to use the library that contains the program and that the operator is authorized to use any files already allocated by the program. If the operator is not authorized to use the library or one or more of the data files, the system returns an error code to the program and does not allow the program to acquire the display station. If the program later attempts to use a file to which an operator at an acquired display station is not authorized access, the security function displays an error message at the requesting display station; the operator must cancel the job step or the job.

Security Installation

PASSWORD SECURITY DISPLAYS

The master security officer can activate or deactivate password or badge security and define, modify, or delete the password security file by running the PROF procedure. Other security officers defined by the master security officer can modify the password security file using the PROF procedure. The PROF procedure calls the password security utility (\$PROF).

The \$PROF utility can be run only from the system console. The user enters the procedure name, PROF, and the Password Security Menu appears as follows:

```
PASSWORD SECURITY MENU

1. DEFINE PASSWORD SECURITY
2. ADD NEW USERS
3. CHANGE OR DELETE USER PROFILES
4. END OF JOB

ENTER NUMBER TO MAKE SELECTION
```

Enter the number of the desired option and press the Enter/Rec Adv key to continue. Option 4 will terminate the utility. If password security is not active, only option 1 is allowed. If password security is active, only the master security officer can select option 1.

Define Password Security

If password security is not active, you can select it by using the Define Password Security display. Select option 1 on the Password Security Menu display and the Define Password Security display appears:

```
DEFINE PASSWORD SECURITY

PASSWORD SECURITY REQUESTED (1/0)..... 0
BADGE SECURITY REQUESTED (1/0)..... 0
MASTER SECURITY OFFICER
  USER ID....   PASSWORD....   BADGE ID...
PASSWORD SECURITY FILE SIZE (1-25 BLOCKS).....
  (40 USERS PER BLOCK)
OVERRIDE USER ID.....   OVERRIDE PASSWORD.....

CONTROL      U
CONTROL  C TO RETURN TO MENU  U TO UPDATE THE FILE.
```


Password security requested: To request password security, indicate 1 (yes) in this field.

Badge security requested: If you would like to have badge security active at this time, you may do so by indicating 1 (yes) in this field.

Master security officer: Indicate in this field the *user ID*, *password*, and *badge ID* (if badge security is activated) of the master security officer. The master security officer user ID is 1 to 8 characters long. The initial character must be left-adjusted and either A through Z or #, \$, or @. The user ID must not contain commas or embedded blanks. The master security officer password is a 4-character field. Blanks cannot be used in the password. The master security officer badge ID must be 8 digits (0-9). The security class code for the master security officer is MS.

Password security file size: This field indicates the size of the password security file. The file size must be indicated in blocks. Each block can contain security profiles for up to 40 users. The minimum file size is 1 block (40 users). The maximum file size is 25 blocks (1000 users). This disk space is in the user disk area.

Override user ID and Override password: An override user ID and password may be defined in these fields. The override user ID and password can be used to sign on to the system if the password security file is destroyed or has a permanent I/O error. These fields have the same syntax restrictions as the master security officer user ID and password. These overrides can only be used at the system console, and only after an IPL occurs or the COMPRESS procedure is run. When the SSP is reloaded from diskette, the overrides are reset to their values at backup.

Control: Indicate a U in this field when activating password security. U indicates an update to password security file.

When the operator presses the Enter/Rec Adv key with the Control set to U, password security will be active after the next IPL. At that time, only the master security officer will be able to sign on to the system. He must sign on and define all other users by running the PROF procedure.

When password security is active, only users who are defined to the system can sign on. Each user defined to the system must have a unique ID. Each user must also have a password; however, the password does not need to be unique.

The password security function should be activated only after your System/34 is completely installed and functional.

If password security is already active, the master security officer can redefine password/badge security by using the Define Password Security display. Only the master security officer can use this option. The master security officer user ID, password, badge ID, and the size of the password security file can be changed. The master security officer user ID, password, and badge ID must satisfy the restrictions listed before in this section. The new file size can be 1 through 25 blocks long.

CAUTION

The old password security file is destroyed when the file size is changed. Therefore, you should save the old password security file on diskette before increasing the size; otherwise your old file will be lost. You can save your password security file by using the PRSAVE command. (See the description of the PRSAVE command later in this chapter.) You will not be able to restore your password security file if you decrease the size of that file.

If you specified badge security either during activation of password security or while changing password security, only display stations configured as having magnetic stripe readers will be able to use the badge security function. You can specify which display stations have the magnetic stripe reader feature during CNFIGSSP.

Deactivating Password or Badge Security

The master security officer can deactivate password or badge security by setting the appropriate request field 0 (no) and pressing the Enter/Rec Adv key with the Control set to U for update. The change in security configuration does not take effect until after the next IPL. Deactivating password security causes resource and badge security to be deactivated, and both the password and resource security files are deleted. The PRSAVE procedure should be used to copy those files before deactivating password security if the files will be needed later.

Add New Users

The master security officer or other designated security officers can add new user profiles by using the Password Security-Add New Users display. Select option 2 of the Password Security Menu display, and the Password Security-Add New Users display appears:

PASSWORD SECURITY-ADD NEW USERS						
USER ID	PASSWORD	CLASS	COMMENT	BADGE ID	SERVICE AIDS USE	
CONTROL <u>U</u>						
CONTROLS C TO RETURN TO MENU U TO UPDATE THE FILE.						

The security officer enters the user ID, password, security class, and authorization for certain service aids (DUMP, PATCH, and SETDUMP) for each user profile. The security officer can also enter a comment in the comment field for each new user. Optionally the badge ID can be entered, if appropriate for this profile. The badge ID field will only appear if badge security is active.

Up to four new users can be entered each time this display appears. A U entered in the control option field causes these new user profiles to be saved in the password security file. If a C is entered in the control option field before the Enter/Rec Adv key is pressed, the Password Security Menu display returns, and any new profiles entered are not saved in the password security file.

The *user ID* must meet the same restrictions as the master security officer user ID:

- 1 to 8 characters long
- Initial character either A through Z, #, \$, or @
- No embedded blanks or commas
- Unique in the password security file
- Not the same as any work station ID

The *password* must be 4 nonblank characters.

The *security class* can be SO, OP, SC, or WS, as follows:

SO = Security Officer: The security officer can add, delete, or change the passwords of system operators and work station operators. Security officers can also change their own password.

OP = System Operator: This user can sign on at the system console and all display stations, but is not permitted to update the security file.

SC = Subconsole Operator: This user can sign on at any command display station or subconsole display station and can operate in subconsole mode, but is not permitted to update the security file or sign on at the system console.

WS = Work Station Operator: This user can sign on at any command display station, but is not permitted to update the security file or to sign on at the system console. This user cannot operate a subconsole display station in subconsole mode.

The *comment* field can contain a maximum of 20 characters.

The *badge ID* must be 8 digits (0-9).

The *service aids* authorization field allows you to restrict certain users from running the DUMP, PATCH, and SETDUMP service aids. Specify 0 if you want to restrict the user from running these service aids. Specify 1 if you want to allow the user to use the DUMP, PATCH, and SETDUMP procedures. You must specify either 0 or 1 for this field.

Change or Delete User Profiles

You can change or delete user profiles by using the Password Security-Change or Delete User Profiles display. Select option 3 of the Password Security Menu display, and the Password Security-Change or Delete User Profile display appears:

PASSWORD SECURITY-CHANGE OR DELETE USER PROFILES						
D	USER ID	PASSWORD	CLASS	COMMENT	BADGE ID	SERVICE AIDS USE
-	WWWWWWW	WWW	MS		00000000	1
-	A	AAAA	SO			0
-	B	BBBB	WS		11111111	0
-	C	CCCC	OP			0

CONTROL U
CONTROLS F TO PAGE FORWARD B TO PAGE BACKWARD R TO GO TO 1ST PAGE OF FILE
C TO RETURN TO MENU U TO UPDATE THE FILE I,AAAAAAA TO FIND USER ID AAAAAAA.

This display allows you to change the password security class, comment fields, badge ID, and authorization for service aids (DUMP, PATCH, and SETDUMP) in user profiles. To change a user ID, the old ID must be deleted (using this display); then a new user ID is added by using the Password Security-Add New Users display. User profiles are deleted by entering D in the field to the left of the user ID. The badge ID field will not appear if badge security is not active. The service aids authorization field will contain either 0 or 1. 0 restricts the user from using the DUMP, PATCH, and SETDUMP procedures. 1 allows the user to use these service aids. You can change this field by entering 0 or 1 over the value currently specified. This field will contain 1 for existing security profiles at Release 7. 0 or 1 must be specified for any new user profiles added after, and including, Release 7. These additions would be made on the Password Security-Add New Users display.

Note: The master security officer password can be changed, but the master security officer user ID cannot be deleted.

The master security officer can update all records in the password security file. Other security officers designated by the master security officer can change their own passwords, badge IDs, and service aids authorization, and the security file records of system operators and display station operators.

Menu Security Display

You can assign a menu and a session library to a user and, optionally, restrict that user to operating only from that menu. You do this by using the Menu Security-Change User Menu display. Unless you are the master security officer, you cannot assign yourself a menu or change your menu. Only the master security officer can assign or change menus for security officers. Security officers can assign or change menus for system operators or work station operators. When you run the PRMENU procedure, the system calls the menu security utility (\$PRMN), which causes the Menu Security-Change User Menu display to appear:

MENU SECURITY-CHANGE USER MENU				
USER ID	CLASS	MENU	MENU MANDATORY	DEFAULT LIBRARY
MONTE	NS			
RHS	SQ			CPLIB
LCS	WS	CPTEST	0	
CKS	OP	CPTEST	1	

CONTROL U
CONTROLS F TO PAGE FORWARD; B TO PAGE BACKWARD; R TO GO TO 1ST PAGE OF FILE;
U TO UPDATE THE FILE; I,AAAAAAA TO FIND USER ID AAAAAAA; C TO CANCEL UTILITY.

To assign or change a menu or library, move the cursor to the appropriate user and enter the name in the appropriate column. The name must begin with A through Z, #, \$, or @. It may not contain any embedded blanks or commas. The menu or library need not exist (may be created later). If the user must be restricted to running jobs only from this menu, enter 1 in the MANDATORY column. Otherwise, the menu will be only a default. A default menu appears immediately when the user signs on, but the user is not restricted to only that menu.

CAUTION

If the mandatory indicator is on, the user will not be able to sign on if either the menu or library does not exist on the system. If the menu and library specified as defaults do not exist (the menu and library are not mandatory), the user can sign on by entering zeros in the menu and library fields on the sign-on display or by entering valid menu and library names.

Note: The HELP key is allowed when a mandatory menu is active. The user can view the descriptive text but cannot submit jobs through the HELP screens.

Special Considerations for Menu Security

The following menu security definitions and sign-on results are possible:

VALUES SPECIFIED USING \$PRMN	RESULT AT SIGN-ON
<ul style="list-style-type: none">• Menu name, mandatory indicator, library name	The user is not allowed to sign on if he keys in a menu or library name different from those assigned through \$PRMN.
<ul style="list-style-type: none">• Menu name, mandatory indicator, no library name	The user is not allowed to sign on if he keys in a menu name different from that assigned through \$PRMN.
<ul style="list-style-type: none">• Menu name only	Menu is a default and appears when the user signs on. The default can be overridden from the keyboard.
<ul style="list-style-type: none">• Menu name, no mandatory indicator, library name	The menu and library are defaults. The menu appears after sign-on and the library becomes the session library. Both the menu and the library can be overridden from the keyboard.
<ul style="list-style-type: none">• No menu name, no mandatory indicator, library name	The library is a default. It automatically becomes the session library at sign-on. It can be overridden from the keyboard.
<ul style="list-style-type: none">• No menu name, mandatory indicator, library name	Not supported by \$PRMN.

If CNFIGSSP or SET has been used to define a work station default library, this value will be treated as if it came from the keyboard and will override a default library specified using \$PRMN. If \$PRMN is used to specify a mandatory menu and library for a user, and the user attempts to sign on a work station with a default user library different from the user's assigned library, the user must either key in his own library or blank out the default work station library in order to sign on.

When a menu is specified at sign-on, the user library (if any) specified at sign-on is searched first to find the menu. If the menu is not found in the user library, the system library-#LIBRARY-is searched. This search algorithm is independent of the means by which the menu and library are specified. For example, if CNFIGSSP has been used to assign a default work station user library to all work stations, this user library will be searched for the user's mandatory menu. If the menu is not found, #LIBRARY will be searched.

RESOURCE SECURITY DISPLAYS

Resource Security Utility Menu

The master security officer can define, modify, or delete the resource security file and can activate or deactivate resource security by running the PRSRC procedure. Other security officers defined by the master security officer can modify the resource security file using the PRSRC procedure. The PRSRC procedure calls the resource security utility \$PRES.

The \$PRES utility can be run only from the system console. Password security must be active.

The following display appears when PRSRC is entered:

```
RESOURCE SECURITY UTILTY MENU

1. DEFINE RESOURCE SECURITY
2. ADD FILE/LIBRARY RECORD
3. CHANGE FILE/LIBRARY RECORD
4. END OF JOB

ENTER NUMBER OF DESIRED OPTION .....
```

Enter the number of the desired option and press the Enter/Rec Adv key to continue. A 4 option will terminate the utility.

Define Resource Security

The resource security file can be allocated, reallocated, or deleted. Resource security can be activated or deactivated. Select option 1 on the Resource Utility Menu, and the Define Resource Security display appears:

```
DEFINE RESOURCE SECURITY

1. RESOURCE SECURITY ACTIVE (1/0) ..... 0
2. ALLOCATE RESOURCE SECURITY FILE (1/0) ..... 0
   MAXIMUM NUMBER OF SECURED FILES & LIBRARIES (1-###) ... 018
   CURRENT STATUS OF FILE..... 000
   MAXIMUM NUMBER OF USERS PER FILE OR LIBRARY (1-111) ... 013
   CURRENT STATUS OF FILE..... 000
3. DELETE RESOURCE SECURITY FILE (1/0) ..... 0

CONTROL      U
_(U - UPDATE; C - RETURN TO MENU)
```


Only the master security officer can use this option. To return to the menu, a control of C is entered and the Enter/Rec Adv key is pressed.

The preferred responses are entered along with the control of U and the Enter/Rec Adv key is pressed. Any invalid entries or combination of entries will be flagged and may be retried.

Resource security active: To activate resource security, the master security officer enters 1 (yes). The resource security file must either be previously allocated or allocated concurrently.

To deactivate resource security, 0 (no) is entered. Caution should be taken if resource security is deactivated when the resource security file still exists. Any new files or libraries created while resource security is not active will not be secure even if a record already exists in the resource security file. When resource security is activated, access will not be checked for those particular files or libraries.

The display will have the current status (for example, if resource security is active, 1 will appear in the field, otherwise it will be 0).

Allocate Resource Security File: To allocate the resource security file, the master security officer enters 1 (yes) and specifies the number of files and libraries to secure and the maximum number of users that can be assigned to a file or library.

If the resource security file currently exists, the file may be reallocated without specifying delete. However, all of the file and library records currently in the file will be deleted. If the data is to be saved, use the PRSAVE and PRESTOR procedures. A FILE WILL BE DELETED message appears when the Enter/Rec Adv key is pressed. Press the Enter/Rec Adv key again to continue.

The resource security file will be allocated large enough to contain at least the number of file and library records specified. Each record will be large enough to contain at least the number of users specified.

The following explains how the allocated size is determined. This is for information only. This utility will perform the needed calculations. After the allocation is complete, the format of the resource security file will be displayed on the current status lines.

\$PRES allocates the file in blocks (1 block = 10 sectors). The maximum size of the file is 25 blocks or 250 sectors. One sector of the resource security file is reserved for system use. Therefore, the maximum space available is 249 sectors.

The maximum number of users per resource security file record is 111. The maximum number of file/library records is dependent upon the number of users per record. The number of users per record is broken down into 5 different categories:

- 1 to 6 users
- 7 to 13 users
- 14 to 27 users
- 28 to 55 users
- 56 to 111 users

The specified number of users per record is automatically allotted the maximum number of users per record for that category. For example, if you specify eight users per record you are automatically allotted 13 users for that record.

Also with the maximum amount of users there is a maximum number of records that can be protected. The maximum number of records for users are as follows:

- With 6 users 996 files and libraries can be protected
- With 13 users 498 files and libraries can be protected
- With 27 users 249 files and libraries can be protected
- With 55 users 124 files and libraries can be protected
- With 111 users 62 files and libraries can be protected

The following table shows the size of the resource security file in blocks for various combinations of maximum users per record and maximum files and libraries protected:

Users per File or Library	Number of Files and Libraries								
	20	40	60	80	100	150	200	500	996
6	1	2	2	3	3	4	6	13	25
13	2	3	4	5	6	8	11	-	-
27	3	5	7	9	11	16	21	-	-
55	5	9	13	17	21	-	-	-	-
111	9	17	25	-	-	-	-	-	-

Add File/Library Record

File and library records can be added to the resource security file. Select option 2 of the Resource Security Utility Menu, and the Add File/Library Record display appears:

```

ADD FILE/LIBRARY RECORD

FILE/LIBRARY NAME ....
AUDIT (1/0) ..... PUBLIC ACCESS (E,R,G,O)...

ACCESS CODES AND USER IDS - C,XXXXXXXX:
(O-OWNER, G-CHANGE, R-READ ONLY, E-EXECUTE LIBRARY MEMBERS)

CONTROL      U
(E - ENTER ADDITIONAL USERS; U - UPDATE RECORD; C - RETURN TO MENU)
  
```

This explanatory text does not appear on the 960-character screen.

Any security officer can use this option. To return to the menu, set the control to C and press the Enter/Rec Adv key.

File/library name: This field indicates the name of the file or library to be secured.

Audit: 1 (yes) indicates you wish to track successful accesses to the indicated file or library. Accesses which fail because of resource security are always tracked. 0 (no) indicates you do not want to track successful accesses. If Y is specified, the resource security authorization check determines the level of access and logs a message to the history file noting that this level of access was obtained. See message SYS-5975 through SYS-5978 in the *Displayed Messages Guide*.

Public Access: Indicates the access code allowed for system users. Valid codes are listed under *Access codes and user IDs* in this section. If you want only those users on the authorization list to have access to the file or library, leave this field blank.

Access codes and user IDs: Indicate the appropriate access code and user ID in the format specified. Valid access codes are:

Access Code	File or Library			Members in a Library			Records in a File	
	Update Access List	Rename	Create or Delete	Add, Change, or Delete	Read	Execute	Add, Change, or Delete	Read
O Owner	X	X	X	X	X	X	X	X
G Change			X	X	X	X	X	X
R Read					X	X		X
E Execute						X		

The access codes and user IDs field must be indicated by the format specified. The format, C,XXXXXXXX, can be broken down to the access code and the user ID. The access code (C) is followed by a comma. Immediately following the comma is the user ID (XXXXXXXX). When specifying the user ID it must be left-justified and can be up to eight characters in length. The user ID must already exist in the password security file (see \$PROF utility in the *System Support Reference Manual*).

When the file and library record information has been entered, set the control to U and press the Enter/Rec Adv key.

At least one user ID must be entered for each record. The maximum allowed was specified when the resource security file was allocated. Up to 36 user IDs may be entered on the first screen. If more than 36 users are to be in this record, enter the first 36 user IDs on the screen, along with the name and audit information. Enter an A in the control field and press the Enter key. The name and audit information will then appear on the screen, but the user IDs will be cleared. Now you can enter any additional user IDs. Continue this process until all the user IDs are on the screen, then enter a U in the control field and press the Enter/Rec Adv key.

Change File/Library Record

The file and library records may be scanned, modified, or deleted. Select option 3 of the Resource Security Utility Menu, and the Change File/Library Record display appears:

```
CHANGE FILE/LIBRARY RECORD
FILE/LIBRARY NAME ..... PAYROLL
AUDIT (1,0) ..... 1          PUBLIC ACCESS (E,R,G,O)...
ACCESS CODES AND USER IDS:
(O-OWNER, G-CHANGE, R-READ ONLY, E-EXECUTE LIBRARY MEMBERS)
O,SAM      G,TON      G,MARY      G,BILL      R,SUE      R,JANE
R,DICK      R,BILL

CONTROL      U
(A - ADVANCE TO ADDITIONAL USERS; U - UPDATE RECORD; D - DELETE RECORD;
F - GO TO NEXT RECORD; B - GO TO PREVIOUS RECORD; R - RETURN TO FIRST RECORD;
I,FILE/LIBRARY NAME - ADVANCE TO THAT RECORD; C - RETURN TO MENU)
```

This explanatory text does not appear on the 960-character screen.

Any security officer can use this option. To return to the menu, enter C in the control field and press the Enter/Rec Adv key.

The initial screen will display the first record in the resource security file. If there are no records in the file, a blank record will be displayed.

Using the following control codes, the records may be scanned, modified, or deleted:

Control	Function
A	Advance to additional users. This control allows you to advance to additional users if this file or library record has more users than those displayed. If there are no additional users, that part of the display will be blank.
U	Update this record. Any of the information displayed for this record, except the name, may be modified. If the file and library name need to be modified, the record will have to be deleted and a new one added (see previous section). The access codes and user IDs may be added or deleted as well as modified, with the restrictions given in the previous section. If in a control A (additional users) screen, the audit field cannot be modified. If U is entered and the Enter/Rec Adv key is pressed while in a control A screen, the record will be updated and the first part of the record will be displayed.
D	Delete this record. This file or library record will be deleted from the resource security file.
F	Go to the next record. The next sequential file or library record in the resource security file will be displayed. If at the end of the file, the first record will be displayed. Blank records will be displayed if the file is not full.
B	Go to previous record. The previous sequential file or library record in the resource security file will be displayed. If at the beginning of the file, the last record will be displayed. Blank records will be displayed if the file is not full.
R	Return to first record. The first file or library record in the resource security file will be displayed.
I, file/ library name	Advance to that record. The file or library record specified will be displayed. If the record is not found, a message is displayed.

Resource Owner Utility Menu

You can identify and modify the file or library records for the user's files in the resource security file by running the PRSRCID procedure. The PRSRCID procedure calls the resource owner utility, \$PRON.

The PRSRCID procedure can be run only if password security is active and if the resource security file exists.

The following display appears when the procedure name, PRSRCID is entered:

```
RESOURCE OWNER UTILITY MENU

  1. DISPLAY NAMES OF FILES/LIBRARIES
  2. CHANGE FILE/LIBRARY RECORD
  3. END OF JOB

ENTER NUMBER OF DESIRED OPTION .....
```

Enter the number of the desired option and press the Enter/Rec Adv key to continue. A 3 option will terminate the utility.

Display Names of Files/Libraries

This screen is used by the owner of secured files or libraries to display the labels of all the files and libraries for which the operator is listed as an owner.

Select option 1 of the Resource Owner Utility Menu, and the Display Names of Files/Libraries display appears:

```
DISPLAY NAMES OF FILES/LIBRARIES

FILE/LIBRARY NAME ..... ALL

PAYROLL

CONTROL
(A - ADVANCE TO ADDITIONAL NAMES; R - RETURN TO BEGINNING OF FILE;
C - RETURN TO MENU)
```

This explanatory text does not appear on the 960-character screen.

The initial display has the first 36 file or library labels contained in the resource security file where this user ID (the user ID that signed on to the system) is an owner. To display additional labels, enter a control of A and press the Enter/Rec Adv key. To return the display to the beginning of the resource security file, enter a control of R and press the Enter/Rec Adv key. To return to the menu, enter a control of C and press the Enter/Rec Adv key. If this user is not specified as an owner in any of the file or library records, a blank screen is displayed.

Change File/Library Record

The file and library records in which the operator is listed as an owner may be scanned and modified. Select option 2 of the Resource Owner Utility Menu, and the Change File/Library Record display appears:

```
CHANGE FILE/LIBRARY RECORD

FILE/LIBRARY NAME ..... PAYROLL
AUDIT (1,0) ..... 1          PUBLIC ACCESS (E,R,G,O)...
ACCESS CODES AND USER IDS:
(O-OWNER, G-CHANGE, R-READ ONLY, E-EXECUTE LIBRARY MEMBER)
O,SAN      G,TOM      G,MARY      G,BILL      R,SUE      R,JANE
R,DICK

CONTROL    U
(A - ADVANCE TO ADDITIONAL USERS; U - UPDATE RECORD; F - GO TO NEXT RECORD;
R - RETURN TO FIRST RECORD; I,FILE/LIBRARY NAME - ADVANCE TO THAT RECORD;
C - RETURN TO MENU)
```

This explanatory text does not appear on the 960-character screen.

To return to the menu, set the control to C and press the Enter/Rec Adv key.

This user ID (the user ID entered at sign on time) must be specified as an owner in the file or library record for that record to be displayed.

The initial screen displays the first record in the resource security file that has this user specified as an owner. If the file has no such records, a blank record is displayed.

Using the following control codes, the records may be scanned or modified:

Control	Function
A	Advance to additional users. Control A allows you to advance to additional users, if this file or library record has more users than those displayed. If there are no additional users, that part of the display will be blank.
U	Update this record. Any of the information displayed for this record, except the name, may be modified. The access codes and user IDs may be added or deleted as well as modified. If in a control A (additional users) display, the audit field cannot be modified. If U is entered and the Enter/Rec Adv key is pressed while in a control A display, the record is updated and the first part of the record is displayed.
F	Go to next record. The next sequential file or library record that has this user as an owner is displayed. If you are at the end of the resource security file, a message is displayed indicating that fact.
R	Return to first record. The first file or library record that has this user as an owner is displayed.
I, file/ library name	Advance to that specific record. The file or library record specified is displayed if you are an owner of that file or library. If you are not the owner or if the record is not found, a message is displayed.

SAVING AND RESTORING THE SECURITY FILES

The PRSAVE and PRESTOR procedures, which are used to save and restore the security files on diskette, are described in the *System Support Reference Manual*. These procedures put the security files out to diskette as one file. These procedures can be used only by the master security officer.

Note: An up-to-date backup copy of the security files should be maintained at all times and stored in a secure place.

If the maximum number of users per record in the resource security file must be increased, the following steps can be taken by the master security officer:

1. Run the PRSAVE procedure to back up the security files on diskette.
2. Run the PRSRC procedure and reallocate the resource security file with more users per record.
3. Run the PRESTOR procedure to copy the security files to disk. The resource security file from diskette is reformatted to the larger record size on disk.

Note: PRESTOR does not support reformatting the resource security file to a smaller record size.

ERROR RECOVERY

Several possible security problems, and ways to recover from them, are as follows:

Problem: The password security file is destroyed on disk.

Recovery: If an override user ID and password were created using the PROF procedure, they can be used to sign on even though the password security file is lost. The override ID and password can be entered only at the system console, and only during the first sign-on time after an IPL or a COMPRESS procedure. The master security officer should sign on using the override user ID and password. Option 1 of the Password Security Menu display should then be selected to redefine the password security file. If the resource security file is destroyed, use PRSRC to redefine it. The security files can then be restored from diskette if a backup copy is available. If a backup copy is not available, the entire password security file must be reentered.

Problem: A permanent I/O error occurs in the password security file. Some users cannot sign on, and the file cannot be updated by using option 2 of the Security Menu display.

Recovery: Use the PRESTOR (procedure command) to restore the security files from diskette. If no diskette copy is available, use option 1 of the Password Security Menu display to redefine the file and option 2 to reenter all of the user profiles.

Problem: A user is unable to sign on.

Recovery: A security officer can use option 3 of the Password Security Menu display to check for the user's record in the password security file. The security officer then verifies that the user is entering the proper user ID and password, and that the user is authorized to work at the desired display station. For example, if the display station is the system console, verify that the user is authorized as a system operator or security officer.

See the *System/34 Displayed Messages Guide* for required responses to security related error messages.

SUMMARY TO INSTALLING SECURITY

The following steps install security on your system:

1. Configure your system with optional SSP security support.
2. Use the PROF procedure to define password security for the system.
3. IPL the system again to activate password security.
4. Use the PROF procedure to define additional users, levels of access, and optional badge information.
5. If resource security is desired, use the PRSRC procedure to define and activate resource security.
6. If menu security is desired, use the PRMENU procedure to assign menus.
7. Use the PRSAVE procedure to save security information on diskette.

LIMITATIONS OF SECURITY

Physical access to the System/34 and its system console should be limited to authorized personnel. Keylock on/off switches are available for the display stations. These prevent access to the system when it is unattended. Caution should be used to prevent unauthorized modification of the SSP or the creation of private modified versions of the SSP utilities.

Any security system has its limitations. If authorized users disclose their user IDs and passwords to others, or if an authorized user signs on a display station and then leaves it unattended, security can be breached. You must keep your SSP PID diskettes, and any backup copies of your SSP, in a secure place.

LEVELS OF ACCESS

The following table shows what level of security an operator should have to perform the indicated functions.

(A) USER PROGRAMS	Access Level
(1) New Files	Change (G)
(2) Input Only Files	Read (R)

Language implementations are:

- Assembler—The ACCESS parameter of the \$DTFD macro contains CG, DG, DGA, IS, IR, ISRI, or ZPAMI.

Note: Changing the ACCESS value after the security check is not supported by disk data management and might produce unpredictable results.

- COBOL—Executing the statement OPEN INPUT...
- FORTRAN—Specifying // DAD UPDATE=N,...
- RPG II—File description specifications with a file type of input, and add is not specified.
- WSU—Master files with an F specification that defines them as input only, no add.
- BASIC—Open file reference: File ID, INPUT...

(A) USER PROGRAMS (continued)

Access Level

(3) Output/Update/Add Files

Change (G)

Language implementations are:

- Assembler—The ACCESS parameter of the \$DTFD macro contains CA, CO, CU, DO, DU, DOA, DUA, IA, IO, ISA, ISU, ISUA, IRA, IRU, IRUA, ZPAMA, or ZPAMO.
- COBOL—Executing the statements:
OPEN I-O...
OPEN OUTOPUT...
- FORTRAN—Specifying // DAD UPDATE=Y,... (This is the default.)
- RPG—File description specifications with a file type of update, output, input with add specified, or combined with a device name of SPECIAL or WORKSTN.
- BASIC—OPEN statement file reference: File ID , { OUTPUT
OUTIN } , ...
- WSU—The transaction file and all master files with an F specification that indicates update, output, or add.

(B) OCL (library referenced in the library name parameter)

Access Level

// JOBQ

Execute (E)

// LIBRARY

Execute (E)

// MENU

Execute (E)

Existence tests:

Execute (E)

// IF SOURCE

// IF PROC

// IF LOAD

// IF SUBR

(C) SSP PROCEDURES AND COMMANDS**Access Level**

Session library from sign-on	Execute (E)
APAR (input library)	Read (R)
APPLYPTF (output library)	Change (G)
BLDFILE	Change (G)
BLDLIBR (input library) (output library)	Read (R) Change (G)
BLDMENU (input library) (output library)	Read (R) Change (G)
CNFIGICF (library containing configuration record to review) (library containing configuration record to change)	Read (R) Change (G)
CONDENSE (library)	Change (G)
CREATE (source and object library)	Change (G)
CRESTART (checkpoint record file)	Change (G)
DCFORMS (input library) (output file)	Execute (E) Change (G)
DCPRINT (input file)	Read (R)
DELETE (file or library)	Change (G)
DISPLAY (input file)	Read (R)
ENABLE (library containing configuration record) (library containing procedure for inactive destination messages)	Read (R) Execute (E)

(C) SSP PROCEDURES AND COMMANDS (continued)**Access Level****FORMAT**

(input library)
(output library)

Read (R)
Change (G)

FROMLIBR

(input library)
(output disk file)

Read (R)
Change (G)

JOBSTR (output library)

Change (G)

JOBQ (input library)

Execute (E)

KEYSORT (input file)

Read (R)

LIBRLIBR

(input library)
(output library)

Read (R)
Change (G)

LISTFILE (input file)

Read (R)

LISTLIBR (input library)

Read (R)

MENU (input library)

Execute (E)

MRJE

(input library)
(input files)
(output files)

Execute (E)
Read (R)
Change (G)

OLINK

(input libraries)
(output library)

Read (R)
Change (G)

(C) SSP PROCEDURES AND COMMANDS (continued)**Access
Level****ORGANIZE**

(input file)

Read (R)

(output file)

Change (G)

Note: If the input file is secured, the output file will be marked as secured. The resource security file is not checked at the time the output file is written. Therefore, any subsequent use of the reorganized file requires an entry in the resource security file.

REMOVE (specified library)

Change (G)

RENAME

(old file/library label)

Owner (O)

(new file/library label)

Owner (O)

RESTORE (for each file restored)

Change (G)

SAVE (for each file saved)

Read (R)

SETFILE (disk file)

Change (G)

SRJE

(input libraries)

Execute (E)

(input files)

Read (R)

(output files)

Change (G)

TOLIBR

(input disk file)

Read (R)

(output library)

Change (G)

TRANSFER

(if output disk file)

Change (G)

(if input disk file)

Read (R)

(D) SSP UTILITIES**Access Level**

\$BICR (if output disk file) (if input disk file)	Change (G) Read (R)
\$BMENU (inlib parameter)	Change (G)
\$COPY (input disk file) (output disk file)	Read (R) Change (G)
<p>Note: If the input file is secured, the output file will be marked as secured. It is the responsibility of the user to ensure that the label of the new file has a record in the resource security file.</p>	
\$DELETE (file, all files in group, library)	Change (G)
\$FBLD (file created)	Change (G)
\$FEFIX (library changed)	Change (G)
\$MAINT (input disk file) (output disk file) (input library) (output library) (create/change size of a library) (delete library members) (compress a library)	Read (R) Change (G) Read (R) Change (G) Change (G) Change (G) Change (G)
\$MGBLD (message library)	Change (G)
\$RENAM (old label) (new label)	Owner (O) Owner (O)
\$SFGR (input library) (output library)	Read (R) Change (G)
\$SLFL (disk file)	Change (G)

(E) UTILITIES PROGRAM PRODUCT**Access Level****DFU**

(library used for job set up for any ENTER, UPDATE,
INQUIRY, LIST command)

Change (G)

ENTER

(library used)
(disk file)

Execute (E)

Change (G)

UPDATE

(library used)
(disk file)

Execute (E)

Change (G)

INQUIRY

(library used)
(disk file)

Execute (E)

Read (R)

LIST

(library used)
(input files)

Execute (E)

Read (R)

SDA

(input source library)
(output source library)
(output load member library)

Change (G)

Change (G)

Change (G)

SEU

(source/procedure member library)
(include member libraries)

Change (G)

Read (R)

SORT

(input files)
(output file)
(library containing sort specifications)

Read (R)

Change (G)

Execute (E)

WSU

(source input library program)
(source input libraries—file descriptions—transaction file/master
files)
(object output library)

Read (R)

Read (R)

Change (G)

(F) LANGUAGES**Access
Level****ASM**

(source input library) Read (R)
(R-module output library) Change (G)

COBOL

(source input library) Read (R)
(libraries containing copied source) Read (R)
(subroutine input libraries) Read (R)
(R-module output library) Change (G)
(load module output library) Change (G)
(diagnosed source file) Change (G)
(output source library from diagnosed source file-COBMOVE) Change (G)
(execution library-COBOLG, COBOLCG) Execute (E)

FORTRAN

(source input library) Read (R)
(subroutine input library) Read (R)
(R-module output library) Change (G)
(load module output library) Change (G)
(diagnosed source file) Change (G)
(output source library from diagnosed source file-FORTMOVE) Change (G)
(execution library-FORTG, FORTCG, FORTGO) Execute (E)

RPG II

(source input/library-RPG and AUTO procedures with no
CONSOLE file or NOGEN PARAMETER-or RPGX procedure) Read (R)
(source input and \$SFGR output/library RPG and AUTO
procedures with a CONSOLE file and GEN option specified) Change (G)
(object output library) Change (G)
(execution library) Execute (E)

BASIC**BASIC Procedure**

(load, list, chain, merge, or edit without program replace from library) Read (R)
(load, list, merge, or edit data without replace from library) Read (R)
(save or replace to library) Change (G)
(use SFGR load members) Execute (E)
(OPEN statement)
(input file or input library member) Read (R)
(output file or output library member) Change (G)
(outin file) Change (G)
(LIBRARY command) Read (R)
(access message members) Execute (E)
(delete files or library members) Change (G)
(execute BASIC procedures) Read (R)

(F) LANGUAGES (continued)**Access
Level****(BASICP Procedure)**

(chain, use message members, or use SFGR load members)	Execute (E)
(load, merge, chain, or list program to printer without replace from library)	Read (R)
(load, merge, or list data to printer without replace from library)	Read (R)
(save or replace to library)	Change (G)
(OPEN statement)	
(input file or input library member)	Read (R)
(output file or output library member)	Change (G)
(outin file)	Change (G)
(delete file or library member)	Change (G)
(LIBRARY command)	Read (R)
(execute BASIC procedures)	Read (R)

(BASICR Procedure)

(chain, execute, use message members, or use SFGR load members)	Execute (E)
OPEN statement)	
(input file or input library member)	Read (R)
(output file or output library member)	Change (G)
(outin file)	Change (G)

(BASICS Procedure)

(access Source library)	Read (R)
(access SUBR library)	Change (G)

LISTING THE CONTENTS OF THE SECURITY FILES

You can list the contents of your security files by entering the PRLIST procedure. These listings will provide you with greater controls over the security function and your secured resources. Refer to the *System Support Reference Manual* for the different formats and parameter descriptions of the PRLIST procedure.

The following four different types of listing can be generated:

- System (sign on) security listed by user ID
- Resource security listed by resource name
- Resource security listed by owner ID
- Resource security listed by user ID

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System (Sign On) Security Listed by User ID

You can list the contents of the system security file (by user ID) by entering PRLIST SYSTEM with any optional parameters. If you request that passwords be listed, they will be only listed to your level of access. For example, if you are the master security officer, all passwords are listed; if you are a security officer, only the system operators', subconsole operators', and display operators' passwords are listed; and so on. If you specify the SORT parameter, the listing will be sorted first by operator class (from master security officer to display station operator), then alphabetically by user ID. If you are the master security officer and enter:

PRLIST SYSTEM,PW,SORT

the following sorted listing of the system security file will be listed by user ID:

```

1
SYSTEM SECURITY BY USER ID
REQUESTOR ID JUD
2 DATE 02/29/80 3 TIME 14:20:00
5 WS ID W1 6 PAGE 1
4
7 8 9 10 11 12 13 14 15
USER ID PASSWORD BADGE CLASS SERVICE AIDS DEFAULT MENU MANDATORY COMMENT
-----
JUD 0403 MS 1 JOHN DOE MS OFFICER
MSS 0312 SO 0 MIKE SMITH S OFFICER
JSS 0604 OP 0 JOHN SMITH SYS OPER
MAD 1129 SC 0 MARY DOE SUBCON OPER
JMS 0420 00100101 WS 0 WORKALIB WKMENU 1 JANE SMITH WS OPER

16 SECTORS ALLOCATED NNN MASTER SECURITY OFFICER 1
SECURITY OFFICERS 1
18 SYSTEM OPERATORS 1
SUBCONSOLE OPERATORS 1
DISPLAY STATION OPERATORS 1
-----
17 USERS ALLOCATED 13 TOTAL USERS DEFINED 5
  
```

- 1** This line tells the type of listing.
- 2** *Date:* The system date of the listing.
- 3** *Time:* The system time of the listing.
- 4** *Requestor ID:* The user ID of the operator that requested the listing.
- 5** *WS ID:* The ID of the display station from which the PRLIST procedure was entered.
- 6** *Page:* The page number of the listing.
- 7** *User ID:* Lists the user ID for each operator.

8 *Password:* Lists the password associated with the user ID, if PW was specified on the PRLIST procedure. The password field is only listed to the level of the requestor.

9 *Badge:* If badge security is active, lists the badge number associated with the user ID and password. If PW was not specified on the PRLIST procedure, the badge column will not be listed.

10 *Class:* The class field lists the type of operator. The class field can contain any of the following:

- MS = Master security officer
- SO = Security officer
- OP = System operator
- SC = Subconsole operator
- WS = Display station operator

If sorting is specified, the listing will be sorted on this field first. The master security officer (MS) will be listed first and the display station operators (WS) listed last.

11 *Service aids:* Lists the authorization status of the service aids (DUMP, PATCH, and SETDUMP) for each user ID. 0 indicates the user is restricted from using the DUMP, PATCH, and SETDUMP procedures. 1 indicates the user is allowed to use these service aids.

12 *Default library:* Lists the default library for each operator, if a default library was assigned.

13 *Menu:* Lists the menu for each operator, if a menu was assigned.

14 *Menu mandatory:* An entry appears in this column only if a menu was assigned. 0 indicates the menu is not mandatory. 1 indicates the menu is mandatory.

15 *Comment:* Those comments that were entered in the comment field when the security file was created are listed in this field.

16 *Sectors allocated:* The total number of sectors allocated for the system security file.

17 *Users allocated:* The total number of users that can be accommodated by the system security file.

18 Lists the number of each different type of operators as well as the total number of users defined.

Resource Security Listed by Resource Name

You can list the complete contents of the *resource security file by resource name* by entering PRLIST RESOURCE,RNAME with any optional parameters. If you request a listing of all resources in the resource security file, you must be the master security officer or a security officer. Otherwise, you can list only those resources to which you have access. If you specify the SORT parameter, the listing will be sorted in order by *type, resource, access, and user ID*. If you are the master security officer and enter:

```
PRLIST RESOURCE,RNAME,ALL,SORT
```

the following sorted listing of the resource security file will be listed by resource name:

1	RESOURCE SECURITY BY RESOURCE NAME	2	DATE 02/29/80	3	TIME 14:21:00
4	REQUESTOR ID JUD	5	WS ID W1	6	PAGE 1

7	8	9	10	11	12	13
RESOURCE	TYPE	AUDIT	USER ID	ACCESS	USERS DEFINED	PUBLIC ACCESS
-----	-----	-----	-----	-----	-----	-----
WORKALIB	LIBRARY	1	JUD MSS JSS MAD JMS	OWNER OWNER CHANGE READ EXECUTE	5	EXECUTE
FILEA	FILE	0	JUD MSS	OWNER CHANGE	2	
WORKBLIB	UNUSED	1	JUD	OWNER	1	

14	SECTORS ALLOCATED	10			
					SECURED LIBRARIES 1
					16 SECURED FILES 1
					UNUSED SECURED NAMES 1

15	SECURED RESOURCES ALLOCATED	18			SECURED RESOURCES 3

17	ALLOCATED USERS PER SECURED RESOURCE	13
18	MAXIMUM USERS PER SECURED RESOURCE	5

- 1 This line tells the type of listing.
- 2 *Date*: The system date of the listing.
- 3 *Time*: The system time of the listing.
- 4 *Requestor ID*: The user ID of the operator that requested the listing.
- 5 *WS ID*: The ID of the display station from which the PRLIST procedure was entered.
- 6 *Page*: The page number of the listing.
- 7 *Resource*: The name of the secured file or library.
- 8 *Type*: Indicates whether the resource is a file or library. If a resource name is defined, but no file or library exists with that name, UNUSED is listed.
- 9 *Audit*: If the resource is audited, 1 appears in this column. If the resource is not audited, 0 is listed.
- 10 *User ID*: Lists the user IDs of all operators who can access the resource.
- 11 *Access*: Lists the access level of each user for the resource. Possible access levels are:
 - Owner
 - Change
 - Read
 - Execute
- 12 *Users defined*: Lists the number of users that are defined for this resource.
- 13 *Public access*: Lists the public access level for the resource, if one exists. Possible public access levels are the same as those listed for Access.
- 14 *Sectors allocated*: The total number of sectors allocated for the resource security file.
- 15 *Secured resources allocated*: The total number of secured resources that can be allocated for the resource security file.
- 16 Lists the number of secured libraries, secured files, and unused secured names, as well as the total number of secured resources for the resource security file.
- 17 *Allocated users per secured resource*: Lists the maximum number users that can be allocated for each secured resource.
- 18 *Maximum users per secured resource*: Lists the maximum number of users that are currently defined for any secured resource.

Resource Security Listed by Owner ID

You can list the resources of the resource security file *by owner ID* by entering PRLIST RESOURCE,OWNER with any optional parameters. If you request a listing of all the resources of the resource security file, you must be the master security officer or a security officer. Otherwise, you can list only those resources of which you are an owner. If you specify the SORT parameter, the listing will be sorted in order by *owner ID*, *type*, and *resource*. If you are the master security officer and enter:

PRLIST RESOURCE,OWNERID,ALL,SORT

the following sorted listing of the resource security file will be listed by owner ID:

1 RESOURCE SECURITY BY OWNER ID		2 DATE 02/29/80	3 TIME 14:22:15
REQUESTOR ID JUD		5 WS ID W1	6 PAGE 1
4	7	8	9
OWNER ID	RESOURCE	TYPE	10
-----	-----	-----	-----
JUD	WORKALIB	LIBRARY	1
	FILEA	FILE	0
	WORKBLIB	UNUSED	1
MSS	WORKALIB	LIBRARY	1
			11
			PUBLIC ACCESS

			EXECUTE
			EXECUTE
12	SECTORS ALLOCATED	10	
			SECURED LIBRARIES
			14 SECURED FILES
			UNUSED SECURED NAMES

13	SECURED RESOURCES ALLOCATED	18	SECURED RESOURCES

			3
15	ALLOCATED USERS PER SECURED RESOURCE	13	
16	MAXIMUM USERS PER SECURED RESOURCE	5	

- 1** This line tells the type of listing.
- 2** *Date*: The system date of the listing.
- 3** *Time*: The system time of the listing.
- 4** *Requestor ID*: The user ID of the operator that requested the listing.
- 5** *WS ID*: The ID of the display station from which the PRLIST procedure was entered.
- 6** *Page*: The page number of the listing.
- 7** *Owner ID*: Lists all user IDs for operators who are owners of resources.
- 8** *Resource*: Lists the name of all the secured files or libraries for an owner ID.
- 9** *Type*: Indicates whether resource is a file or library. If a resource name is defined, but no file or library exists with that name, UNUSED is listed.
- 10** *Audit*: If the resource is audited, 1 appears in this column. If the resource is not audited, 0 is listed.
- 11** *Public access*: Lists the public access level for the resource, if one exists. Possible public access levels are:
 - Owner
 - Change
 - Read
 - Execute
- 12** *Sectors allocated*: The total number of sectors allocated for the resource security file.
- 13** *Secured resources allocated*: The total number of secured resources that can be allocated for the resource security file.
- 14** Lists the number of secured libraries, secured files, and unused secured names, as well as the total number of secured resources for the resource security file.
- 15** *Allocated users per secured resource*: Lists the maximum number of users that can be allocated for each secured resource.
- 16** *Maximum users per secured resource*: Lists the maximum number of users that are currently defined for any secured resource.

Resource Security Listed by User ID

You can list the resources of the resource security file by user ID by entering PRLIST RESOURCE,USER with any optional parameters. If you request a listing of all the resources in the resource security file, you must be the master security officer or a security officer. Otherwise, you can list only those resources to which you have access. If you specify the SORT parameter, the listing will be sorted in order by user ID, type, and resource. If you are the master security officer and enter:

PRLIST RESOURCE,USERID,ALL,SORT

the following sorted listing of the resource security file will be listed by user ID:

1 RESOURCE SECURITY BY USER ID
4 REQUESTOR ID JUD

2 DATE 02/29/80 **3** TIME 14:23:25
5 WS ID W1 **6** PAGE 1

7 USER ID	8 RESOURCE	9 TYPE	10 AUDIT	11 ACCESS
JUD	WORKALIB	LIBRARY	1	OWNER
	FILEA	FILE	0	OWNER
	WORKBLIB	UNUSED	1	OWNER
MSS	WORKALIB	LIBRARY	1	OWNER
	FILEA	FILE	0	CHANGE
JSS	WORKALIB	LIBRARY	1	CHANGE
MAD	WORKALIB	LIBRARY	1	READ
JMS	WORKALIB	LIBRARY	1	EXECUTE

12 SECTORS ALLOCATED 10

SECURED LIBRARIES 1
 SECURED FILES 1
14 UNUSED SECURED NAMES 1

13 SECURED RESOURCES ALLOCATED 18

SECURED RESOURCES 3

15 ALLOCATED USERS PER SECURED RESOURCE 13

16 MAXIMUM USERS PER SECURED RESOURCE 5

- 1 This line tells the type of listing.
- 2 *Date*: The system date of the listing.
- 3 *Time*: The system time of the listing.
- 4 *Requestor ID*: The user ID of the operator that requested the listing.
- 5 *WS ID*: The ID of the display station from which the PRLIST procedure was entered.
- 6 *Page*: The page number of the listing.
- 7 *User ID*: Lists the user IDs of all operators who can access resources.
- 8 *Resources*: Lists the name of all the secured files and libraries for the user ID.
- 9 *Type*: Indicates whether the resource is a file or library. If a resource name is defined, but no file or library exists with that name, UNUSED is listed.
- 10 *Audit*: If the resource is audited, 1 appears in this column. If the resource is not audited, 0 is listed.
- 11 *Access*: Lists the access level of each user for the resource. Possible access levels are:
 - Owner
 - Change
 - Read
 - Execute
- 12 *Sectors allocated*: The total number of sectors allocated for the resource security file.
- 13 *Secured resources allocated*: The total number of secured resources that can be allocated for the resource security file.
- 14 Lists the number of secured files, secured libraries, and unused resources, as well as the total number of secured resources for the resource security file.
- 15 *Allocated users per secured resource*: Lists the maximum number of users that can be allocated for each secured resource.
- 16 *Maximum user per secured resource*: Lists the maximum number of users that are currently defined for any secured resource.

Appendix A. Storage Estimates

LIBRARY REQUIREMENTS

Use the following table when planning the use of disk space. Use it also to determine how much the system library must be expanded to contain selected program products or optional SSP support. The library blocks value *includes* the library directory sectors value.

The base SSP requires 562 system library blocks, which include 62 library directory sectors. RPG II, basic assembler, FORTRAN IV, COBOL, BASIC, and BSC or SNA 3270 to Device Emulation have their own libraries.

Function	System Library Blocks	System Library Directory Sectors	Function	System Library Blocks	System Library Directory Sectors
DFU	65	4	Help	120	2
Sort	34	6	SMF	30	2
WSU	102	11	Dump file analysis	23	1
SEU	98	6	Subconsole support	26	2
SDA	84	5	User access to spool file	12	1
RPG II ¹	2	1	EDDM	8	1
Basic Assembler ²	7	1	Checkpoint/restart	12	2
COBOL ³	8	2	Remote work station ⁹	23	5
FORTRAN IV ⁴	4	2	Multinational Character Set		
BASIC ⁵	12	2	Conversion Utility ¹³	42	4
BSC 3270 Device Emulation ⁶	2	1	I-Exchange	5	1
SNA 3270 Device Emulation ⁷	2	1	History file scroll	9	1
			MLCA	4	1
			X.21	16	2
			Autocall	7	1
			SSP-ICF support	54	7
<i>Optional SSP Support</i>					
OLE	21	3	<i>SSP-ICF Subsystems</i>		
COBOL execution time	4	1	Intra	2	1
FORTRAN IV execution time	28	2	BSC IMS/IRSS ^{11, 14, 16}	10	1
Security	28	4	BSC ^{11, 14, 16}	11	2
BSC	8	2	BSC CICS ^{11, 14, 16}	4	1
MRJE ¹²	30	5	BSC CCP ^{11, 14, 16}	6	1
SRJE ¹²	30	6	SNA Upline ^{8, 10, 11, 16}	14	3
SNA/SDLC ⁸	9	1	SNA Peer ^{8, 9, 11, 16}	17	3
MICR SUBR08	3	1	BSC 3270 ^{11, 15, 16}	7	2
MICR SUBR25	3	1	SNA 3270 ^{8, 10, 16}	7	1
			Finance ^{9, 16}	16	3

- ¹ RPG II has its own library (#RPGLIB), which requires 200 library blocks; these blocks include 30 directory sectors.
- ² Basic assembler has its own library (#ASMLIB), which requires 180 library blocks; these blocks include 30 library directory sectors.
- ³ COBOL has its own library (#COBLIB), which requires 200 library blocks; these blocks include 25 library directory sectors.
- ⁴ FORTRAN IV has its own library (#FORTLIB), which requires 110 library blocks; these blocks include 25 library directory sectors.
- ⁵ BASIC has its own library (#BLLIB), which requires 150 library blocks; these blocks include 30 library directory sectors. Also, the BASIC Help facility has its own library (#BLHPLIB), which requires 100 library blocks; these blocks include 5 library directory sectors.
- ⁶ BSC 3270 Device Emulation has its own library (#EM71LIB), which requires 26 library blocks; these blocks include 10 library directory sectors.
- ⁷ SNA 3270 Device Emulation has its own library (#ES74LIB), which requires 31 library blocks; these blocks include 5 library directory sectors.
- ⁸ This support requires that secondary SDLC support be copied into #LIBRARY. Allow 3 library blocks, which include 1 library directory sector. Only one copy will be copied into #LIBRARY.
- ⁹ This support requires that primary SDLC support be copied into #LIBRARY. Allow 17 library blocks, which include 2 library directory sectors. Only one copy will be copied into #LIBRARY. The SDLC Station Test Utility is automatically copied into #LIBRARY when primary SDLC support is loaded.
- ¹⁰ This support requires that SNA and the DEFINELU utility be copied into #LIBRARY. Allow 19 library blocks, which include 2 library directory sectors. Only one copy will be copied into #LIBRARY.
- ¹¹ This support automatically loads an installation verification program to verify the subsystem. Allow 7 library blocks, which include 2 library directory sectors for this program. The program may be deleted from #LIBRARY by running the ICDROP procedure.
- ¹² This support requires that two utilities be copied into #LIBRARY. Allow 7 library blocks, which include 1 library directory sector. Only one copy will be copied into #LIBRARY.
- ¹³ The Multinational Character Set Conversion Utility can be stored in the system library or in a user library.
- ¹⁴ This support requires that SSP-ICF BSC support be copied into #LIBRARY. Allow 14 library blocks, which include 2 library directory sectors. Only one copy will be copied into #LIBRARY.
- ¹⁵ This support requires that 3270 BSC support (different from the BSC support in note 14) be copied into #LIBRARY. Allow 5 library blocks, which include 1 library directory sector. Only one copy will be copied into #LIBRARY.
- ¹⁶ This support requires that the SSP-ICF control be copied into #LIBRARY. This is automatically done when you install your first subsystem. Allow 2 library blocks which include 1 library directory sector. Only one copy will be copied into #LIBRARY.

MAKING ADDITIONS TO THE LIBRARY DIRECTORY

You may want to add several user members to the system library or to your own libraries. The library directory must contain an entry for each member. Be sure that you have enough space in the library directory to contain entries for all added members.

Each library directory sector can contain nine entries (for nine user members). To determine how many directory sectors are required to contain additional user members, divide the number of required entries by 9, and round up to the next whole number if you have a remainder.

For example, to add 16 new members to a library, you divide 16 by 9 and get a result of 1 and 7/9ths. Therefore, two directory sectors are required to contain 16 library directory entries.

Calculating Your Task Work Area Size

Space is not preassigned, but is allocated to the task or job step as requested. If the task work area is too small, the system attempts to dynamically allocate more space. Perform the following steps to calculate an initial task work area size. After determining a value for the task work area, the System Measurement Facility (SMF) can be used to evaluate the task work area utilization.

1. Calculate the number of tasks that can be concurrently active:
 - a. 1 for each printer that will be spooled
 - b. 1 for the input job queue
 - c. 6 for SRJE
 - d. 1 for each command display station (local and remote)
 - e. 1 for each display station that will use inquiry
 - f. 1 for each active MRT NEP
 - g. 1 for each SSP-ICF task that is active

2. Calculate the task overhead:

The task overhead is the number of tracks required to hold a program (swap size) plus two. Use the following table to determine the swap size for the task overhead:

Program Size (PS) (In K)	Swap Size (in tracks) for the 8.6, 13.3, and 27.1 Mb Disks (15 K per track)	Swap Size (in tracks) for the 63.9 and 128.4 Mb Disks (16 K per track)
0 < PS ≤ 14	1.0	1.0
14 < PS ≤ 16	2.0	1.0
16 < PS ≤ 30	2.0	1.0
30 < PS ≤ 32	3.0	2.0
32 < PS ≤ 44	3.0	3.0
44 < PS ≤ 48	4.0	3.0
48 < PS ≤ 60	4.0	4.0
60 < PS ≤ 64	5.0	4.0

Be sure to add two tracks to the value you determine from this table. If you experience an unacceptable frequency of delays while initiating programs, increase the task overhead value by one.

3. Multiply the number of tasks by the task overhead.

4. Add the system overhead to this product. The system overhead is 6 tracks plus 6 tracks for every four display stations (local and remote).

$$(\text{Number of Tasks} \times \text{Task Overhead}) + \text{System Overhead}$$

5. Use the following table to determine if any additional tracks need to be added to the previous total:

Function Supported	Additional Tracks needed
Remote work stations	5
SRJE	6
SSP-ICF	10
Extended Trace	2
X.21	1

6. Each online remote display station requires two additional tracks. Multiply the maximum number of concurrently online remote display stations by 2, and then add this total to the total from step 5.

7. Each display station that is an alternate system console or a subconsole and controls a printer requires one track. Add this total to the total from step 6.
8. Each configured remote display station requires 3 sectors, and each remote printer requires 1 sector. Multiply the number of configured remote display stations by 3 and add the number of remote printers. Divide this number by 60 if you have a 8.6, 13.3, or 27.1 MB disk or divide by 64 if you have a 63.9, 128.4, 192.9, or 257.4 MB disk to convert the value from sectors to tracks. Round this value up to the next whole track.
9. Add the value from step 8 to step 7. This total is the number of tracks required for the task work area.
10. Multiply the total by 6 if you have a 8.6, 13.3, or 27.1 MB disk or multiply by 6.4 if you have a 63.9, 128.4, 192.9, or 257.4 MB disk to convert the value from tracks to blocks.

For an example on calculating the task work area size, refer to *Chapter 8. Installation Example*.

Task Work Area Considerations

Even when calculating a reasonable task work area size at maximum utilization, you may still experience fragmentation; however, the chances are minimal. Fragmentation, or noncontiguous space, may result when multiple tasks are started and some are finished. Contiguous tracks are required for swapping, therefore, the fragmentation may cause delays. Each swap area track will contain either 15 K or 16 K bytes of a program.

If user disk space is a serious consideration, you may want to reduce your task work area size. The more you reduce your task work area, the greater the percentage of fragmentation. The following are different factors that might help you to reduce the task work area:

- Utilize the System Measurement Facility (SMF) to evaluate the task work area. This can help determine an acceptable performance while reducing the task work area.
- Reduce the estimate on the number of times inquiry might be used.
- Reduce the swap size. For example, you could change the swap size from 2 tracks to 1.6 tracks if the majority of your programs are 14 K or less and just a few infrequently executed programs are 14 to 30 K.

You may have to reduce the task work area size because of the amount of user disk space needed for your data and library requirements. This increases the chances of fragmentation and delay in program initiation.

OPTION 1 AND OPTION 14 DEFAULT TABLE

If you choose option 1 (full system configuration) or option 14 (basic configuration with defaults) of Display 1.0, System Configuration Menu, certain system defaults are automatically defined, based on the number of local command display stations specified for your system. Figure A-1 shows these defaults. For a detailed discussion of nucleus size considerations, refer to *A Guide for Nucleus Size Selection in the IBM System/34 Planning Guide*, GC21-5154.

Default Parameters	Number of Local Command Display Stations							
	1	2	3	4	5	6	7	8
	Default							
Input job queue	Y	Y	Y	Y	Y	Y	Y	Y
Input job queue size	20	20	20	20	20	20	20	20
Start input job queue	Y	Y	Y	Y	Y	Y	Y	Y
Spooling	N	Y	Y	Y	Y	Y	Y	Y
Autowriter	N	N	N	N	N	N	N	N
Spool file size ¹	12 blocks ¹	12 blocks	12 blocks	12 blocks	12 blocks	12 blocks	12 blocks	12 blocks
Spool segment size	6 blocks	6 blocks	6 blocks	6 blocks	6 blocks	6 blocks	6 blocks	6 blocks
Spool writer buffer size ²	512 bytes (1 HK)	512 bytes (1 HK)	512 bytes (1 HK)	512 bytes (1 HK)	512 bytes (1 HK)	512 bytes (1 HK)	512 bytes (1 HK)	512 bytes (1 HK)
Work station data management	Transient ³	Transient ³	Transient/Resident	Transient/Resident	Transient/Resident	Transient/Resident	Transient/Resident	Transient/Resident
Work station buffer size ^{2,4,5}	2048 bytes (4 HK)	2048 bytes (4 HK)	2048 bytes (4 HK)	2560 bytes (5 HK)	2560 bytes (5 HK)	3072 bytes (6 HK)	3072 bytes (6 HK)	3072 bytes (6 HK)
System assign/free size ^{1,4}	4096 bytes (8 HK)	4608 bytes (9 HK)	5120 bytes (10 HK)	6144 bytes (12 HK)	6656 bytes (13 HK)	7168 bytes (14 HK)	7680 bytes (15 HK)	8192 bytes (16 HK)

¹Each block = 10 sectors of disk space = 2560 bytes.
²HK = one-half K (0.5 K) bytes = 512 bytes.
³If remote work station support is specified, this defaults to transient/resident.
⁴If remote work station support is specified, the default value for work station buffer size is increased by 4 HK and the default value for system assign/free size is increased by 3 HK.
⁵When the number of local and remote work stations is greater than 16, a 14 HK work station buffer size is the recommended maximum. The amount of the work station buffer used is influenced most by the size of the screen formats.

Figure A-1 (Part 1 of 2). Option 1 and Option 14 Default Table

Default Parameters	Number of Local Command Display Stations							
	9	10	11	12	13	14	15	16
	Default							
Input job queue	Y	Y	Y	Y	Y	Y	Y	Y
Input job queue size	20	20	20	20	20	20	20	20
Start input job queue	Y	Y	Y	Y	Y	Y	Y	Y
Spooling	Y	Y	Y	Y	Y	Y	Y	Y
Autowriter	N	N	N	N	N	N	N	N
Spool file size ¹	12 blocks ¹	12 blocks	12 blocks	12 blocks	12 blocks	12 blocks	12 blocks	12 blocks
Spool segment size	6 blocks	6 blocks	6 blocks	6 blocks	6 blocks	6 blocks	6 blocks	6 blocks
Spool writer buffer size ²	512 bytes (1 HK)	512 bytes (1 HK)	512 bytes (1 HK)	512 bytes (1 HK)	512 bytes (1 HK)	512 bytes (1 HK)	512 bytes (1 HK)	512 bytes (1 HK)
Work station data management	Transient/Resident	Transient/Resident	Transient/Resident	Transient/Resident	Transient/Resident	Transient/Resident	Transient/Resident	Transient/Resident
Work station buffer size ^{2,4,5}	4096 bytes (7 HK)	4096 bytes (7 HK)	5120 bytes (8 HK)	5120 bytes (8 HK)	6144 bytes (9 HK)	6144 bytes (9 HK)	7168 bytes (10 HK)	7168 bytes (10 HK)
System assign/free size ^{1,4}	9216 bytes (18 HK)	9216 bytes (18 HK)	10240 bytes (20 HK)	10240 bytes (20 HK)	11264 bytes (22 HK)	11264 bytes (22 HK)	12288 bytes (24 HK)	12288 bytes (24 HK)

¹Each block = 10 sectors of disk space = 2560 bytes.

²HK = one-half K (0.5 K) bytes = 512 bytes.

³If remote work station support is specified, this defaults to transient/resident.

⁴If remote work station support is specified, the default value for work station buffer size is increased by 4 HK and the default value for system assign/free size is increased by 3 HK.

⁵When the number of local and remote work stations is greater than 16, a 14 HK work station buffer size is the recommended maximum. The amount of the work station buffer used is influenced most by the size of the screen formats.

Figure A-1 (Part 2 of 2). Option 1 and Option 14 Default Table

DISKETTE AND DISK SPECIFICATIONS

Diskette 1 Diskette Specifications

Capacity	128-Byte Format	512-Byte Format
Bytes/sector	128	512
Sectors/track	26	8
Bytes/track	3328	4096
Tracks/cylinder	1	1
Cylinders/diskette	74	74
Bytes/diskette	246272	303104

Diskette 2D Diskette Specifications

Capacity	256-Byte Format	1024-Byte Format
Bytes/sector	256	1024
Sectors/track	26	8
Bytes/track	6656	8192
Tracks/cylinder	2	2
Cylinders/diskette	74	74
Bytes/diskette	985088	1212416

Disk Specifications

Capacity (In MB)	8.6	13.2	27.1 ¹	63.9	128.4 ¹	192.9 ¹	257.4 ¹
Bytes/sector	256	256	256	256	256	256	256
Sectors/track	60	60	60	64	64	64	64
Blocks/track	6.0	6.0	6.0	6.4	6.4	6.4	6.4
Bytes/track	15360	15360	15360	16384	16384	16384	16384
Tracks/cylinder	3	3	3	11	11	11	11
Bytes/cylinder	46080	46080	46080	180224	180224	180224	180224
Cylinder/disk	202	303	303	360	360	360	360
(User available)	187.00	288.00	589.33 (2 disks)	354.50	712.50 (2 disks)	1070.50 (3 disks)	1428.50 (4 disks)

¹Disk specifications for 27.1-MB (megabyte), 128.4-MB, 192.9-MB, and 257.4-MB capacities are indicated per disk. Although the 27.1-MB, 128.4-MB, 192.9-MB, and 257.4-MB totals are reached by using two, three, and four disks, the capacities are more than twice the capacity of a 13.2-MB and more than two, three, and four times the capacity of a 63.9-MB disk, respectively, because system information is not duplicated on the second, third, and fourth disk.

SPOOL FILE STORAGE ESTIMATES

Use the following tables and formulas to calculate the size of the spool file segments and the spool file. For more information on how extents, segments, and the spool file relate to each other, refer to the *Concepts and Design Guide*.

Spool File Segment Size

The spool file segment size is related to the number of pages that are normally printed for a print file. For example, assume you normally print three reports a day. One report (considered one print file) is usually about 50 pages; another report is usually about 65 pages; and the third report is usually about 41 pages. Therefore, the average number of pages that would normally be printed for a print file would be 52 pages $([50 + 65 + 41] / 3)$. By using the following table, you would probably select a spool file segment size of 10 blocks (based on 50 average number of pages printed per print file).

Average Number of Pages Printed per Print File	Spool File Segment Size (in blocks)
2	3
5	6
10	7
20	8
50	10
100	12
200	14
500 and over	16

A larger segment size requires fewer segment accesses, possibly causing a faster processing time. However, a smaller segment size tends to make more efficient use of the spool file space.

There are other considerations for segment size and spool file size. Refer to the *Spool File Size Restrictions* section later in this appendix when determining the values for the spool file segment size and the spool file itself.

Spool File Size

The spool file size represents, in blocks, the amount of disk space initially allocated for the spool file.

The number of blocks required for the spool file is based on three factors:

- Average length of a printed line
- Average number of pages printed per print file
- Number of print files in the spool file at one time

Use the following formula to calculate the size for your spool file:

$$A = B \times C$$

where:

A = The size for your spool file in blocks. This is the value you should specify during configuration.

B = The maximum number of print files that can be in the spool file at one time.

C = The number of blocks used by each print file. Use the following table to determine that value:

Number of Blocks Required per Print File

Average Length (in number of characters) of Printed Line	Average Number of Pages per Print File								
	2	5	10	20	50	100	200	500	1000
25	1	1	2	4	10	20	35	85	165
50	1	2	3	6	15	30	55	135	265
75	1	2	4	8	20	40	75	185	365
100	2	3	5	10	25	50	95	235	465
132	2	3	6	12	30	60	120	300	600
198	2	5	9	18	45	90	175	430	860

This chart represents the amount of disk space initially allocated for the spool file. The chart assumes that the spool file would be extended five times to contain the amount of data produced from the values you specify for B and C above. Consequently, when the spool file has been extended to its maximum, it will take up six times the amount of disk space that was initially calculated (A). You may increase the size of the spool file if you wish to reduce the number of times it must be extended.

For an example, use the three reports mentioned earlier. The average length of the lines in each of the reports is 132 characters and it is possible that all three reports (also referred to as print files) will be in the spool file at the same time.

Using the formula:

$$A = B \times C$$

B = 3 (because all three reports may be in the spool file at one time)

C = 30 (obtained from the chart, average length of printed line equals 132; average number of pages printed per print file equals 50)

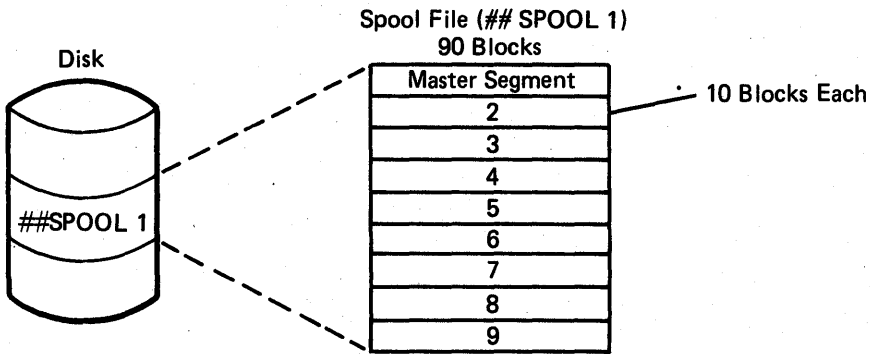
therefore:

$$A = 3 \times 30$$

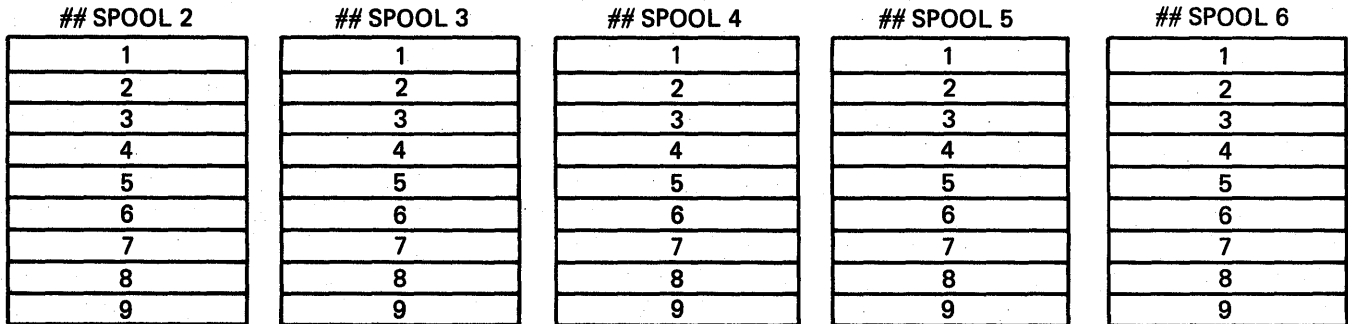
$$A = 90 \text{ blocks}$$

The spool file size should be 90 blocks and the segments within the spool file should be 10 blocks. Therefore, there would be a total of nine 10-block segments for the spool file. If the spool file is extended, each extent would also be nine 10-block segments (90 blocks).

Following is a graphic representation of that spool file on disk:



Possibly 5 extents (90 blocks each with each extent having nine 10-block segments)



Spool File Size Restrictions

Consider the following restrictions when specifying the spool file segment size and the size of the spool file:

- The spool file must consist of at least two segments but cannot consist of more than 800 segments. For example, you could not specify a spool file size of 12 blocks and a segment size of ten blocks. The spool file is not large enough to consist of two segments, ten blocks each. Conversely, you could not specify a spool file size of 1000 blocks and a segment size of one block. The spool file would consist of 1000 one-block segments and 800 segments is the maximum.
- The size specified for the spool file must be within the range of 12 blocks to 12,800 blocks.
- The size specified for the segments must be within the range of 1 block to 16 blocks.

DETERMINING THE CHECKPOINT RECORD FILE SIZE

Use the following formula to determine the number of blocks needed for a checkpoint record file:

$$B = \frac{202 + W + U}{5}$$

where:

B = Blocks needed for the checkpoint record file.

W = 60 for 8.6, 13.2, or 27.1 megabyte disks or 64 for 63.9, 128.4, 192.9, 257.4 megabyte disks.

U = User program's region size in sectors (calculated by $4 \times N$, where N is the number of K bytes assigned to the region).

ASSIGN/FREE REQUIREMENTS FOR THE SNA PEER AND SNA UPLINE FACILITY SUBSYSTEMS

SNA Peer

Use the following formula to determine the system assign/free area size needed for the SNA Peer subsystem:

$$F = \frac{A + B + C + D + E}{512}$$

where:

A = If the number of 2 K pages used for SDLC buffers (transmit and receive) is:

2 then A = 632

3 then A = 888

4 then A = 1144

B = 324 if the multiline communications adapter is used; otherwise B equals 0.

C = 120 (SDLC common area).

D = 16 if primary SDLC is used, otherwise D equals 0.

E = 75 if multipoint lines are used; otherwise E equals 0.

F = The assign/free area size in HK for the SNA Peer subsystem.

The minimum assign/free area size for the SNA Peer subsystem is 2 HK; the maximum is 4 HK.

SNA Upline

Use the following formula to determine the system assign/free area size needed for the SNA Upline Facility subsystem:

$$F = \frac{A + B + C}{512}$$

where:

A = 324 if the multiline communications adapter is used; otherwise A equals 0

B = 32 (Buffer Pool Size in K x 3.75 [rounded down]) + 128

C = 120 (SDLC common area)

F = The assign/free area size in HK for the SNA Upline Facility subsystem

The minimum assign/free area size for the SNA Upline Facility subsystem is 1 HK; the maximum is 4 HK.

INSTCOPY Procedure

This procedure allows the initialization and backup of program product libraries.

Command format:

INSTCOPY program product, vol-id,library name.

program product The program product being backed up.

vol-id Volume label of the backup diskettes.

library Name of the library being backed up. The default is #LIBRARY.

Use the following formats when using the INSTCOPY procedure for the following program products:

Program Product	Format	
SSP	INSTCOPY	SSP,SYSTEM,#LIBRARY
RPG II ¹	INSTCOPY	RPG,RPGRPG,#RPGLIB
Assembler ¹	INSTCOPY	ASM,PPASM,#ASMLIB
COBOL ¹	INSTCOPY	COB,PPCOBL,#COBLIB
FORTRAN IV ¹	INSTCOPY	FORT,PPFORT,#FORTLIB
BASIC ¹	INSTCOPY	BAS,PPBA1,#BLLIB
Utilities	INSTCOPY	UT1,PPUTIL,#LIBRARY
3270 Device Emulation:		
BSC	INSTCOPY	EM1,PPEM1,EM71LIB
SNA	INSTCOPY	EM1,PPEM1,ES74LIB

To reload the program product diskettes (other than the SSP) refer to *Copying Program Products to Disk* in Chapter 6. For reloading the SSP diskettes, refer to Chapter 7.

¹The support that is resident in the system library (#LIBRARY) is not copied. That support is in the backed up copy of the SSP.

COMMAND KEY AND SPECIAL FUNCTION KEY USAGE

Certain command keys and special function keys can be used to assist you in getting the correct displays while running the CNFIGSSP procedure. Following is a description of these keys:

Key	Description
Enter	Used to advance to the next display or used during an option 9 to advance display 2A of the next set of work stations.
Roll Up	Used during an option 9 to advance to additional parameters for the current set of work stations. Roll Up causes an advance from display 2A to displays 2B, 2C, 2D, and 2E.
Roll Down	Used during an option 9 to go back to the previous set of parameters for the current set of work stations. For example, Roll Down causes the screen to change from display 2B to display 2A.
Command key 4	Used during option 9 while on display 2A, 2B, 2C, 2D, or 2E. Command key 4 causes display 2A of the previous set of work stations to be displayed.
Command key 5	Used during option 9. Command key 5 causes the responses to the current display to be diagnosed without advancing to the next display
Command key 9	When used from display 1.0 (System Configuration Menu), command key 9 causes normal end of job. When used during option 9, command key 9 causes the work station parameters to be written back to the library member and causes a return to display 1. During option 16, command key 9 is used to terminate the review of the work station parameters and advance to the remaining displays. Note: On option 1 or 4, if command key 9 is used after display 2.0 (Work Station Parameters), the work station parameters have already been copied from the library member to the configuration record. However, any information that was altered on any other displays is not updated in the configuration record.
Command key 19	Causes immediate termination of CNFIGSSP from any display but the help displays. When command key 19 is issued during an option 9, the library member is not updated and CNFIGSSP is terminated.

USING THE HELP DISPLAY

There is a help function that can be used during your responses to displays 2A and 2B during an option 9. By pressing the Help key you will cause one of the Help displays to be presented. Display 2L contains explanations of the parameters presented on displays 2A and 2B local work stations. Display 2R contains explanations of the parameters presented on displays 2A and 2B remote work stations. When the Help key is pressed, one of the following displays will be presented:

** 2L LOCAL WORK STATION DEFINITIONS **

W1

LOGICAL ID : 1ST CHARACTER ALPHABETIC 2ND CHARACTER ALPHAMERIC
DEVICE TYPE : D-DISPLAY STATION (DEFAULT), P-PRINTER, L-LINE PRINTER
UNIT ADDRESS : LOCALS 00 01 10-16 20-26 30-36
ATTRIBUTE : A-ALTERNATE CONSOLE D-DATA DISPLAY STATION
S-SYSTEM CONSOLE/PRINTER, C-COMMAND CAPABLE, E-SUBCONSOLE
DEFAULT PRINTER : ENTER A PRINTER LOGICAL ID OR SYSTEM PRINTER INDICATOR '27'
SCREENS SIZE : 1-1920 (DEFAULT), 9-960
MAGNETIC STRIPE : 0-NO (DEFAULT), 1-YES

** 2R REMOTE WORK STATION DEFINITIONS **

W1

CONTROLLER LOGICAL ID : 3 ALPHAMERIC CHARACTERS, 1ST MUST BE 'C'
STATION ADDRESS : 2 HEXADECIMAL DIGITS (01-FE)
LOGICAL ID : 1ST CHARACTER ALPHABETIC 2ND CHARACTER ALPHAMERIC
DEVICE TYPE : D-DISPLAY STATION (DEFAULT) P-PRINTER
UNIT ADDRESS : REMOTES 00 02-09
ATTRIBUTE : D-DATA DISPLAY STATION, C-COMMAND CAPABLE, E-SUBCONSOLE
DEFAULT PRINTER : ENTER A PRINTER LOGICAL ID OR SYSTEM PRINTER INDICATOR '27'
SCREEN SIZE : 1-1920 (DEFAULT), 9-960
MAGNETIC STRIPE : 0-NO (DEFAULT), 1-YES
AUTO ONLINE : 0-NO (DEFAULT), 1-YES

PARAMETER OVERRIDE CHART

Certain system configuration parameters can be altered by the SET command or overridden by IPL overrides or OCL statements.

The following table summarizes parameter changes that can be made:

System Configuration Parameters ¹	Can be Altered by SET Command	Can be Overridden by IPL Overrides	Can be Overridden by OCL Statements
Associated printer	X		X
Lines per inch			X
Date format	X	X	
Single program mode		X	
Startup procedure name		X	
Default user library	X		X
Input job queue		X	
Input job queue size		X	
Start input job queue		X	
Forms ID	X		X
Lines per page	X		X
Print belt image	X		X
Print spooling		X	X
Spool all printers		X	
Spool writer buffer size		X	
Autowriter		X	
Spool file size		X	
Spool file segment size		X	
Spool file preferred location		X	
Work station data management		X	
Work station buffer size		X	
System assign/free size		X	
Trace table size		X	

¹This is not a complete list of all system configuration parameters; it includes only parameters that can be altered or overridden.

APPLYPTF PROCEDURE

The APPLYPTF procedure applies module replacement PTFs (program temporary fixes) to a specified library. Care should be taken to always include applied PTFs in backup copies of the system library or of program products. PTFs applied by the APPLYPTF procedure are read from a PTF diskette.

CAUTION

There must be enough unused library space to contain any PTFs. If there is not, the library must be expanded to accommodate any PTFs.

Command format:

APPLYPTF [OLD
ALL
PTF log number] , { ALLPTF
SS1nn
UT1nn
AS1nn
RG1nn
FO1nn
CB1nn
IC1nn
BA1nn
EM1nn } , library name

APPLYPTF parameters prompted for:

ALLPTF	PTFs that apply to the current system configuration; this includes SSP, RPG, Utilities, and so on. If ALLPTF is specified, you do not need to specify the <i>library name</i> parameter. PTFs will be applied to all corresponding libraries.
SS1nn	PTFs that change the SSP are applied; nn is the release number of the system.
UT1nn	PTFs that change the IBM System/34 Utilities Program Product (DFU/Sort/WSU/SEU/SDA) are applied; nn is the release number of the utility.
AS1nn	PTFs that change the Basic Assembler Program Product are applied; nn is the release number of the basic assembler.
RG1nn	PTFs that change the RPG II Program Product are applied; nn is the release number of RPG II.
FO1nn	PTFs that change the FORTRAN IV Program Product are applied; nn is the release number of FORTRAN IV.
CB1nn	PTFs that change the COBOL Program Product are applied; nn is the release number of COBOL.
IC1nn	PTFs that change the SSP-ICF Feature are applied. nn is the release number of the SSP-ICF feature.
BA1nn	PTFs that change the BASIC Program Product are applied; nn is the release number of BASIC.
EM1nn	PTFs that change 3270 device emulation program product (BSC and SNA) are applied; nn is the release number of 3270 device emulation program product.

APPLYPTF parameters not prompted for:

OLD	Apply PTFs to existing modules only.
ALL	Apply all PTFs from the selected file and allow addition of new members.
PTF log number	Apply only the PTF corresponding to the number given. This number is the PTF log number, and is indicated on the cover letter for each PTF. It is also indicated in the PTFXREF source member on each PTF diskette.
library name	The specified library where PTFs are to be applied. For RPG II, it is #RPGLIB; for assembler, it is #ASMLIB; for FORTRAN IV, it is #FORTLIB; for COBOL, it is #COBLIB; for BASIC, it is #BLLIB; for BSC 3270 device emulation, it is #EM71LIB; for SNA 3270 device emulation, it is #ES74LIB; for SSP and utilities, it is #LIBRARY.

Note: A library name is a required parameter for the APPLYPTF command.

Each PTF diskette contains a PTF cross-reference file. This file is a list of all PTFs contained on the diskette. To obtain a copy of this file, enter:

TOLIBR PTFXREF
LISTLIBR PTFXREF

The following is an example of the output you will obtain:

TYPE	NAME	DISK ADDR	TOTAL	NUM	TEXT/RECORD	ATTRIBUTES	LINK	ADDR/NUM	STMT
S	PTFXREF	523002/07FAFA	19/0013	120/78		0000000		211/00D3	

MEMORANDUM TO: CUSTOMER ENGINEERS SUPPORTING IBM SYSTEM/34
PROGRAMS 5726-SSI, 5726-BA1, 5726-RG1, 5726-EM1,
5726-CB1, 5726-UT1, AND 5799-BCP.

SUBJECT: PTF'S APPLIED TO IBM SYSTEM/34 RELEASE 7.

* THIS IS NOT A PID RELEASE DISKETTE *

SYSTEM/34 PTF CROSS-REFERENCE LIST 22.10

*(5726-SSI) SYSTEM/34 RELEASE 7 *

PTF NO.	MODULE(S)	DSK NO.
07001	#GCAC	DSK021
07006	#BSOB	DSK021
07007	#SDLS	DSK022
07008	#IBHL	DSK021
07010	#SPIED	DSK021
	#SPDPQ	
07011	#RWVY	DSK021
07012	#RWCL	DSK021
07013	#RWSW	DSK021
07014	#CSPL	DSK021
07015	#BSLO	DSK021
07016	#IUN4	DSK021
	#IUNE	
07018	#SNGPS	DSK021
07020	#MGRET	DSK021
	@MGRET	
07023	#BICR	DSK021
57024	#MALCO	DSK021
	#MACOM	
07026	#SNEXT	DSK021
07032	#CACM	DSK022
	#CACs	
07037	#SRDCD	DSK021
07041	#CMCR	DSK022
	#CCDF	
07042	#ITHML	DSK022
07044	#RWVF	DSK022
07045	#CAIC	DSK022
07047	#PDLS	DSK022
07049	\$\$FFDB	DSK022
07050	#DDL M	DSK022
07051	#SBFS	DSK022
07052	\$FRE1	DSK022
	\$FRE2	
07058	#CTEIF	05/14/81
07059	#DRSI	DSK022
07062	#WDOB	DSK022
07064	#CCJQ	DSK022
07065	#CMCM	DSK022
57066	#CAM2	05/14/81
	#CAF3	
07069	#CCS2	DSK022

07070 \$SRJE DSK022
 \$SRPIN
 #SRAET
 #SRATT
 #SRDCI
 #SRCI2
 #SRICP
 #SRJE
 #SRMSG
 #SRPPI
 #SRPTR
 #SRSAL
 #SRSDA
 #SRSDI

 *(5726-BA1) SYSTEM/34 RELEASE 7 *

PTF NO.	MODULE(S)	DSK NO.
-----	-----	-----
07034	#BL0PR	DSK021
57054	#BL4IS	DSK022
	#BL4IL	
07099	#BLDIR	07/20/81
07107	#BLXTR	05/14/81

 *(5726-EM1) SYSTEM/34 RELEASE 7 *

PTF NO.	MODULE(S)	DSK NO.
-----	-----	-----
07074	#EM9D	06/01/81
07117	#EMAD	07/06/81
	#ESAD	07/20/81

 *(5726-CB1) SYSTEM/34 RELEASE 7 *

PTF NO.	MODULE(S)	DSK NO.
-----	-----	-----
07055	@CB590	DSK022
07061	@CB020	DSK020
	@CB050	
07096	#CBL02	06/29/81
	#CBL01	
	#CBL04	
	#CBI 08	
07110	@CB330	06/16/81
07118	#CBL11	06/22/81
07119	#CBL03	06/29/81
	#CBI 06	
	#CBL55	
07120	#CBL10	06/29/81
07124	@CB440	06/29/81
07127	@CB660	07/13/81
07130	@CB320	07/13/81
07134	#CB#M2	07/13/81

 *(5726-RG1) SYSTEM/34 RELEASE 7 *

PTF NO.	MODULE(S)	DSK NO.
07027	#RPGZ	DSK021
07028	#RPJA	DSK021
07029	#RPHC	DSK021
07040	#RPQT	DSK022
07057	@PGT1	DSK022
07060	#RPMP	DSK022
07094	#RPLR	05/14/81
07101	@PG22	05/14/81
07109	#RPSB	06/16/81
07123	#RPHT	07/06/81

 *(5726-UT1) SYSTEM/34 RELEASE 7 *

PTF NO.	MODULE(S)	DSK NO.
07030	#TXINT	DSK022
07031	#DFLS	DSK021
07072	#GSCL	DSK022
07073	#SERC	DSK022
07086	#WSX11	DSK022
	#WSGEP	
07090	#WSK03	DSK022
07102	#MAGS	05/26/81
07112	#TXEX	07/06/81
07125	#DFIN	06/22/81

 *(5799-BCP) SYSTEM 34 RELEASE 7 *

01049	#SIDM	DSK022
	#SIDX	
	#SIDT	
	#SIDO	
	#SIDS	
	#SIDT	
	#SISX	

THESE PTF'S ARE SUBJECT TO THE PROVISIONS OF THE LICENSE AGREEMENT FOR IBM PROGRAM PRODUCTS. BY THAT AGREEMENT, THE CUSTOMER HAS AGREED NOT TO PROVIDE OR OTHERWISE MAKE AVAILABLE THE PTF'S TO ANY PERSON OTHER THAN THE CUSTOMER OR IBM EMPLOYEES. IF THE CUSTOMER WISHES TO DISPOSE OF A LICENSED PTF WHICH REMAINS THE PROPERTY OF IBM, HE MAY EITHER:

- 1 ERASE THE DISKETTE EMBODYING THE PTF AND THERAFTER UTILIZE THE DISKETTE FOR HIS PURPOSES. OR
- 2 RETURN THE PTF TO IBM.

PRINT BELT CHARACTERS

The following table lists the System/34 print belt characters and indicates which print belt(s) the characters are on. If you want information on print belts other than the ones shown, contact your IBM sales representative.

Note: The characters are shown in ascending sorting sequence; that is, the blank character is the lowest (will be sorted before any other character) and the 9 character is the highest.

Character	Hexadecimal Equivalent	Print Belt				
		48 (BELT48)	48HN (BELT48HN)	64 (BELT64)	96 (BELT96)	188 (BELT188)
Blank (not represented on the print belt)	40	•	•	•	•	•
()	41					•
à	42					•
á	43					•
â	44					•
ã	45					•
ä	46					•
å	47					•
ç	48					•
ñ	49					•
¢	4A			•	•	[
. (period)	4B	•	•	•	•	•
<	4C			•	•	•
(	4D		•	•	•	•
+	4E	•	•	•	•	•
|	4F			•	•	!
&	50	•	•	•	•	•
€	51					•
ø	52					•
é	53					•
ê	54					•
ï	55					•
î	56					•
ÿ	57					•
ı	58					•
β	59					•
!	5A			•	•]
\$	5B	•	•	•	•	•
*	5C	•	•	•	•	•
)	5D		•	•	•	•
:	5E			•	•	•

Character	Hexadecimal Equivalent	Print Belt				
		48 (BELT48)	48HN (BELT48HN)	64 (BELT64)	96 (BELT96)	188 (BELT188)
—	5F			•	•	^
- (minus)	60	•	•	•	•	•
/	61	•	•	•	•	•
^	62					•
ä	63					•
~	64					•
^	65					•
^	66					•
^	67					•
^	68					•
ç	69					•
z	6A				•	•
, (comma)	6B	•	•	•	•	•
%	6C	•		•	•	•
_ (underscore)	6D			•	•	•
>	6E			•	•	•
?	6F			•	•	•
ø	70					•
é	71					•
é	72					•
é	73					•
é	74					•
í	75					•
í	76					•
í	77					•
í	78					•
' (grave accent)	79			•	•	•
:	7A			•	•	•
#	7B	•		•	•	•
@	7C	•		•	•	•
' (single quote)	7D	•	•	•	•	•
=	7E		•	•	•	•
"	7F			•	•	•
ø	80					•
a	81				•	•
b	82				•	•
c	83				•	•
d	84				•	•
e	85				•	•
f	86				•	•
g	87				•	•
h	88				•	•
i	89				•	•
<<	8A					•
>>	8B					•
đ	8C					•
≤	8D					•
ƒ	8E					•
±	8F					•
°	90					•
j	91				•	•

Character	Hexadecimal Equivalent	Print Belt				
		48 (BELT48)	48HN (BELT48HN)	64 (BELT64)	96 (BELT96)	188 (BELT188)
k	92				•	•
l	93				•	•
m	94				•	•
n	95				•	•
o	96				•	•
p	97				•	•
q	98				•	•
r	99				•	•
@	9A					•
Q	9B					•
H	9C				•	&
S	9D					•
Æ	9E					•
⊕	9F				•	H
μ	A0					•
~	A1				•	•
s	A2				•	•
t	A3				•	•
u	A4				•	•
v	A5				•	•
w	A6				•	•
x	A7				•	•
y	A8				•	•
z	A9				•	•
i	AA					•
¿	AB					•
Ð	AC					•
↑	AD					•
§	AE					•
®	AF					•
¢	B0					•
£	B1					•
¥	B2					•
Rs	B3					•
f	B4					•
§	B5					•
¶	B6					•
¼	B7					•
½	B8					•
¾	B9					•
┌	BA					•
|	BB					•
≠	BC					•
..	BD					•
'	BE					•
=	BF					•
{	C0					•
A	C1	•	•	•	•	•
B	C2	•	•	•	•	•
C	C3	•	•	•	•	•
D	C4	•	•	•	•	•

Character	Hexadecimal Equivalent	Print Belt				
		48 (BELT48)	48HN (BELT48HN)	64 (BELT64)	96 (BELT96)	188 (BELT188)
E	C5	•	•	•	•	•
F	C6	•	•	•	•	•
G	C7	•	•	•	•	•
H	C8	•	•	•	•	•
I	C9	•	•	•	•	•
-	CA					•
ø	CB					•
ö	CC					•
ö	CD					•
ö	CE					•
ö	CF					•
ö	D0				•	•
J	D1	•	•	•	•	•
K	D2	•	•	•	•	•
L	D3	•	•	•	•	•
M	D4	•	•	•	•	•
N	D5	•	•	•	•	•
O	D6	•	•	•	•	•
P	D7	•	•	•	•	•
Q	D8	•	•	•	•	•
R	D9	•	•	•	•	•
Y	DA					•
Z	DB					•
ü	DC					•
ü	DD					•
ü	DE					•
ü	DF					•
Y	E0			•	•	•
/	E2	•	•	•	•	•
S	E3	•	•	•	•	•
T	E4	•	•	•	•	•
U	E5	•	•	•	•	•
V	E6	•	•	•	•	•
W	E7	•	•	•	•	•
X	E8	•	•	•	•	•
Y	E9	•	•	•	•	•
Z	EA					•
²	EB					•
ø	EC					•
ö	ED					•
ö	EE					•
ö	EF					•
ø	F0	•	•	•	•	•
0	F1	•	•	•	•	•
1	F2	•	•	•	•	•
2	F3	•	•	•	•	•
3	F4	•	•	•	•	•
4	F5	•	•	•	•	•
5	F6	•	•	•	•	•
6	F7	•	•	•	•	•
7						

Character	Hexadecimal Equivalent	Print Belt				
		48 (BELT48)	48HN (BELT48HN)	64 (BELT64)	96 (BELT96)	188 (BELT188)
8	F8	•	•	•	•	•
9	F9	•	•	•	•	•
,	FA					•
0	FB					•
1	FC					•
2	FD					•
3	FE					•

Appendix C. Multinational Character Set Conversion Utility Installation

The support for the Multinational Character Set Conversion Utility is contained on the last PID SSP diskette. To copy the Multinational Character Set Conversion Utility support from the diskette to disk, enter:

TOLIBR MCSLOAD

Note: If you have the diskette magazine drive, the diskette must be placed into slot S1.

Once the support is copied, you can save the Multinational Character Set Conversion Utility support on the diskette by entering:

MCSSAVE

To remove the Multinational Character Set Conversion Utility from disk, enter:

MCSDROP

Option 6 and 15 of the CNFIGSSP procedure will not load the Multinational Character Set Conversion Utility. Therefore, you must load the Multinational Character Set Conversion Utility support for each new release, if needed.

Refer to the *System Support Reference Manual* for further information on the Multinational Character Set Conversion Utility.

Appendix D. X.21 Feature Software Installation

The communications SSP support for the X.21 hardware feature is distributed with the PID diskettes that contain the optional SSP programs; it is normally contained on the last PID SSP diskette. To copy the X.21 software support from the diskette onto disk, enter:

TOLIBR X21LOAD

Note: If you receive the error message **SYS-1494 THIS FILE NOT ON INSERTED DISKETTE**, the X.21 support was probably packaged on the next-to-last PID SSP diskette. Remove the last PID SSP diskette and insert the next-to-last PID SSP diskette, and select option 1 for the message.

If you have the diskette magazine drive, the diskette must be placed into slot S1.

Once the support is copied onto disk, you can save the X.21 feature support on your own diskette by entering:

X21SAVE

To remove the X.21 feature software support from disk, enter:

X21DROP

Options 6 and 15 of the CNFIGSSP procedure will not load the X.21 feature software support. Therefore, you must load the support for each new release, if needed.

Refer to the *Data Communications Reference Manual* for information on the support that performs the X.21 autocall function. Refer to the *System Support Reference Manual* for further information on the DEFINX21 and REQUESTX procedures.

Appendix E. System/34 Translation Tables

96 TO 48 CHARACTER SET FOLD (#96E48)

From		To		From		To	
Character	Code	Character	Code	Character	Code	Character	Code
()	40	()	40	()	70	()	40
()	41	()	40	()	71	()	40
()	42	()	40	()	72	()	40
()	43	()	40	()	73	()	40
()	44	()	40	()	74	()	40
()	45	()	40	()	75	()	40
()	46	()	40	()	76	()	40
()	47	()	40	()	77	()	40
()	48	()	40	()	78	()	40
()	49	()	40	'	79	()	40
¢	4A	()	40	:	7A	()	40
.	4B	.	4B	#	7B	#	7B
<	4C	()	40	@	7C	@	7C
()	4D	()	40	'	7D	'	7D
+	4E	+	4E	=	7E	()	40
|	4F	()	40	"	7F	()	40
&	50	&	50	()	80	()	40
()	51	()	40	a	81	A	C1
()	52	()	40	b	82	B	C2
()	53	()	40	c	83	C	C3
()	54	()	40	d	84	D	C4
()	55	()	40	e	85	E	C5
()	56	()	40	f	86	F	C6
()	57	()	40	g	87	G	C7
()	58	()	40	h	88	H	C8
()	59	()	40	i	89	I	C9
!	5A	()	40	()	8A	()	40
\$	5B	\$	5B	()	8B	()	40
*	5C	*	5C	()	8C	()	40
)	5D	()	40	()	8D	()	40
;	5E	()	40	()	8E	()	40
┘	5F	()	40	()	8F	()	40
-	60	-	60	()	90	()	40
/	61	/	61	j	91	J	D1
()	62	()	40	k	92	K	D2
()	63	()	40	l	93	L	D3
()	64	()	40	m	94	M	D4
()	65	()	40	n	95	N	D5
()	66	()	40	o	96	O	D6
()	67	()	40	p	97	P	D7
()	68	()	40	q	98	Q	D8
()	69	()	40	r	99	R	D9
:	6A	()	40	()	9A	()	40
,	6B	,	6B	()	9B	()	40
%	6C	%	6C	()	9C	()	40
-	6D	()	40	()	9D	()	40
>	6E	()	40	()	9E	()	40
?	6F	()	40	()	9F	()	40

96 TO 48 CHARACTER SET FOLD (#96E48)

(continued)

From		To		From		To	
Character	Code	Character	Code	Character	Code	Character	Code
()	A0	()	40	()	D0	()	40
()	A1	()	40	J	D1	J	D1
s	A2	S	E2	K	D2	K	D2
t	A3	T	E3	L	D3	L	D3
u	A4	U	E4	M	D4	M	D4
v	A5	V	E5	N	D5	N	D5
w	A6	W	E6	O	D6	O	D6
x	A7	X	E7	P	D7	P	D7
y	A8	Y	E8	Q	D8	Q	D8
z	A9	Z	E9	R	D9	R	D9
()	AA	()	40	()	DA	()	40
()	AB	()	40	()	DB	()	40
()	AC	()	40	()	DC	()	40
()	AD	()	40	()	DD	()	40
()	AE	()	40	()	DE	()	40
()	AF	()	40	()	DF	()	40
()	B0	()	40	\	E0	()	40
()	B1	()	40	()	E1	()	40
()	B2	()	40	S	E2	S	E2
()	B3	()	40	T	E3	T	E3
()	B4	()	40	U	E4	U	E4
()	B5	()	40	V	E5	V	E5
()	B6	()	40	W	E6	W	E6
()	B7	()	40	X	E7	X	E7
()	B8	()	40	Y	E8	Y	E8
()	B9	()	40	Z	E9	Z	E9
()	BA	()	40	()	EA	()	40
()	BB	()	40	()	EB	()	40
()	BC	()	40	()	EC	()	40
()	BD	()	40	()	ED	()	40
()	BE	()	40	()	EE	()	40
()	BF	()	40	()	EF	()	40
()	C0	()	40	0	F0	0	F0
A	C1	A	C1	1	F1	1	F1
B	C2	B	C2	2	F2	2	F2
C	C3	C	C3	3	F3	3	F3
D	C4	D	C4	4	F4	4	F4
E	C5	E	C5	5	F5	5	F5
F	C6	F	C6	6	F6	6	F6
G	C7	G	C7	7	F7	7	F7
H	C8	H	C8	8	F8	8	F8
I	C9	I	C9	9	F9	9	F9
()	CA	()	40	()	FA	()	40
()	CB	()	40	()	FB	()	40
()	CC	()	40	()	FC	()	40
()	CD	()	40	()	FD	()	40
()	CE	()	40	()	FE	()	40
()	CF	()	40				

96 TO 64 CHARACTER SET FOLD (#96E64)

From		To		From		To	
Character	Code	Character	Code	Character	Code	Character	Code
()	40	()	40	()	70	()	40
()	41	()	40	()	71	()	40
()	42	()	40	()	72	()	40
()	43	()	40	()	73	()	40
()	44	()	40	()	74	()	40
()	45	()	40	()	75	()	40
()	46	()	40	()	76	()	40
()	47	()	40	()	77	()	40
()	48	()	40	()	78	()	40
()	49	()	40	`	79	`	79
¢	4A	¢	4A	:	7A	:	7A
.	4B	.	4B	#	7B	#	7B
<	4C	<	4C	@	7C	@	7C
(	4D	(	4D	'	7D	'	7D
+	4E	+	4E	=	7E	=	7E
|	4F	|	4F	"	7F	"	7F
&	50	&	50	()	80	()	40
()	51	()	40	a	81	A	C1
()	52	()	40	b	82	B	C2
()	53	()	40	c	83	C	C3
()	54	()	40	d	84	D	C4
()	55	()	40	e	85	E	C5
()	56	()	40	f	86	F	C6
()	57	()	40	g	87	G	C7
()	58	()	40	h	88	H	C8
()	59	()	40	i	89	I	C9
!	5A	!	5A	()	8A	()	40
\$	5B	\$	5B	()	8B	()	40
*	5C	*	5C	()	8C	()	40
)	5D	)	5D	()	8D	()	40
;	5E	;	5E	()	8E	()	40
┘	5F	┘	5F	()	8F	()	40
-	60	-	60	()	90	()	40
/	61	/	61	j	91	J	D1
()	62	()	40	k	92	K	D2
()	63	()	40	l	93	L	D3
()	64	()	40	m	94	M	D4
()	65	()	40	n	95	N	D5
()	66	()	40	o	96	O	D6
()	67	()	40	p	97	P	D7
()	68	()	40	q	98	Q	D8
()	69	()	40	r	99	R	D9
!	6A	()	40	()	9A	()	40
.	6B	.	6B	()	9B	()	40
%	6C	%	6C	()	9C	()	40
-	6D	-	6D	()	9D	()	40
>	6E	>	6E	()	9E	()	40
?	6F	?	6F	()	9F	()	40

96 TO 64 CHARACTER SET FOLD (#96E64)

(continued)

From		To		From		To	
Character	Code	Character	Code	Character	Code	Character	Code
()	A0	()	40	()	D0	()	40
()	A1	()	40	J	D1	J	D1
s	A2	S	E2	K	D2	K	D2
t	A3	T	E3	L	D3	L	D3
u	A4	U	E4	M	D4	M	D4
v	A5	V	E5	N	D5	N	D5
w	A6	W	E6	O	D6	O	D6
x	A7	X	E7	P	D7	P	D7
y	A8	Y	E8	Q	D8	Q	D8
z	A9	Z	E9	R	D9	R	D9
()	AA	()	40	()	DA	()	40
()	AB	()	40	()	DB	()	40
()	AC	()	40	()	DC	()	40
()	AD	()	40	()	DD	()	40
()	AE	()	40	()	DE	()	40
()	AF	()	40	()	DF	()	40
()	B0	()	40	\	E0	\	E0
()	B1	()	40	()	E1	()	40
()	B2	()	40	S	E2	S	E2
()	B3	()	40	T	E3	T	E3
()	B4	()	40	U	E4	U	E4
()	B5	()	40	V	E5	V	E5
()	B6	()	40	W	E6	W	E6
()	B7	()	40	X	E7	X	E7
()	B8	()	40	Y	E8	Y	E8
()	B9	()	40	Z	E9	Z	E9
()	BA	()	40	()	EA	()	40
()	BB	()	40	()	EB	()	40
()	BC	()	40	()	EC	()	40
()	BD	()	40	()	ED	()	40
()	BE	()	40	()	EE	()	40
()	BF	()	40	()	EF	()	40
()	C0	()	40	0	F0	0	F0
A	C1	A	C1	1	F1	1	F1
B	C2	B	C2	2	F2	2	F2
C	C3	C	C3	3	F3	3	F3
D	C4	D	C4	4	F4	4	F4
E	C5	E	C5	5	F5	5	F5
F	C6	F	C6	6	F6	6	F6
G	C7	G	C7	7	F7	7	F7
H	C8	H	C8	8	F8	8	F8
I	C9	I	C9	9	F9	9	F9
()	CA	()	40	()	FA	()	40
()	CB	()	40	()	FB	()	40
()	CC	()	40	()	FC	()	40
()	CD	()	40	()	FD	()	40
()	CE	()	40	()	FE	()	40
()	CF	()	40				

192 TO 48 CHARACTER SET FOLD (#188E48)

From		To	
Character	Code	Character	Code
()	40	()	40
()	41	()	40
â	42	A	C1
ä	43	A	C1
à	44	A	C1
á	45	A	C1
ã	46	A	C1
ä	47	A	C1
ç	48	C	C3
ñ	49	N	D5
[	4A	()	40
.	4B	.	4B
<	4C	()	40
(	4D	()	4D
+	4E	+	4E
!	4F	()	4F
&	50	&	50
e	51	E	C5
è	52	E	C5
ë	53	E	C5
ê	54	E	C5
í	55	I	C9
î	56	I	C9
ï	57	I	C9
ì	58	I	C9
β	59	S	E2
]	5A	()	40
\$	5B	\$	5B
*	5C	*	5C
)	5D	()	5D
;	5E	()	5E
^	5F	()	40
-	60	-	60
/	61	/	61
À	62	A	C1
Á	63	A	C1
Â	64	A	C1
Ã	65	A	C1
Ä	66	A	C1
Å	67	A	C1
Ç	68	C	C3
Ñ	69	N	D5
:	6A	()	40
,	6B	,	6B
%	6C	%	6C
-	6D	()	40
>	6E	()	40
?	6F	()	40

From		To	
Character	Code	Character	Code
ø	70	O	D6
é	71	E	C5
ê	72	E	C5
ë	73	E	C5
ê	74	E	C5
í	75	I	C9
î	76	I	C9
ï	77	I	C9
ì	78	I	C9
,	79	()	40
:	7A	()	40
#	7B	#	7B
@	7C	@	7C
'	7D	'	7D
=	7E	()	40
"	7F	()	40
ø	80	O	D6
a	81	A	C1
b	82	B	C2
c	83	C	C3
d	84	D	C4
e	85	E	C5
f	86	F	C6
g	87	G	C7
h	88	H	C8
i	89	I	C9
«	8A	()	40
»	8B	()	40
đ	8C	D	C4
≤	8D	()	40
ƒ	8E	()	40
±	8F	()	40
°	90	()	40
j	91	J	D1
k	92	K	D2
l	93	L	D3
m	94	M	D4
n	95	N	D5
o	96	O	D6
p	97	P	D7
q	98	Q	D8
r	99	R	D9
@	9A	A	C1
Q	9B	O	D6
æ	9C	()	40
•	9D	()	40
Æ	9E	()	40
π	9F	()	40

192 TO 48 CHARACTER SET FOLD (#188E48)
(continued)

From		To		From		To	
Character	Code	Character	Code	Character	Code	Character	Code
μ	A0	()	40	}	D0	()	40
~	A1	()	40	J	D1	J	D1
s	A2	S	E2	K	D2	K	D2
t	A3	T	E3	L	D3	L	D3
u	A4	U	E4	M	D4	M	D4
v	A5	V	E5	N	D5	N	D5
w	A6	W	E6	O	D6	O	D6
x	A7	X	E7	P	D7	P	D7
y	A8	Y	E8	Q	D8	Q	D8
z	A9	Z	E9	R	D9	R	D9
i	AA	()	40	≥	DA	()	40
é	AB	()	40	û	DB	U	E4
ð	AC	D	C4	ü	DC	U	E4
†	AD	()	40	ù	DD	U	E4
þ	AE	()	40	ÿ	DE	U	E4
®	AF	()	40	ÿ	DF	Y	E8
¢	B0	()	40	\	E0	()	E0
£	B1	()	40	()	E1	()	E1
¥	B2	()	40	S	E2	S	E2
Pts	B3	()	40	T	E3	T	E3
f	B4	()	40	U	E4	U	E4
§	B5	()	40	V	E5	V	E5
¶	B6	()	40	W	E6	W	E6
¼	B7	()	40	X	E7	X	E7
½	B8	()	40	Y	E8	Y	E8
¾	B9	()	40	Z	E9	Z	E9
¬	BA	()	40	²	EA	()	40
|	BB	()	40	ø	EB	O	D6
≠	BC	()	40	ö	EC	O	D6
∴	BD	()	40	õ	ED	O	D6
,	BE	()	40	ö	EE	O	D6
=	BF	()	40	ö	EF	O	D6
{	C0	()	40	0	F0	0	F0
A	C1	A	C1	1	F1	1	F1
B	C2	B	C2	2	F2	2	F2
C	C3	C	C3	3	F3	3	F3
D	C4	D	C4	4	F4	4	F4
E	C5	E	C5	5	F5	5	F5
F	C6	F	C6	6	F6	6	F6
G	C7	G	C7	7	F7	7	F7
H	C8	H	C8	8	F8	8	F8
I	C9	I	C9	9	F9	9	F9
—	CA	()	40	³	FA	()	40
ø	CB	O	D6	Ü	FB	U	E4
ö	CC	O	D6	ü	FC	U	E4
õ	CD	O	D6	Û	FD	U	E4
ö	CE	O	D6	ü	FE	U	E4
õ	CF	O	D6				

192 TO 64 CHARACTER SET FOLD (#188E64)

From		To	
Character	Code	Character	Code
()	40	()	40
()	41	()	40
à	42	A	C1
ä	43	A	C1
â	44	A	C1
á	45	A	C1
ã	46	A	C1
ä	47	A	C1
ç	48	C	C3
ñ	49	N	D5
[	4A	()	40
.	4B	.	4B
<	4C	<	4C
(	4D	(	4D
+	4E	+	4E
!	4F	!	4F
&	50	&	50
e	51	E	C5
è	52	E	C5
ë	53	E	C5
é	54	E	C5
í	55	I	C9
î	56	I	C9
ï	57	I	C9
ì	58	I	C9
ß	59	S	E2
]	5A	()	40
\$	5B	\$	5B
*	5C	*	5C
)	5D	)	5D
;	5E	;	5E
^	5F	()	40
-	60	-	60
/	61	/	61
À	62	A	C1
Ä	63	A	C1
Â	64	A	C1
Á	65	A	C1
Ã	66	A	C1
Ä	67	A	C1
Ç	68	C	C3
Ñ	69	N	D5
!	6A	()	40
,	6B	,	6B
%	6C	%	6C
-	6D	-	6D
>	6E	>	6E
?	6F	?	6F

From		To	
Character	Code	Character	Code
Ø	70	O	D6
É	71	E	C5
Ê	72	E	C5
Ë	73	E	C5
È	74	E	C5
Í	75	I	C9
Î	76	I	C9
Ï	77	I	C9
Ì	78	I	C9
`	79	`	79
:	7A	:	7A
#	7B	#	7B
@	7C	@	7C
'	7D	'	7D
=	7E	=	7E
"	7F	"	7F
Ø	80	O	D6
a	81	A	C1
b	82	B	C2
c	83	C	C3
d	84	D	C4
e	85	E	C5
f	86	F	C6
g	87	G	C7
h	88	H	C8
i	89	I	C9
«	8A	()	40
»	8B	()	40
đ	8C	D	C4
≤	8D	()	40
ƒ	8E	()	40
±	8F	()	40
°	90	()	40
j	91	J	D1
k	92	K	D2
l	93	L	D3
m	94	M	D4
n	95	N	D5
o	96	O	D6
p	97	P	D7
q	98	Q	D8
r	99	R	D9
@	9A	A	C1
Q	9B	O	D6
æ	9C	()	40
ˆ	9D	()	40
Æ	9E	()	40
π	9F	()	40

192 TO 64 CHARACTER SET FOLD (#188E64)
 (continued)

From		To		From		To	
Character	Code	Character	Code	Character	Code	Character	Code
μ	A0	()	40	}	D0	()	40
~	A1	()	40	J	D1	J	D1
s	A2	S	E2	K	D2	K	D2
t	A3	T	E3	L	D3	L	D3
u	A4	U	E4	M	D4	M	D4
v	A5	V	E5	N	D5	N	D5
w	A6	W	E6	O	D6	O	D6
x	A7	X	E7	P	D7	P	D7
y	A8	Y	E8	Q	D8	Q	D8
z	A9	Z	E9	R	D9	R	D9
i	AA	()	40	≥	DA	()	40
¿	AB	()	40	û	DB	U	E4
Ð	AC	D	C4	ü	DC	U	E4
↑	AD	()	40	ù	DD	U	E4
þ	AE	()	40	ú	DE	U	E4
®	AF	()	40	ÿ	DF	Y	E8
¢	B0	()	40	\	E0	\	E0
£	B1	()	40	()	E1	()	E1
¥	B2	()	40	S	E2	S	E2
Pts	B3	()	40	T	E3	T	E3
f	B4	()	40	U	E4	U	E4
§	B5	()	40	V	E5	V	E5
¶	B6	()	40	W	E6	W	E6
¼	B7	()	40	X	E7	X	E7
½	B8	()	40	Y	E8	Y	E8
¾	B9	()	40	Z	E9	Z	E9
¬	BA	()	40	²	EA	()	40
|	BB	()	40	ô	EB	O	D6
≠	BC	()	40	ö	EC	O	D6
..	BD	()	40	ò	ED	O	D6
,	BE	()	40	ó	EE	O	D6
=	BF	()	40	õ	EF	O	D6
{	C0	()	40	0	F0	0	F0
A	C1	A	C1	1	F1	1	F1
B	C2	B	C2	2	F2	2	F2
C	C3	C	C3	3	F3	3	F3
D	C4	D	C4	4	F4	4	F4
E	C5	E	C5	5	F5	5	F5
F	C6	F	C6	6	F6	6	F6
G	C7	G	C7	7	F7	7	F7
H	C8	H	C8	8	F8	8	F8
I	C9	I	C9	9	F9	9	F9
—	CA	()	40	³	FA	()	40
ø	CB	O	D6	û	FB	U	E4
ö	CC	O	D6	ü	FC	U	E4
õ	CD	O	D6	ù	FD	U	E4
ó	CE	O	D6	ÿ	FE	U	E4
õ	CF	O	D6				

192 TO 96 CHARACTER SET FOLD (#188E96)

From		To	
Character	Code	Character	Code
()	40	()	40
()	41	()	40
â	42	a	81
ä	43	a	81
à	44	a	81
á	45	a	81
ã	46	a	81
ä	47	a	81
ç	48	c	83
ñ	49	n	95
[	4A	()	40
.	4B	.	4B
<	4C	<	4C
(	4D	(	4D
+	4E	+	4E
!	4F	!	4F
&	50	&	50
e	51	e	85
è	52	e	85
é	53	e	85
ê	54	e	85
í	55	i	89
î	56	i	89
ï	57	i	89
ì	58	i	89
β	59	s	A2
]	5A	()	40
\$	5B	\$	5B
*	5C	*	5C
)	5D	)	5D
;	5E	;	5E
^	5F	()	40
-	60	-	60
/	61	/	61
À	62	A	C1
Ä	63	A	C1
À	64	A	C1
Á	65	A	C1
Ä	66	A	C1
Á	67	A	C1
Ç	68	C	C3
Ñ	69	N	D5
:	6A	:	6A
,	6B	,	6B
%	6C	%	6C
-	6D	-	6D
>	6E	>	6E
?	6F	?	6F

From		To	
Character	Code	Character	Code
ø	70	o	96
É	71	E	C5
É	72	E	C5
É	73	E	C5
É	74	E	C5
Í	75	I	C9
Î	76	I	C9
Ï	77	I	C9
Ï	78	I	C9
`	79	`	79
:	7A	:	7A
#	7B	#	7B
@	7C	@	7C
'	7D	'	7D
=	7E	=	7E
"	7F	"	7F
0	80	0	D6
a	81	a	81
b	82	b	82
c	83	c	83
d	84	d	84
e	85	e	85
f	86	f	86
g	87	g	87
h	88	h	88
i	89	i	89
«	8A	()	40
»	8B	()	40
đ	8C	d	84
≤	8D	()	40
ƒ	8E	()	40
±	8F	()	40
°	90	()	40
·	90	()	40
j	91	j	91
k	92	k	92
l	93	l	93
m	94	m	94
n	95	n	95
o	96	o	96
p	97	p	97
q	98	q	98
r	99	r	99
ä	9A	a	81
Q	9B	o	96
æ	9C	()	40
»	9D	()	40
Æ	9E	()	40
π	9F	()	40

192 TO 96 CHARACTER SET FOLD (#188E96)
 (continued)

From		To		From		To	
Character	Code	Character	Code	Character	Code	Character	Code
μ	A0	()	40	}	D0	}	D0
~	A1	~	A1	J	D1	J	D1
s	A2	s	A2	K	D2	K	D2
t	A3	t	A3	L	D3	L	D3
u	A4	u	A4	M	D4	M	D4
v	A5	v	A5	N	D5	N	D5
w	A6	w	A6	O	D6	O	D6
x	A7	x	A7	P	D7	P	D7
y	A8	y	A8	Q	D8	Q	D8
z	A9	z	A9	R	D9	R	D9
i	AA	()	40	≥	DA	()	40
¿	AB	()	40	Û	DB	u	A4
Ð	AC	D	C4	Ü	DC	u	A4
†	AD	()	40	Ù	DD	u	A4
‡	AE	()	40	Ú	DE	u	A4
®	AF	()	40	ÿ	DF	y	A8
¢	B0	()	40	\	E0	\	E0
£	B1	()	40	()	E1	()	E1
¥	B2	()	40	S	E2	S	E2
Pts	B3	()	40	T	E3	T	E3
f	B4	()	40	U	E4	U	E4
§	B5	()	40	V	E5	V	E5
¶	B6	()	40	W	E6	W	E6
¼	B7	()	40	X	E7	X	E7
½	B8	()	40	Y	E8	Y	E8
¾	B9	()	40	Z	E9	Z	E9
¬	BA	()	40	Z ²	EA	()	40
|	BB	()	40	ø	EB	O	D6
≠	BC	()	40	ö	EC	O	D6
∴	BD	()	40	õ	ED	O	D6
'	BE	()	40	ö	EE	O	D6
=	BF	()	40	ö	EF	O	D6
(	C0	(	C0	0	F0	0	F0
A	C1	A	C1	1	F1	1	F1
B	C2	B	C2	2	F2	2	F2
C	C3	C	C3	3	F3	3	F3
D	C4	D	C4	4	F4	4	F4
E	C5	E	C5	5	F5	5	F5
F	C6	F	C6	6	F6	6	F6
G	C7	G	C7	7	F7	7	F7
H	C8	H	C8	8	F8	8	F8
I	C9	I	C9	9	F9	9	F9
-	CA	()	40	3	FA	()	40
ø	CB	o	96	Û	FB	U	E4
ö	CC	o	96	Ü	FC	U	E4
õ	CD	o	96	Û	FD	U	E4
ö	CE	o	96	Ü	FE	U	E4
ö	CF	o	96				

Disk Upgrades

When upgrading from an 8.6, 13.2, or 27.1 MB disk to a 63.9, 128.4, 192.9, or 257.4 MB disk:

- Have a current backup copy of all the files and libraries (including the system library) contained on disk.
- Have a level of the SSP that supports the new disk.
- Make sure the spool file and the input job queue are empty.

After your CE has made the required changes, you should:

- Reload the system using the backup copy of the system library.
- Restore all the user files and libraries.
- Run the CNFIGSSP procedure using option 4 to restore your work station configuration.

Main Storage (Memory) Upgrades

When upgrading your main storage size (32 K, 48 K, 64 K, 96 K, 128 K, or 256 K):

- Have a current backup copy of all the files and libraries (including the system library) contained on disk.
- Compress the disk to free space at the low end. Refer to the step in Chapter 4 for the OCL statements necessary to compress the disk.
- Make sure enough disk space is available to restore the system library.

After the CE has made the required changes, you should:

- Restore the system library.
- Make any necessary changes to the assign/free and work station buffer sizes. Refer to *7.0 Performance Parameters* in Chapter 2 for information on making these changes.

Changing from a 5211 Printer to a 3262 Printer

When changing from a 5211 Printer to a 3262 Printer:

- Make sure the spool file is empty.
- Allow for the line voltage change.

After your CE has made the required changes, you should run the CNFIGSSP procedure (option 2 and option 4) to change the print belt image member name. Option 4 copies the change onto the master configuration record.

Adding or Changing to a 5224 or 5225 Printer

When adding or changing to a 5224 or 5225 Printer, make sure the spool file is empty. After installing the 5224 or 5225 Printer, run the CNFIGSSP procedure (option 9 and option 4). Option 9 allows you to add the printer (device type 2P; attribute S if it is the system printer) to the work station configuration. Option 4 copies the addition onto the master configuration record.

Adding or Changing Communications Lines

After your CE has updated the microcode as a result of adding communications lines or changing an attribute of an existing line, you should run the CNFIGSSP procedure (option 6). Option 6 will allow you to recopy your communications support. Also, you should apply any PTFs.

Appendix G. Planning Forms

System/34 Installation Planning Chart																															
Use this chart for planning the options for your system. Fill it in before doing a System/34 Installation.																															
Reload	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;">Reload Parameters</th> <th style="width: 40%;">Comments</th> </tr> </thead> <tbody> <tr> <td>Library blocks _____</td> <td>_____</td> </tr> <tr> <td>Library directory sectors _____</td> <td>_____</td> </tr> <tr> <td>History file blocks _____</td> <td>_____</td> </tr> <tr> <td>Task work file blocks _____</td> <td>_____</td> </tr> <tr> <td>Number of VTOC entries _____</td> <td>_____</td> </tr> <tr> <td>Delete files from VTOC _____</td> <td>_____</td> </tr> <tr> <td>Use backup configuration _____</td> <td>_____</td> </tr> </tbody> </table>	Reload Parameters	Comments	Library blocks _____	_____	Library directory sectors _____	_____	History file blocks _____	_____	Task work file blocks _____	_____	Number of VTOC entries _____	_____	Delete files from VTOC _____	_____	Use backup configuration _____	_____														
Reload Parameters	Comments																														
Library blocks _____	_____																														
Library directory sectors _____	_____																														
History file blocks _____	_____																														
Task work file blocks _____	_____																														
Number of VTOC entries _____	_____																														
Delete files from VTOC _____	_____																														
Use backup configuration _____	_____																														
Configuration	<p>1.0 System Configuration Menu</p> <p>Option _____</p> <hr/> <p>2.0 Create/Edit Work Station Parameters</p> <p>1. Work station parameter member name (up to 8 characters) _____</p> <p>2. Enter selection: _____</p> <p style="margin-left: 20px;">(1-Create new member <u>2-Edit existing member</u></p> <p style="margin-left: 20px;">3-Create member from current work station configuration) _____</p> <hr/> <p>2.1 Work Station Configuration Options</p> <p>1. Configure remote work stations? (0-No 1-Yes) _____</p> <p>2. Remote work station support swappable? (0-No 1-Yes) _____</p> <p>3. Number of local work stations? (<u>0-locals 1-8</u> 1-locals 9-16) _____</p> <hr/> <p>2.2 Remote Work Station Line Configuration (Used only if answer to 2.1, Work Station Configuration Options, Question 1 was Yes.)</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Specify:</th> <th style="text-align: left;">Line #</th> <th style="text-align: center;">1</th> <th style="text-align: center;">2</th> <th style="text-align: center;">3</th> <th style="text-align: center;">4</th> </tr> </thead> <tbody> <tr> <td>1. Remote line use:</td> <td>(0-No 1-Yes)</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> </tr> <tr> <td>2. Remote line switched:</td> <td>(0-No 1-Yes)</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> </tr> <tr> <td>3. Switch type:</td> <td>(0-None 1-Manual call 2-Auto answer 3-Manual answer)</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> </tr> <tr> <td>4. Slow polling:</td> <td>(0-No 1-Yes)</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> <td style="text-align: center;">_____</td> </tr> </tbody> </table> <p>Refer to the network diagrams to respond to the parameters on Displays 2A, 2B, 2C, and 2E Local Work Station Configuration and Displays 2A, 2B, 2C, and 2E Remote Work Station Configuration.</p>	Specify:	Line #	1	2	3	4	1. Remote line use:	(0-No 1-Yes)	_____	_____	_____	_____	2. Remote line switched:	(0-No 1-Yes)	_____	_____	_____	_____	3. Switch type:	(0-None 1-Manual call 2-Auto answer 3-Manual answer)	_____	_____	_____	_____	4. Slow polling:	(0-No 1-Yes)	_____	_____	_____	_____
Specify:	Line #	1	2	3	4																										
1. Remote line use:	(0-No 1-Yes)	_____	_____	_____	_____																										
2. Remote line switched:	(0-No 1-Yes)	_____	_____	_____	_____																										
3. Switch type:	(0-None 1-Manual call 2-Auto answer 3-Manual answer)	_____	_____	_____	_____																										
4. Slow polling:	(0-No 1-Yes)	_____	_____	_____	_____																										

System/34 Installation Planning Chart

Configuration

3.0 General Parameters I

1. Date format? (1-DDMMYY 2-MMDDYY 3-YYMMDD) _____
2. Single program mode? (0-No 1-Yes) _____
3. Startup procedure name? (up to 8 characters) _____
4. Printer default for released jobs? (1-System 2-Session) _____
5. Keep messages at EOJ? (0-No 1-Yes) _____

4.0 General Parameters II

1. Input job queue support? (0-No 1-Yes) _____
 - 1A. Input job queue size? (20 - 120 jobs) _____
 - 1B. Start input job queue? (0-No 1-Yes) _____
2. History file automatic wrap? (0-No 1-Yes) _____
 - 2A. Overflow file size? (1-8 multiples) _____
3. Print spooling? (0-No 1-Yes) _____

5.0 Work Station Environment

1. Default forms ID _____
2. Lines per page (1 - 112) _____
3. Line printer belt image member name (up to 8 characters) _____
4. Line printer translate table name (up to 8 characters) _____
5. Default user library _____

6.0 Spooling Parameters

1. Spool all printers? (0-No 1-Yes) _____
2. Spool writer buffer size? (1-4 HK) _____
3. Autowriter? (0-No 1-Yes) _____
4. Spool file size? (12-12800 blocks) _____
5. Spool file segment size? (1-16 blocks) _____
6. Spool file preferred location? (1-A1 2-A2) _____

7.0 Performance Parameters

1. Work station data management (1-Resident 2-Transient/Resident 3-Transient). _____
2. Work station buffer size (4-64 HK for locals 8-64 HK for remotes). _____
3. System assign/free size (6-64 HK for locals 9-64 HK for remotes). _____
4. Trace table size (16-512 entries). _____

System/34 Installation Planning Chart

Configuration

8.0 SSP Feature Support I	
1. Security support?	(0-No 1-Yes) _____
2. Help support?	(0-No 1-Yes) _____
3. System measurement facility?	(0-No 1-Yes) _____
4. MICR SUBR08?	(0-No 1-Yes) _____
5. MICR SUBR25?	(0-No 1-Yes) _____
6. Extended disk data management?	(0-No 1-Yes) _____
7. Extended index data management?	(0-No 1-Yes) _____

8.1 SSP Feature Support II	
1. Dump file analysis?	(0-No 1-Yes) _____
2. Subconsole support?	(0-No 1-Yes) _____
3. User access to spool file?	(0-No 1-Yes) _____
4. I-Exchange?	(0-No 1-Yes) _____
5. History file scroll?	(0-No 1-Yes) _____

8.2 SSP Support for Program Products	
1. Overlay linkage editor?	(0-No 1-Yes) _____
2. COBOL execution time support?	(0-No 1-Yes) _____
3. FORTRAN execution time support?	(0-No 1-Yes) _____
4. Checkpoint/restart?	(0-No 1-Yes) _____

9.0 Communications Support	
1. BSC support?	(0-No 1-Yes) _____
2. MRJE support?	(0-No 1-Yes) _____
3. SRJE support?	(0-No 1-Yes) _____
4. Secondary SNA/SDLC support?	(0-No 1-Yes) _____
5. Remote work station support?	(0-No 1-Yes) _____
6. SSP-ICF support?	(0-No 1-Yes) _____
7. MLCA support?	(0-No 1-Yes) _____
8. Autocall feature support?	(0-No 1-Yes) _____

9.2 SSP-ICF Communications Support	
1. BSC support – IMS, BSC, CICS, CCP	(0-No 1-Yes) _____
2. BSC support – 3270	(0-No 1-Yes) _____
3. SNA support – 3270	(0-No 1-Yes) _____
4. SNA support – SNA upline facility	(0-No 1-Yes) _____
5. SNA support – Peer	(0-No 1-Yes) _____
6. SDLC support – Finance	(0-No 1-Yes) _____

10.0 SNA/SDLC Parameters	
	Line 1 2 3 4
1. Station address? (Two hexadecimal digits)	_____
2. Exchange ID? (Five hexadecimal digits)	_____
3. Logical unit mode? (A-Single B-Multiple)	_____
4. Receive data buffers?	_____
5. Transmit data buffers?	_____
6. Switch type? (A-Auto answer B-Manual answer C-Manual call D-Autocall)	_____

System/34 Installation Planning Chart

1 Installation—Utilities

Number of utility diskettes furnished (1 or 4) _____

- 1. DFU—Data File Utility (0-No 1-Yes) _____
- 2. Sort—Sort Utility (0-No 1-Yes) _____
- 3. WSU—Work Station Utility (0-No 1-Yes) _____
- 4. SEU—Source Entry Utility (0-No 1-Yes) _____
- 5. SDA—Screen Design Aid (0-No 1-Yes) _____

2 Installation—Languages

- 1. RPG—RPG II (0-No 1-Yes) _____
- 2. ASM—Assembler (0-No 1-Yes) _____
- 3. FORT—FORTRAN (0-No 1-Yes) _____
- 4. COBL—COBOL (0-No 1-Yes) _____
- 5. BASIC—BASIC (0-No 1-Yes) _____

3 Installation—SSP-Interactive Communications Feature

- 1. Intra (0-No 1-Yes) _____
- 2. BSC IMS/IRSS (0-No 1-Yes) _____
- 3. BSCCL (0-No 1-Yes) _____
- 4. BSC CICS (0-No 1-Yes) _____
- 5. BSC CCP (0-No 1-Yes) _____
- 6. SNA Upline (0-No 1-Yes) _____
- 7. SNA Peer (0-No 1-Yes) _____
- 8. BSC 3270 (0-No 1-Yes) _____
- 9. SNA 3270 (0-No 1-Yes) _____
- 10. Finance (0-No 1-Yes) _____

4 Installation—Program Products

- 1. B3270—BSC 3270 Emulation (0-No 1-Yes) _____
- 2. S3270—SNA 3270 Emulation (0-No 1-Yes) _____

Installation—PTFs and Backup

- 1. Apply PTFs (0-No 1-Yes) _____
- 2. Backup considerations:

Program Product	Back up Library		Initialize Diskettes		Number of Diskettes Required
	(0-No	1-Yes)	(0-No	1-Yes)	
Utilities	_____	_____	_____	_____	_____
SSP (#LIBRARY)	_____	_____	_____	_____	_____
RPG library	_____	_____	_____	_____	_____
ASM library	_____	_____	_____	_____	_____
FORTTRAN library	_____	_____	_____	_____	_____
COBOL library	_____	_____	_____	_____	_____
BASIC library	_____	_____	_____	_____	_____
BSC 3270 library	_____	_____	_____	_____	_____
SNA 3270 library	_____	_____	_____	_____	_____

Install

System/34 Installation Planning Chart

Use this chart for planning the options for your system. Fill it in before doing a System/34 Installation.

Reload	Reload Parameters		Comments			
	Library blocks	_____	_____			
	Library directory sectors	_____	_____			
	History file blocks	_____	_____			
	Task work file blocks	_____	_____			
	Number of VTOC entries	_____	_____			
	Delete files from VTOC	_____	_____			
Use backup configuration	_____	_____				
Configuration	1.0 System Configuration Menu					
	Option _____					
	2.0 Create/Edit Work Station Parameters					
	1. Work station parameter member name (up to 8 characters) _____					
	2. Enter selection: _____					
	(1-Create new member 2-Edit existing member 3-Create member from current work station configuration)					
2.1 Work Station Configuration Options						
1. Configure remote work stations? (0-No 1-Yes) _____						
2. Remote work station support swappable? (0-No 1-Yes) _____						
3. Number of local work stations? (0-locals 1-8 1-locals 9-16) _____						
2.2 Remote Work Station Line Configuration						
(Used only if answer to 2.1, Work Station Configuration Options, Question 1 was Yes.)						
Specify:		Line #	1	2	3	4
1. Remote line use:		(0-No 1-Yes)	_____	_____	_____	_____
2. Remote line switched:		(0-No 1-Yes)	_____	_____	_____	_____
3. Switch type:		(0-None 1-Manual call 2-Auto answer 3-Manual answer)	_____	_____	_____	_____
4. Slow polling:		(0-No 1-Yes)	_____	_____	_____	_____
Refer to the network diagrams to respond to the parameters on Displays 2A, 2B, 2C, and 2E Local Work Station Configuration and Displays 2A, 2B, 2C, and 2E Remote Work Station Configuration.						

System/34 Installation Planning Chart

Configuration

3.0 General Parameters I

1. Date format? (1-DDMMYY 2-MMDDYY 3-YYMMDD) _____
2. Single program mode? (0-No 1-Yes) _____
3. Startup procedure name? (up to 8 characters) _____
4. Printer default for released jobs? (1-System 2-Session) _____
5. Keep messages at EOJ? (0-No 1-Yes) _____

4.0 General Parameters II

1. Input job queue support? (0-No 1-Yes) _____
 - 1A. Input job queue size? (20 - 120 jobs) _____
 - 1B. Start input job queue? (0-No 1-Yes) _____
2. History file automatic wrap? (0-No 1-Yes) _____
 - 2A. Overflow file size? (1-8 multiples) _____
3. Print spooling? (0-No 1-Yes) _____

5.0 Work Station Environment

1. Default forms ID _____
2. Lines per page (1 - 112) _____
3. Line printer belt image member name (up to 8 characters) _____
4. Line printer translate table name (up to 8 characters) _____
5. Default user library _____

6.0 Spooling Parameters

1. Spool all printers? (0-No 1-Yes) _____
2. Spool writer buffer size? (1-4 HK) _____
3. Autowriter? (0-No 1-Yes) _____
4. Spool file size? (12-12800 blocks) _____
5. Spool file segment size? (1-16 blocks) _____
6. Spool file preferred location? (1-A1 2-A2) _____

7.0 Performance Parameters

1. Work station data management (1-Resident 2-Transient/Resident 3-Transient). _____
2. Work station buffer size (4-64 HK for locals 8-64 HK for remotes). _____
3. System assign/free size (6-64 HK for locals 9-64 HK for remotes). _____
4. Trace table size (16-512 entries). _____

System/34 Installation Planning Chart

Configuration

8.0 SSP Feature Support I

- 1. Security support? (0-No 1-Yes) _____
- 2. Help support? (0-No 1-Yes) _____
- 3. System measurement facility? (0-No 1-Yes) _____
- 4. MICR SUBR08? (0-No 1-Yes) _____
- 5. MICR SUBR25? (0-No 1-Yes) _____
- 6. Extended disk data management? (0-No 1-Yes) _____
- 7. Extended index data management? (0-No 1-Yes) _____

8.1 SSP Feature Support II

- 1. Dump file analysis? (0-No 1-Yes) _____
- 2. Subconsole support? (0-No 1-Yes) _____
- 3. User access to spool file? (0-No 1-Yes) _____
- 4. I-Exchange? (0-No 1-Yes) _____
- 5. History file scroll? (0-No 1-Yes) _____

8.2 SSP Support for Program Products

- 1. Overlay linkage editor? (0-No 1-Yes) _____
- 2. COBOL execution time support? (0-No 1-Yes) _____
- 3. FORTRAN execution time support? (0-No 1-Yes) _____
- 4. Checkpoint/restart? (0-No 1-Yes) _____

9.0 Communications Support

- 1. BSC support? (0-No 1-Yes) _____
- 2. MRJE support? (0-No 1-Yes) _____
- 3. SRJE support? (0-No 1-Yes) _____
- 4. Secondary SNA/SDLC support? (0-No 1-Yes) _____
- 5. Remote work station support? (0-No 1-Yes) _____
- 6. SSP-ICF support? (0-No 1-Yes) _____
- 7. MLCA support? (0-No 1-Yes) _____
- 8. Autocall feature support? (0-No 1-Yes) _____

9.2 SSP-ICF Communications Support

- 1. BSC support – IMS, BSECL, CICS, CCP (0-No 1-Yes) _____
- 2. BSC support – 3270 (0-No 1-Yes) _____
- 3. SNA support – 3270 (0-No 1-Yes) _____
- 4. SNA support – SNA upline facility (0-No 1-Yes) _____
- 5. SNA support – Peer (0-No 1-Yes) _____
- 6. SDLC support – Finance (0-No 1-Yes) _____

10.0 SNA/SDLC Parameters

	Line	1	2	3	4
1. Station address? (Two hexadecimal digits)		_____	_____	_____	_____
2. Exchange ID? (Five hexadecimal digits)		_____	_____	_____	_____
3. Logical unit mode? (A-Single B-Multiple)		_____	_____	_____	_____
4. Receive data buffers?		_____	_____	_____	_____
5. Transmit data buffers?		_____	_____	_____	_____
6. Switch type? (A-Auto answer B-Manual answer C-Manual call D-Autocall)		_____	_____	_____	_____

System/34 Installation Planning Chart

Install

1 Installation—Utilities

Number of utility diskettes furnished (1 or 4) _____

- | | | | | | |
|----|------------------------------------|-------|--------|--|--|
| 1. | DFU—Data File Utility | (0-No | 1-Yes) | | |
| 2. | Sort—Sort Utility | (0-No | 1-Yes) | | |
| 3. | WSU—Work Station Utility | (0-No | 1-Yes) | | |
| 4. | SEU—Source Entry Utility | (0-No | 1-Yes) | | |
| 5. | SDA—Screen Design Aid | (0-No | 1-Yes) | | |

2 Installation—Languages

- | | | | | | |
|----|-------------------------|-------|--------|--|--|
| 1. | RPG—RPG II | (0-No | 1-Yes) | | |
| 2. | ASM—Assembler | (0-No | 1-Yes) | | |
| 3. | FORT—FORTRAN | (0-No | 1-Yes) | | |
| 4. | COBL—COBOL | (0-No | 1-Yes) | | |
| 5. | BASIC—BASIC | (0-No | 1-Yes) | | |

3 Installation—SSP-Interactive Communications Feature

- | | | | | | | | | | | | |
|----|--------------------|-------|--------|--|--|-----|------------------------|-------|--------|--|--|
| 1. | Intra | (0-No | 1-Yes) | | | 2. | BSC IMS/IRSS | (0-No | 1-Yes) | | |
| 3. | BSCCL | (0-No | 1-Yes) | | | 4. | BSC CICS | (0-No | 1-Yes) | | |
| 5. | BSC CCP | (0-No | 1-Yes) | | | 6. | SNA Upline | (0-No | 1-Yes) | | |
| 7. | SNA Peer | (0-No | 1-Yes) | | | 8. | BSC 3270 | (0-No | 1-Yes) | | |
| 9. | SNA 3270 | (0-No | 1-Yes) | | | 10. | Finance | (0-No | 1-Yes) | | |

4 Installation—Program Products

- | | | | | | |
|----|------------------------------------|-------|--------|--|--|
| 1. | B3270—BSC 3270 Emulation | (0-No | 1-Yes) | | |
| 2. | S3270—SNA 3270 Emulation | (0-No | 1-Yes) | | |

Installation—PTFs and Backup

- | | | | | | |
|----|------------------------|-------|--------|--|--|
| 1. | Apply PTFs | (0-No | 1-Yes) | | |
| 2. | Backup considerations: | | | | |

Program Product	Back up Library (0-No 1-Yes)	Initialize Diskettes (0-No 1-Yes)	Number of Diskettes Required
Utilities	_____	_____	_____
SSP (#LIBRARY)	_____	_____	_____
RPG library	_____	_____	_____
ASM library	_____	_____	_____
FORTTRAN library	_____	_____	_____
COBOL library	_____	_____	_____
BASIC library	_____	_____	_____
BSC 3270 library	_____	_____	_____
SNA 3270 library	_____	_____	_____

Local Work Station Network Diagram—Part 1

System Unit

5211/3262 Printer	
Logical ID	
Device type	L
Attribute	
Subconsole ID	
Resident writer	
Priority	
Separator pages	

Port 0

System Console		5252 Display Station	
Logical ID		Logical ID	
Device type	D	Device type	
Unit address	0 | 0	Unit address	0 | 1
Attribute	S	Attribute	
Default printer		Default printer	
Screen size		Screen size	
Stripe reader		Stripe reader	

1

Port 1

Work Station		Work Station		Work Station		Work Station		Work Station		Work Station		Work Station	
Logical ID		Logical ID		Logical ID		Logical ID		Logical ID		Logical ID		Logical ID	
Device type		Device type		Device type		Device type		Device type		Device type		Device type	
Unit address	1 |	Unit address	1 |	Unit address	1 |	Unit address	1 |	Unit address	1 |	Unit address	1 |	Unit address	1 |
Attribute		Attribute		Attribute		Attribute		Attribute		Attribute		Attribute	
Default printer		Default printer		Default printer		Default printer		Default printer		Default printer		Default printer	
Screen size		Screen size		Screen size		Screen size		Screen size		Screen size		Screen size	
Stripe reader		Stripe reader		Stripe reader		Stripe reader		Stripe reader		Stripe reader		Stripe reader	
Language group		Language group		Language group		Language group		Language group		Language group		Language group	
Subconsole ID		Subconsole ID		Subconsole ID		Subconsole ID		Subconsole ID		Subconsole ID		Subconsole ID	
Lines per inch		Lines per inch		Lines per inch		Lines per inch		Lines per inch		Lines per inch		Lines per inch	
Resident writer		Resident writer		Resident writer		Resident writer		Resident writer		Resident writer		Resident writer	
Priority		Priority		Priority		Priority		Priority		Priority		Priority	
Separator pages		Separator pages		Separator pages		Separator pages		Separator pages		Separator pages		Separator pages	

1

2

1

2

1

2

1

2

1

2

1

2

1

Local Work Station Network Diagram—Part 1

System Unit

5211/3262 Printer	
Logical ID	
Device type	L
Attribute	
Subconsole ID	
Resident writer	
Priority	
Separator pages	

Port 0

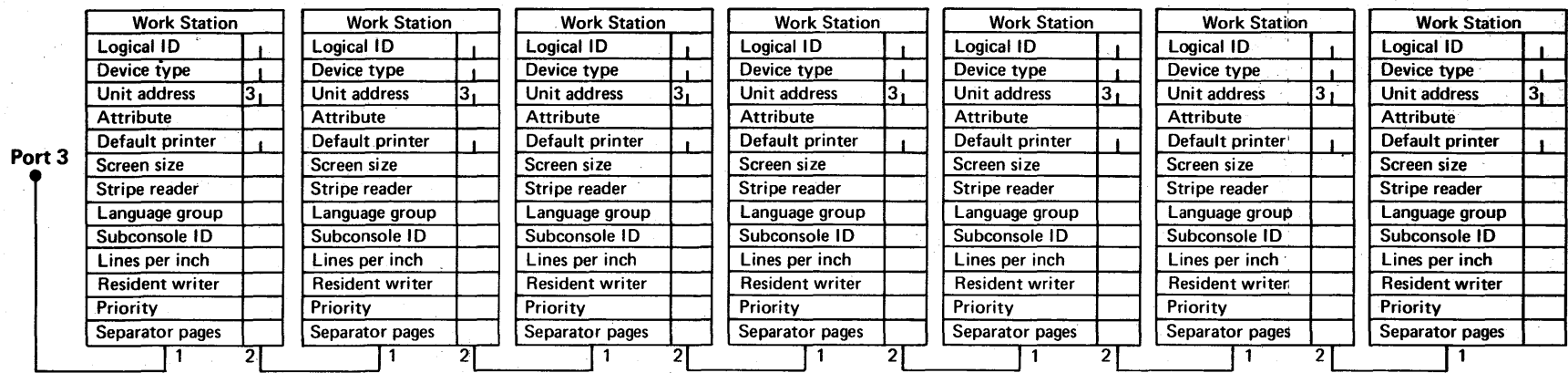
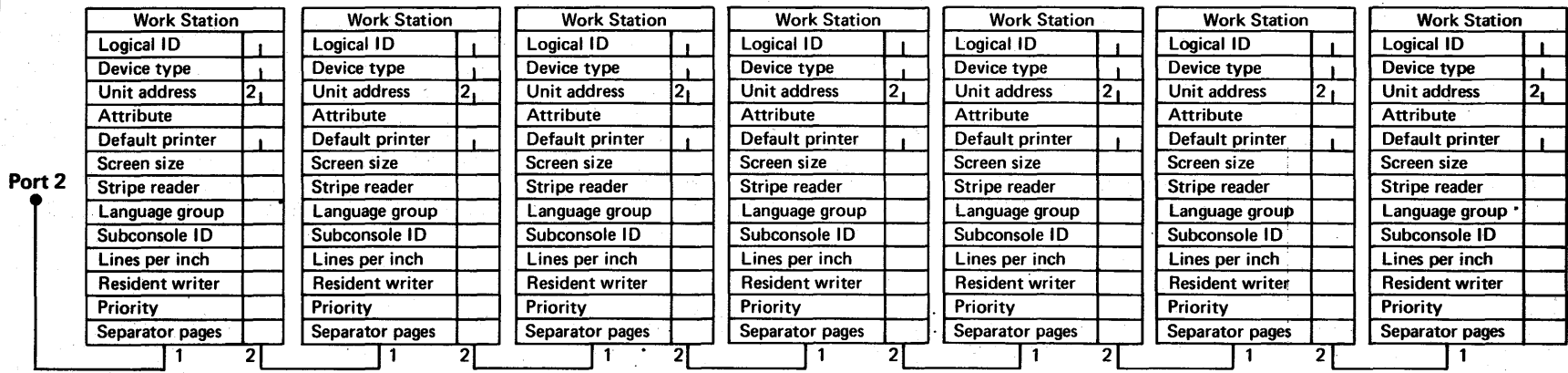
System Console		5252 Display Station	
Logical ID		Logical ID	
Device type	D	Device type	
Unit address	0 | 0	Unit address	0 | 1
Attribute	S	Attribute	
Default printer		Default printer	
Screen size		Screen size	
Stripe reader		Stripe reader	

1

Port 1

Work Station		Work Station		Work Station		Work Station		Work Station		Work Station		Work Station	
Logical ID		Logical ID		Logical ID		Logical ID		Logical ID		Logical ID		Logical ID	
Device type		Device type		Device type		Device type		Device type		Device type		Device type	
Unit address	1 |	Unit address	1 |	Unit address	1 |	Unit address	1 |	Unit address	1 |	Unit address	1 |	Unit address	1 |
Attribute		Attribute		Attribute		Attribute		Attribute		Attribute		Attribute	
Default printer		Default printer		Default printer		Default printer		Default printer		Default printer		Default printer	
Screen size		Screen size		Screen size		Screen size		Screen size		Screen size		Screen size	
Stripe reader		Stripe reader		Stripe reader		Stripe reader		Stripe reader		Stripe reader		Stripe reader	
Language group		Language group		Language group		Language group		Language group		Language group		Language group	
Subconsole ID		Subconsole ID		Subconsole ID		Subconsole ID		Subconsole ID		Subconsole ID		Subconsole ID	
Lines per inch		Lines per inch		Lines per inch		Lines per inch		Lines per inch		Lines per inch		Lines per inch	
Resident writer		Resident writer		Resident writer		Resident writer		Resident writer		Resident writer		Resident writer	
Priority		Priority		Priority		Priority		Priority		Priority		Priority	
Separator pages		Separator pages		Separator pages		Separator pages		Separator pages		Separator pages		Separator pages	
	1 2		1 2		1 2		1 2		1 2		1 2		1

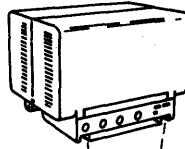
Local Work Station Network Diagram—Part 2



Remote Work Station Network Diagram

Controller	
Logical ID	C | |
Station address	|
Line number	
Alternative line	

Work Station	
Logical ID	|
Device type	D
Unit address	0 | 0
Attribute	
Default printer	|
Screen size	
Stripe reader	
Auto online	



Work Station	
Logical ID	|
Device type	|
Unit address	0 |
Attribute	
Default printer	|
Screen size	
Stripe reader	
Auto online	
Language group	
Subconsole ID	
Lines per inch	
Resident writer	
Priority	
Separator pages	

Cluster Feature (Ports 1-4)

Name		↔
Device Type		
Location		
Unit Address		
Port Number		
Work Station Address		
Telephone		↔

With Dual Cluster Feature (Ports 5-8)

↔ Name		
Device Type		
Location		
Unit Address		
Port Number		
Work Station Address		
Telephone		↔

Work Station	
Logical ID	|
Device type	|
Unit address	0 |
Attribute	
Default printer	|
Screen size	
Stripe reader	
Auto online	
Language group	
Subconsole ID	
Lines per inch	
Resident writer	
Priority	
Separator pages	

Work Station	
Logical ID	|
Device type	|
Unit address	0 |
Attribute	
Default printer	|
Screen size	
Stripe reader	
Auto online	
Language group	
Subconsole ID	
Lines per inch	
Resident writer	
Priority	
Separator pages	

Name		↔
Device Type		
Location		
Unit Address		
Port Number		
Work Station Address		
Telephone		↔

↔ Name		
Device Type		
Location		
Unit Address		
Port Number		
Work Station Address		
Telephone		↔

Work Station	
Logical ID	|
Device type	|
Unit address	0 |
Attribute	
Default printer	|
Screen size	
Stripe reader	
Auto online	
Language group	
Subconsole ID	
Lines per inch	
Resident writer	
Priority	
Separator pages	

Work Station	
Logical ID	|
Device type	|
Unit address	0 |
Attribute	
Default printer	|
Screen size	
Stripe reader	
Auto online	
Language group	
Subconsole ID	
Lines per inch	
Resident writer	
Priority	
Separator pages	

Name		↔
Device Type		
Location		
Unit Address		
Port Number		
Work Station Address		
Telephone		↔

↔ Name		
Device Type		
Location		
Unit Address		
Port Number		
Work Station Address		
Telephone		↔

Work Station	
Logical ID	|
Device type	|
Unit address	0 |
Attribute	
Default printer	|
Screen size	
Stripe reader	
Auto online	
Language group	
Subconsole ID	
Lines per inch	
Resident writer	
Priority	
Separator pages	

Work Station	
Logical ID	|
Device type	|
Unit address	0 |
Attribute	
Default printer	|
Screen size	
Stripe reader	
Auto online	
Language group	
Subconsole ID	
Lines per inch	
Resident writer	
Priority	
Separator pages	

Name		↔
Device Type		
Location		
Unit Address		
Port Number		
Work Station Address		
Telephone		↔

↔ Name		
Device Type		
Location		
Unit Address		
Port Number		
Work Station Address		
Telephone		↔

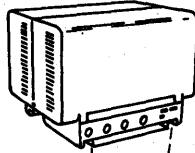
Work Station	
Logical ID	|
Device type	|
Unit address	0 |
Attribute	
Default printer	|
Screen size	
Stripe reader	
Auto online	
Language group	
Subconsole ID	
Lines per inch	
Resident writer	
Priority	
Separator pages	



Remote Work Station Network Diagram

Controller	
Logical ID	C | |
Station address	|
Line number	
Alternative line	

Work Station	
Logical ID	|
Device type	D
Unit address	0 | 0
Attribute	
Default printer	|
Screen size	
Stripe reader	
Auto online	



Work Station	
Logical ID	|
Device type	|
Unit address	0 |
Attribute	
Default printer	|
Screen size	
Stripe reader	
Auto online	
Language group	
Subconsole ID	
Lines per inch	
Resident writer	
Priority	
Separator pages	

Cluster Feature (Ports 1-4)

Name	←
Device Type	
Location	
Unit Address	
Port Number	
Work Station Address	
Telephone	→

With Dual Cluster Feature (Ports 5-8)

→ Name	
Device Type	
Location	
Unit Address	
Port Number	
Work Station Address	
Telephone	←

Work Station	
Logical ID	|
Device type	|
Unit address	0 |
Attribute	
Default printer	|
Screen size	
Stripe reader	
Auto online	
Language group	
Subconsole ID	
Lines per inch	
Resident writer	
Priority	
Separator pages	

Work Station	
Logical ID	|
Device type	|
Unit address	0 |
Attribute	
Default printer	|
Screen size	
Stripe reader	
Auto online	
Language group	
Subconsole ID	
Lines per inch	
Resident writer	
Priority	
Separator pages	

Name	←
Device Type	
Location	
Unit Address	
Port Number	
Work Station Address	
Telephone	→

→ Name	
Device Type	
Location	
Unit Address	
Port Number	
Work Station Address	
Telephone	←

Work Station	
Logical ID	|
Device type	|
Unit address	0 |
Attribute	
Default printer	|
Screen size	
Stripe reader	
Auto online	
Language group	
Subconsole ID	
Lines per inch	
Resident writer	
Priority	
Separator pages	

Work Station	
Logical ID	|
Device type	|
Unit address	0 |
Attribute	
Default printer	|
Screen size	
Stripe reader	
Auto online	
Language group	
Subconsole ID	
Lines per inch	
Resident writer	
Priority	
Separator pages	

Name	←
Device Type	
Location	
Unit Address	
Port Number	
Work Station Address	
Telephone	→

→ Name	
Device Type	
Location	
Unit Address	
Port Number	
Work Station Address	
Telephone	←

Work Station	
Logical ID	|
Device type	|
Unit address	0 |
Attribute	
Default printer	|
Screen size	
Stripe reader	
Auto online	
Language group	
Subconsole ID	
Lines per inch	
Resident writer	
Priority	
Separator pages	

Work Station	
Logical ID	|
Device type	|
Unit address	0 |
Attribute	
Default printer	|
Screen size	
Stripe reader	
Auto online	
Language group	
Subconsole ID	
Lines per inch	
Resident writer	
Priority	
Separator pages	

Name	←
Device Type	
Location	
Unit Address	
Port Number	
Work Station Address	
Telephone	

→ Name	
Device Type	
Location	
Unit Address	
Port Number	
Work Station Address	
Telephone	

Work Station	
Logical ID	|
Device type	|
Unit address	0 |
Attribute	
Default printer	|
Screen size	
Stripe reader	
Auto online	
Language group	
Subconsole ID	
Lines per inch	
Resident writer	
Priority	
Separator pages	



Intra Subsystem Planning Chart

1.0 Subsystem Member Configuration

1. Subsystem configuration member name (8 characters) -----
2. Subsystem library name (8 characters) -----
- Select:
 1. Create new member 4. Delete a member
 2. Edit existing member 5. Review a member
 3. Create new member from existing member
3. Enter selection: _____
4. Existing member name: -----
5. Existing member library name: -----

2.0 Common SSP-ICF Parameters for Each Subsystem

1. SSP-ICF common queue space: (2 - 42 K) _ _
2. Define the subsystem type: 1 _

1 Intra	2 BSC IMS/IRSS
3 BSCEL	4 BSC CICS
5 BSC CCP	6 SNA Upline
7 SNA Peer	8 BSC 3270
9 SNA 3270	10 Finance

3.0 General Subsystem Parameters

1. Location name: (8 characters) -----
2. Subsystem queue space: (0-40 K) _ _
3. Subsystem support swappable: (0-No 1-Yes) _

Intra Subsystem Planning Chart

1.0 Subsystem Member Configuration

1. Subsystem configuration member name (8 characters) -----
2. Subsystem library name (8 characters) -----
 Select:
 1. Create new member
 2. Edit existing member
 3. Create new member from existing member
 4. Delete a member
 5. Review a member
3. Enter selection: _____
4. Existing member name: -----
5. Existing member library name: -----

2.0 Common SSP-ICF Parameters for Each Subsystem

1. SSP-ICF common queue space: (2 - 42 K) _ _
2. Define the subsystem type: 1 _
 - 1 Intra
 - 2 BSC IMS/IRSS
 - 3 BSC EL
 - 4 BSC CICS
 - 5 BSC CCP
 - 6 SNA Upline
 - 7 SNA Peer
 - 8 BSC 3270
 - 9 SNA 3270
 - 10 Finance

3.0 General Subsystem Parameters

1. Location name: (8 characters) -----
2. Subsystem queue space: (0-40 K) _ _
3. Subsystem support swappable: (0-No 1-Yes) _

BSC IMS/IRSS Subsystem Planning Chart

1.0 Subsystem Member Configuration

1. Subsystem configuration member name (8 characters) _ _ _ _ _
2. Subsystem library name (8 characters) _ _ _ _ _
- Select:
 1. Create new member
 2. Edit existing member
 3. Create new member from existing member
 4. Delete a member
 5. Review a member
3. Enter selection:
4. Existing member name: _ _ _ _ _
5. Existing member library name: _ _ _ _ _

2.0 Common SSP-ICF Parameters for Each Subsystem

1. SSP-ICF common queue space: (2 - 40 K) _ _
2. Define the subsystem type: 2 _
 - 1 Intra
 - 2 BSC IMS/IRSS
 - 3 BSC EL
 - 4 BSC CICS
 - 5 BSC CCP
 - 6 SNA Upline
 - 7 SNA Peer
 - 8 BSC 3270
 - 9 SNA 3270
 - 10 Finance

3.0 General Subsystem Parameters

1. Location name: (8 characters) _ _ _ _ _
2. Subsystem queue space: (2-40 K) _ _
3. Subsystem support swappable: (0-No 1-Yes) _

5.0 BSC General Subsystem Parameters I

2. Local station address: (2 hex) _ _

7.0 Subsystem Inactive Destination Messages

1. Subsystem procedure name: (8 characters) _ _ _ _ _
2. Subsystem procedure library name: (8 characters) _ _ _ _ _

12.0 BSC IMS/IRSS Subsystem PTERMs

1. Subsystem remote program start PTERM: _ _ _ _ _
2. Subsystem local PTERMs:

BSC IMS/IRSS Subsystem Planning Chart

1.0 Subsystem Member Configuration

- 1. Subsystem configuration member name (8 characters) -----
- 2. Subsystem library name (8 characters) -----
- Select:
- 1. Create new member 4. Delete a member
- 2. Edit existing member 5. Review a member
- 3. Create new member from existing member
- 3. Enter selection: _____
- 4. Existing member name: -----
- 5. Existing member library name: -----

2.0 Common SSP-ICF Parameters for Each Subsystem

- 1. SSP-ICF common queue space: (2 - 40 K)
- 2. Define the subsystem type:
- 1 Intra 2 BSC IMS/IRSS
- 3 BSCEL 4 BSC CICS
- 5 BSC CCP 6 SNA Upline
- 7 SNA Peer 8 BSC 3270
- 9 SNA 3270 10 Finance

3.0 General Subsystem Parameters

- 1. Location name: (8 characters) -----
- 2. Subsystem queue space: (2-40 K) --
- 3. Subsystem support swappable: (0-No 1-Yes) --

5.0 BSC General Subsystem Parameters I

- 2. Local station address: (2 hex) --

7.0 Subsystem Inactive Destination Messages

- 1. Subsystem procedure name: (8 characters) -----
- 2. Subsystem procedure library name: (8 characters) -----

12.0 BSC IMS/IRSS Subsystem PTERMs

- 1. Subsystem remote program start PTERM: -----
- 2. Subsystem local PTERMs:
-
-
-

BSCCL Subsystem Planning Chart

1.0 Subsystem Member Configuration

- | | | |
|----|--|-------|
| 1. | Subsystem configuration member name (8 characters) | ----- |
| 2. | Subsystem library name (8 characters) | ----- |
| | Select: | |
| | 1. Create new member | |
| | 4. Delete a member | |
| | 2. Edit existing member | |
| | 5. Review a member | |
| | 3. Create new member from existing member | |
| 3. | Enter selection: _____ | |
| 4. | Existing member name: | ----- |
| 5. | Existing member library name: | ----- |

2.0 Common SSP-ICF Parameters for Each Subsystem

- | | | |
|----|--|----------------|
| 1. | SSP-ICF common queue space: (2 - 42 K) | _ _ |
| 2. | Define the subsystem type: | <u>3</u> _ |
| | 1 Intra | 2 BSC IMS/IRSS |
| | 3 BSCCL | 4 BSC CICS |
| | 5 BSC CCP | 6 SNA Upline |
| | 7 SNA Peer | 8 BSC 3270 |
| | 9 SNA 3270 | 10 Finance |

3.0 General Subsystem Parameters

- | | | | |
|----|------------------------------|----------------|---------|
| 1. | Location name: | (8 characters) | ----- |
| 2. | Subsystem queue space: | (0-40 K) | _ _ |
| 3. | Subsystem support swappable: | (0-No 1-Yes) | _ _ |
| 4. | Maximum user record length: | (1-4075) | _ _ _ _ |

4.0 Line Information for SSP-ICF Subsystem

- | | | | |
|----|-----------------|---------------------|---|
| 1. | Line type: | 1-Multipoint | _ |
| | | 2-Nonswitched Pt-Pt | |
| | | 3-Switched Pt-Pt | |
| 3. | Switch type: | | _ |
| | 1 Manual call | 2 Auto answer | |
| | 3 Manual answer | | |

BSCEL Subsystem Planning Chart

5.0 BSC General Subsystem Parameters I

- | | | | |
|----|------------------------|--------------------|----|
| 1. | EBCDIC/ASCII: | (1-EBCDIC 2-ASCII) | -- |
| 2. | Local station address: | (2 hex) | -- |
| 3. | Wait time: | (1 - 999 seconds) | -- |
| 4. | Transparency: | (0-No 1-Yes) | -- |
| 5. | Multiple remote IDs: | (0-No 1-Yes) | -- |
| 6. | Remote ID: | | -- |
| | ----- | | -- |
| 7. | Local ID: | | -- |
| | ----- | | -- |

5.1 BSC General Subsystem Parameters II

- | | | | |
|----|----------------------|-------------------------------------|-------|
| 1. | Phone list name: | | ----- |
| 2. | Refresh: | (0-No 1-Yes) | -- |
| 3. | Block length: | (0-4075) | -- |
| 4. | Record separator: | (Hexadecimal) | -- |
| 5. | ITB mode: | (0-No 1-Yes) | -- |
| 6. | Blank: | (0-No, 1-Compression, 2-Truncation) | -- |
| 7. | 3740 Multiple files: | (0-No 1-Yes) | -- |

6.0 BSCEL Subsystem Parameters

- | | | | |
|----|---------|-----------------|----|
| 1. | Partner | (1-NORM 2-ATTR) | -- |
|----|---------|-----------------|----|

BSCEL Subsystem Planning Chart

5.0 BSC General Subsystem Parameters I

- | | | | |
|----|------------------------|--------------------|-------|
| 1. | EBCDIC/ASCII: | (1-EBCDIC 2-ASCII) | — |
| 2. | Local station address: | (2 hex) | — — |
| 3. | Wait time: | (1 - 999 seconds) | — — — |
| 4. | Transparency: | (0-No 1-Yes) | — |
| 5. | Multiple remote IDs: | (0-No 1-Yes) | — |
| 6. | Remote ID: | | — |
| | ----- | | |
| 7. | Local ID: | | — |
| | ----- | | |

5.1 BSC General Subsystem Parameters II

- | | | | |
|----|----------------------|-------------------------------------|---------|
| 1. | Phone list name: | | ----- |
| 2. | Refresh: | (0-No 1-Yes) | — |
| 3. | Block length: | (0-4075) | — — — — |
| 4. | Record separator: | (Hexadecimal) | — — |
| 5. | ITB mode: | (0-No 1-Yes) | — |
| 6. | Blank: | (0-No, 1-Compression, 2-Truncation) | — |
| 7. | 3740 Multiple files: | (0-No 1-Yes) | — |

6.0 BSCEL Subsystem Parameters

- | | | | |
|----|---------|-----------------|---|
| 1. | Partner | (1-NORM 2-ATTR) | — |
|----|---------|-----------------|---|

BSC CICS Subsystem Planning Chart

1.0 Subsystem Member Configuration

- | | | |
|----|--|-------|
| 1. | Subsystem configuration member name (8 characters) | ----- |
| 2. | Subsystem library name (8 characters) | ----- |
| | Select: | |
| | 1. Create new member | |
| | 4. Delete a member | |
| | 2. Edit existing member | |
| | 5. Review a member | |
| | 3. Create new member from existing member | |
| 3. | Enter selection: _____ | |
| 4. | Existing member name: | ----- |
| 5. | Existing member library name: | ----- |

2.0 Common SSP-ICF Parameters for Each Subsystem

- | | | |
|----|--|-------------|
| 1. | SSP-ICF common queue space: (2 - 42 K) | -- |
| 2. | Define the subsystem type: | <u>4</u> -- |
| | 1 Intra | |
| | 2 BSC IMS/IRSS | |
| | 3 BSCEL | |
| | 4 BSC CICS | |
| | 5 BSC CCP | |
| | 6 SNA Upline | |
| | 7 SNA Peer | |
| | 8 BSC 3270 | |
| | 9 SNA 3270 | |
| | 10 Finance | |

3.0 General Subsystem Parameters

- | | | |
|----|---|-------|
| 1. | Location name: (8 characters) | ----- |
| 2. | Subsystem queue space: (0-40 K) | -- |
| 3. | Subsystem support swappable: (0-No 1-Yes) | -- |
| 4. | Maximum user record length: (1-4075) | ----- |

4.0 Line Information for SSP-ICF Subsystem

- | | | |
|----|---------------------|----|
| 1. | Line type: | -- |
| | 1-Multipoint | |
| | 2-Nonswitched Pt-Pt | |
| | 3-Switched Pt-Pt | |
| 3. | Switch type: | -- |
| | 1 Manual call | |
| | 2 Auto answer | |
| | 3 Manual answer | |

BSC CICS Subsystem Planning Chart

5.0 BSC General Subsystem Parameters I

- | | | | |
|----|------------------------|--------------------|----|
| 1. | EBCDIC/ASCII: | (1-EBCDIC 2-ASCII) | __ |
| 2. | Local station address: | (2 hex) | __ |
| 3. | Wait time: | (1-999 seconds) | __ |
| 4. | Transparency: | (0-No 1-Yes) | __ |
| 5. | Multiple remote IDs: | (0-No 1-Yes) | __ |
| 6. | Remote ID: | | __ |
| 7. | Local ID: | | __ |

5.1 BSC General Subsystem Parameters II

- | | | | |
|----|------------------|--------------|----|
| 1. | Phone list name: | | __ |
| 2. | Refresh: | (0-No 1-Yes) | __ |

7.0 Subsystem Inactive Destination Messages

- | | | | |
|----|-----------------------------------|----------------|----|
| 1. | Subsystem procedure name: | (8 characters) | __ |
| 2. | Subsystem procedure library name: | (8 characters) | __ |

10.0 BSC Multipoint Session Addresses

Define session addresses:

0-Address not defined

1-Address in pool

2-Address reserved

Incoming - Specify 0 or 2

Outgoing - Specify 0, 1, or 2

(Blank) __

A __ B __ C __ D __ E __

F __ G __ H __ I __ J __

K __ L __ M __ N __ O __

BSC CICS Subsystem Planning Chart

1.0 Subsystem Member Configuration

- | | | |
|----|--|-------|
| 1. | Subsystem configuration member name (8 characters) | ----- |
| 2. | Subsystem library name (8 characters) | ----- |
| | Select: | |
| | 1. Create new member | |
| | 2. Edit existing member | |
| | 3. Create new member from existing member | |
| | 4. Delete a member | |
| | 5. Review a member | |
| 3. | Enter selection: _____ | |
| 4. | Existing member name: | ----- |
| 5. | Existing member library name: | ----- |

2.0 Common SSP-ICF Parameters for Each Subsystem

- | | | |
|----|--|----------------|
| 1. | SSP-ICF common queue space: (2 - 42 K) | _ _ |
| 2. | Define the subsystem type: | <u>4</u> _ |
| | 1 Intra | 2 BSC IMS/IRSS |
| | 3 BSCEL | 4 BSC CICS |
| | 5 BSC CCP | 6 SNA Upline |
| | 7 SNA Peer | 8 BSC 3270 |
| | 9 SNA 3270 | 10 Finance |

3.0 General Subsystem Parameters

- | | | |
|----|---|---------|
| 1. | Location name: (8 characters) | ----- |
| 2. | Subsystem queue space: (0-40 K) | _ _ |
| 3. | Subsystem support swappable: (0-No 1-Yes) | _ |
| 4. | Maximum user record length: (1-4075) | _ _ _ _ |

4.0 Line Information for SSP-ICF Subsystem

- | | | |
|----|---------------------|---|
| 1. | Line type: | _ |
| | 1-Multipoint | |
| | 2-Nonswitched Pt-Pt | |
| | 3-Switched Pt-Pt | |
| 3. | Switch type: | _ |
| | 1 Manual call | |
| | 2 Auto answer | |
| | 3 Manual answer | |

BSC CICS Subsystem Planning Chart

5.0 BSC General Subsystem Parameters I

- | | | | |
|----|------------------------|--------------------|-------|
| 1. | EBCDIC/ASCII: | (1-EBCDIC 2-ASCII) | _ |
| 2. | Local station address: | (2 hex) | _ _ |
| 3. | Wait time: | (1-999 seconds) | _ _ _ |
| 4. | Transparency: | (0-No 1-Yes) | _ |
| 5. | Multiple remote IDs: | (0-No 1-Yes) | _ |
| 6. | Remote ID: | | _ |
| | | | |
| 7. | Local ID: | | _ |
| | | | |

5.1 BSC General Subsystem Parameters II

- | | | | |
|----|------------------|--------------|-----------|
| 1. | Phone list name: | | _ _ _ _ _ |
| 2. | Refresh: | (0-No 1-Yes) | _ |

7.0 Subsystem Inactive Destination Messages

- | | | | |
|----|-----------------------------------|----------------|-----------|
| 1. | Subsystem procedure name: | (8 characters) | _ _ _ _ _ |
| 2. | Subsystem procedure library name: | (8 characters) | _ _ _ _ _ |

10.0 BSC Multipoint Session Addresses

Define session addresses:

0-Address not defined

1-Address in pool

2-Address reserved

Incoming - Specify 0 or 2

Outgoing - Specify 0, 1, or 2

(Blank)	___			
A	___	B	___	C
D	___	E	___	
F	___	G	___	H
I	___	J	___	
K	___	L	___	M
N	___	O	___	

BSC CCP Subsystem Planning Chart

5.1 BSC General Subsystem Parameters II

1. Phone list name: _____
2. Refresh: (0-No 1-Yes) _____

10.0 BSC Multipoint Session Addresses

Define session addresses:

0-Address not defined

1-Address in pool

2-Address reserved

Incoming - Specify 0 or 2

Outgoing - Specify 0, 1, or 2

(Blank) _____

A _____ B _____ C _____ D _____ E _____

F _____ G _____ H _____ I _____ J _____

K _____ L _____ M _____ N _____ O _____

11.0 BSC CCP Subsystem Parameters

1. (Disposition of unsolicited host messages:
(1-System console 2-History file 3-Ignored) _____
2. Data mode escape characters: (Hexadecimal) _____
3. Sign on option: (1-Enable 2-Acquire) _____
4. Queuing: (0-No 1-Yes) _____
5. CCP password security: (0-No 1-Yes) _____
6. Specify password: _____
7. Requested local ID: (15 characters) _____
8. Requestor local ID: (15 characters) _____

BSC CCP Subsystem Planning Chart

1.0 Subsystem Member Configuration

- | | | |
|---------|--|-------|
| 1. | Subsystem configuration member name (8 characters) | ----- |
| 2. | Subsystem library name (8 characters) | ----- |
| Select: | | |
| 1. | Create new member | |
| 2. | Edit existing member | |
| 3. | Create new member from existing member | |
| 4. | Delete a member | |
| 5. | Review a member | |
| 3. | Enter selection: _____ | |
| 4. | Existing member name: | ----- |
| 5. | Existing member library name: | ----- |

2.0 Common SSP-ICF Parameters for Each Subsystem

- | | | |
|----|--|-------------|
| 1. | SSP-ICF common queue space: (2 - 42 K) | -- -- |
| 2. | Define the subsystem type: | <u>5</u> -- |
| 1 | Intra | |
| 2 | BSC IMS/IRSS | |
| 3 | BSC EL | |
| 4 | BSC CICS | |
| 5 | BSC CCP | |
| 6 | SNA Upline | |
| 7 | SNA Peer | |
| 8 | BSC 3270 | |
| 9 | SNA 3270 | |
| 10 | Finance | |

3.0 General Subsystem Parameters

- | | | |
|----|---|-------|
| 1. | Location name: (8 characters) | ----- |
| 2. | Subsystem queue space: (0-40 K) | -- -- |
| 3. | Subsystem support swappable: (0-No 1-Yes) | -- |
| 4. | Maximum user record length: (1-4075) | ----- |

4.0 Line Information for SSP-ICF Subsystem

- | | | |
|----|---------------------|----|
| 1. | Line type | -- |
| | 1-Multipoint | |
| | 2-Nonswitched Pt-Pt | |
| | 3-Switched Pt-Pt | |

5.0 BSC General Subsystem Parameters I

- | | | |
|----|----------------------------------|-------|
| 1. | EBCDIC/ASCII: (1-EBCDIC 2-ASCII) | -- |
| 2. | Local station address: (2 hex) | -- -- |
| 3. | Wait time: (1 - 999 seconds) | -- -- |
| 4. | Transparency: (0-No 1-Yes) | -- |
| 6. | Remote ID: | ----- |

BSC CCP Subsystem Planning Chart

5.1 BSC General Subsystem Parameters II

1. Phone list name: _____
2. Refresh: (0-No 1-Yes) _____

10.0 BSC Multipoint Session Addresses

Define session addresses:

0-Address not defined

1-Address in pool

2-Address reserved

Incoming - Specify 0 or 2

Outgoing - Specify 0, 1, or 2

(Blank) _____

A _____ B _____ C _____ D _____ E _____

F _____ G _____ H _____ I _____ J _____

K _____ L _____ M _____ N _____ O _____

11.0 BSC CCP Subsystem Parameters

1. (Disposition of unsolicited host messages:
(1-System console 2-History file 3-Ignored) _____
2. Data mode escape characters: (Hexadecimal) _____
3. Sign on option: (1-Enable 2-Acquire) _____
4. Queuing: (0-No 1-Yes) _____
5. CCP password security: (0-No 1-Yes) _____
6. Specify password: _____
7. Requested local ID: (15 characters) _____
8. Requestor local ID: (15 characters) _____

SNA Upline Subsystem Planning Chart

1.0 Subsystem Member Configuration

1. Subsystem configuration member name (8 characters) -----
2. Subsystem library name (8 characters) -----
- Select:
 1. Create new member
 2. Edit existing member
 3. Create new member from existing member
 4. Delete a member
 5. Review a member
3. Enter selection: _____
4. Existing member name: -----
5. Existing member library name: -----

2.0 Common SSP-ICF Parameters for Each Subsystem

1. SSP-ICF common queue space: (2 - 42 K) -----
2. Define the subsystem type: 6 -----

1 Intra	2 BSC IMS/IRSS
3 BSC EL	4 BSC CICS
5 BSC CCP	6 SNA Upline
7 SNA Peer	8 BSC 3270
9 SNA 3270	10 Finance

3.0 General Subsystem Parameters

1. Location name: (8 characters) -----
2. Subsystem queue space: (0-40 K) -----
3. Subsystem support swappable: (0-No 1-Yes) -----
4. Maximum user record length: (1-4075) -----

4.0 Line Information for SSP-ICF Subsystem

1. Line type: -----

2-Nonswitched Pt-Pt
3-Switched Pt-Pt
2. Local station address: (2 hex) -----
3. Switch type: -----

1 Manual call	2 Auto answer
3 Manual answer	

7.0 Subsystem Inactive Destination Messages

1. Subsystem procedure name: (8 characters) -----
2. Subsystem procedure library name: (8 characters) -----

SNA Upline Subsystem Planning Chart

8.0 SNA General Subsystem Parameters

- | | | | |
|----|--------------------------------|---------------|-----------|
| 1. | SDLC Buffer pool size: | (2-8 K) | — |
| 2. | Number of transmit buffers: | (1-15) | — — |
| 3. | Maximum number of sessions: | (1-32) | — — |
| 4. | Maximum receive pacing count: | (1-63) | — — |
| 5. | Local ID: | (Hexadecimal) | — — — — — |
| 6. | LU configuration library name: | | — — — — — |
| 7. | LU configuration member name: | | — — — — — |

9.0 SNA Upline Subsystem Parameters

- | | | | |
|----|---------------------------|------------------------------|-----------|
| 1. | Subsystem application ID: | | — — — — — |
| 2. | Subsystem host name: | (1-Other 2-IMS/VS 3-CICS/VS) | — |

9.1 SNA Upline/3270 Station Parameters (Extra copies of this section are included.)

- | | | | |
|----|-----------------------|--------------|-----------|
| 1. | Remote location name: | | — — — — — |
| 2. | SSCPID: | (0-65535) | — — — — — |
| 3. | Phone list name: | | — — — — — |
| 4. | Location activated: | (0-No 1-Yes) | — |

SNA Upline Subsystem Planning Chart

1.0 Subsystem Member Configuration

- | | | |
|---------|--|-----------|
| 1. | Subsystem configuration member name (8 characters) | _ _ _ _ _ |
| 2. | Subsystem library name (8 characters) | _ _ _ _ _ |
| Select: | | |
| 1. | Create new member | |
| 4. | Delete a member | |
| 2. | Edit existing member | |
| 5. | Review a member | |
| 3. | Create new member from existing member | |
| 3. | Enter selection: _____ | |
| 4. | Existing member name: | _ _ _ _ _ |
| 5. | Existing member library name: | _ _ _ _ _ |

2.0 Common SSP-ICF Parameters for Each Subsystem

- | | | |
|----|--|------------|
| 1. | SSP-ICF common queue space: (2 - 42 K) | _ _ |
| 2. | Define the subsystem type: | <u>6</u> _ |
| | 1 Intra | |
| | 2 BSC IMS/IRSS | |
| | 3 BSCEL | |
| | 4 BSC CICS | |
| | 5 BSC CCP | |
| | 6 SNA Upline | |
| | 7 SNA Peer | |
| | 8 BSC 3270 | |
| | 9 SNA 3270 | |
| | 10 Finance | |

3.0 General Subsystem Parameters

- | | | |
|----|---|-----------|
| 1. | Location name: (8 characters) | _ _ _ _ _ |
| 2. | Subsystem queue space: (0-40 K) | _ _ |
| 3. | Subsystem support swappable: (0-No 1-Yes) | _ |
| 4. | Maximum user record length: (1-4075) | _ _ _ _ |

4.0 Line Information for SSP-ICF Subsystem

- | | | |
|----|--------------------------------|-----|
| 1. | Line type: | _ |
| | 2-Nonswitched Pt-Pt | |
| | 3-Switched Pt-Pt | |
| 2. | Local station address: (2 hex) | _ _ |
| 3. | Switch type: | _ |
| | 1 Manual call | |
| | 2 Auto answer | |
| | 3 Manual answer | |

7.0 Subsystem Inactive Destination Messages

- | | | |
|----|--|-----------|
| 1. | Subsystem procedure name: (8 characters) | _ _ _ _ _ |
| 2. | Subsystem procedure library name: (8 characters) | _ _ _ _ _ |

SNA Upline Subsystem Planning Chart

8.0 SNA General Subsystem Parameters

- | | | | |
|----|--------------------------------|---------------|-----------|
| 1. | SDLC Buffer pool size: | (2-8 K) | — |
| 2. | Number of transmit buffers: | (1-15) | — — |
| 3. | Maximum number of sessions: | (1-32) | — — |
| 4. | Maximum receive pacing count: | (1-63) | — — |
| 5. | Local ID: | (Hexadecimal) | — — — — — |
| 6. | LU configuration library name: | | — — — — — |
| 7. | LU configuration member name: | | — — — — — |

9.0 SNA Upline Subsystem Parameters

- | | | | |
|----|---------------------------|------------------------------|-----------|
| 1. | Subsystem application ID: | | — — — — — |
| 2. | Subsystem host name: | (1-Other 2-IMS/VS 3-CICS/VS) | — |

9.1 SNA Upline/3270 Station Parameters (Extra copies of this section are included.)

- | | | | |
|----|-----------------------|--------------|-----------|
| 1. | Remote location name: | | — — — — — |
| 2. | SSCPID: | (0-65535) | — — — — — |
| 3. | Phone list name: | | — — — — — |
| 4. | Location activated: | (0-No 1-Yes) | — |

SNA Upline Subsystem Planning Chart

9.1 SNA Upline/3270 Station Parameters

- | | | |
|----|----------------------------------|-------|
| 1. | Remote location name: | ----- |
| 2. | SSCPID: (0-65535) | ----- |
| 3. | Phone list name: | ----- |
| 4. | Location activated: (0-No 1-Yes) | -- |

9.1 SNA Upline/3270 Station Parameters

- | | | |
|----|----------------------------------|-------|
| 1. | Remote location name: | ----- |
| 2. | SSCPID: (0-65535) | ----- |
| 3. | Phone list name: | ----- |
| 4. | Location activated: (0-No 1-Yes) | -- |

9.1 SNA Upline/3270 Station Parameters

- | | | |
|----|----------------------------------|-------|
| 1. | Remote location name: | ----- |
| 2. | SSCPID: (0-65535) | ----- |
| 3. | Phone list name: | ----- |
| 4. | Location activated: (0-No 1-Yes) | -- |

9.1 SNA Upline/3270 Station Parameters

- | | | |
|----|----------------------------------|-------|
| 1. | Remote location name: | ----- |
| 2. | SSCPID: (0-65535) | ----- |
| 3. | Phone list name: | ----- |
| 4. | Location activated: (0-No 1-Yes) | -- |

SNA Upline Subsystem Planning Chart

9.1 SNA Upline/3270 Station Parameters

- 1. Remote location name: _____
- 2. SSCPID: (0-65535) _____
- 3. Phone list name: _____
- 4. Location activated: (0-No 1-Yes) _____

9.1 SNA Upline/3270 Station Parameters

- 1. Remote location name: _____
- 2. SSCPID: (0-65535) _____
- 3. Phone list name: _____
- 4. Location activated: (0-No 1-Yes) _____

9.1 SNA Upline/3270 Station Parameters

- 1. Remote location name: _____
- 2. SSCPID: (0-65535) _____
- 3. Phone list name: _____
- 4. Location activated: (0-No 1-Yes) _____

9.1 SNA Upline/3270 Station Parameters

- 1. Remote location name: _____
- 2. SSCPID: (0-65535) _____
- 3. Phone list name: _____
- 4. Location activated: (0-No 1-Yes) _____

SNA Peer Subsystem Planning Chart

1.0 Subsystem Member Configuration

- | | | | |
|---|-------------------------------------|----------------|-----------------|
| 1. | Subsystem configuration member name | (8 characters) | ----- |
| 2. | Subsystem library name | (8 characters) | ----- |
| Select: | | | |
| 1. | Create new member | 4. | Delete a member |
| 2. | Edit existing member | 5. | Review a member |
| 3. Create new member from existing member | | | |
| 3. | Enter selection: _____ | | |
| 4. | Existing member name: | | ----- |
| 5. | Existing member library name: | | ----- |

2.0 Common SSP-ICF Parameters for Each Subsystem

- | | | | |
|----|-----------------------------|------------|--------------|
| 1. | SSP-ICF common queue space: | (2 - 42 K) | _ _ |
| 2. | Define the subsystem type: | | <u>7</u> _ |
| 1 | Intra | 2 | BSC IMS/IRSS |
| 3 | BSCEL | 4 | BSC CICS |
| 5 | BSC CCP | 6 | SNA Upline |
| 7 | SNA Peer | 8 | BSC 3270 |
| 9 | SNA 3270 | 10 | Finance |

3.0 General Subsystem Parameters

- | | | | |
|----|------------------------------|----------------|---------|
| 1. | Location name: | (8 characters) | ----- |
| 2. | Subsystem queue space: | (0-40 K) | _ _ |
| 3. | Subsystem support swappable: | (0-No 1-Yes) | _ |
| 4. | Maximum user record length: | (1-4075) | _ _ _ _ |

3.1 SDLC General Subsystem Parameters

- | | | | |
|----|------------------------------|-------------------------|-----|
| 1. | SDLC protocol | (1-Primary 2-Secondary) | _ |
| 2. | SDLC receive buffer size | (2 or 4 K) | _ |
| 3. | SDLC transmit buffer size | (2 or 4 K) | _ |
| 4. | Maximum receive pacing count | (1-63) | _ _ |

SNA Peer Subsystem Planning Chart

4.0 Line Information for SSP-ICF Subsystem

- | | | | |
|----|------------------------|---|-----|
| 1. | Line type: | 1-Multipoint
2-Nonswitched Pt-Pt
3-Switched Pt-Pt | — |
| 2. | Local station address: | (2 hex) | — — |
| 3. | Switch type: | | — |
| | 1 Manual call | 2 Auto answer | |
| | 3 Manual answer | | |
| 4. | Auto disconnect: | (0-No 1-Yes) | — |
| 5. | Stay operational: | (0-No 1-Yes) | — |

13.0 SNA Peer Subsystem Parameters (Extra copies of this section are included.)

- | | | | |
|----|------------------------------------|------------------------|-----------------|
| 1. | Remote station address: | (01 to FE hexadecimal) | — — |
| 2. | Remote location name: | | — — — — — — — — |
| 3. | Maximum number of active sessions: | (1 - 64) | — — |
| 4. | Number of preestablished sessions: | | — — |
| 5. | Maximum number of I-frames: | (1 - 7) | — |
| 6. | Location activated: | (0-No 1-Yes) | — |
| 7. | Slow poll: | (0 - 5) | — |
| 8. | Phone list name: | | — — — — — — — — |

SNA Peer Subsystem Planning Chart

1.0 Subsystem Member Configuration

- | | | |
|----|--|-------|
| 1. | Subsystem configuration member name (8 characters) | ----- |
| 2. | Subsystem library name (8 characters) | ----- |
| | Select: | |
| | 1. Create new member | |
| | 4. Delete a member | |
| | 2. Edit existing member | |
| | 5. Review a member | |
| | 3. Create new member from existing member | |
| 3. | Enter selection: _____ | |
| 4. | Existing member name: | ----- |
| 5. | Existing member library name: | ----- |

2.0 Common SSP-ICF Parameters for Each Subsystem

- | | | |
|----|--|----------------|
| 1. | SSP-ICF common queue space: (2 - 42 K) | _ _ |
| 2. | Define the subsystem type: | <u>7</u> _ |
| | 1 Intra | 2 BSC IMS/IRSS |
| | 3 BSCEL | 4 BSC CICS |
| | 5 BSC CCP | 6 SNA Upline |
| | 7 SNA Peer | 8 BSC 3270 |
| | 9 SNA 3270 | 10 Finance |

3.0 General Subsystem Parameters

- | | | | |
|----|------------------------------|----------------|---------|
| 1. | Location name: | (8 characters) | ----- |
| 2. | Subsystem queue space: | (0-40 K) | _ _ |
| 3. | Subsystem support swappable: | (0-No 1-Yes) | _ |
| 4. | Maximum user record length: | (1-4075) | _ _ _ _ |

3.1 SDLC General Subsystem Parameters

- | | | | |
|----|------------------------------|-------------------------|-----|
| 1. | SDLC protocol | (1-Primary 2-Secondary) | _ |
| 2. | SDLC receive buffer size | (2 or 4 K) | _ |
| 3. | SDLC transmit buffer size | (2 or 4 K) | _ |
| 4. | Maximum receive pacing count | (1-63) | _ _ |

SNA Peer Subsystem Planning Chart

4.0 Line Information for SSP-ICF Subsystem

- | | | | |
|----|------------------------|---|-----|
| 1. | Line type: | 1-Multipoint
2-Nonswitched Pt-Pt
3-Switched Pt-Pt | — |
| 2. | Local station address: | (2 hex) | — — |
| 3. | Switch type: | | — |
| | 1 Manual call | 2 Auto answer | |
| | 3 Manual answer | | |
| 4. | Auto disconnect: | (0-No 1-Yes) | — |
| 5. | Stay operational: | (0-No 1-Yes) | — |

13.0 SNA Peer Subsystem Parameters (Extra copies of this section are included.)

- | | | | |
|----|------------------------------------|------------------------|-----------|
| 1. | Remote station address: | (01 to FE hexadecimal) | — — |
| 2. | Remote location name: | | — — — — — |
| 3. | Maximum number of active sessions: | (1 - 64) | — — |
| 4. | Number of preestablished sessions: | | — — |
| 5. | Maximum number of I-frames: | (1 - 7) | — |
| 6. | Location activated: | (0-No 1-Yes) | — |
| 7. | Slow poll: | (0 - 5) | — |
| 8. | Phone list name: | | — — — — — |

SNA Peer Subsystem Planning Chart

13.0 SNA Peer Subsystem Parameters

- | | | | |
|----|------------------------------------|------------------------|-------|
| 1. | Remote station address: | (01 to FE hexadecimal) | -- |
| 2. | Remote location name: | | ----- |
| 3. | Maximum number of active sessions: | (1-64) | -- |
| 4. | Number of preestablished sessions: | | -- |
| 5. | Maximum number of I-frames: | (1-7) | -- |
| 6. | Location activated: | (0-No 1-Yes) | -- |
| 7. | Slow poll: | (0-5) | -- |
| 8. | Phone list name: | | ----- |

13.0 SNA Peer Subsystem Parameters

- | | | | |
|----|------------------------------------|------------------------|-------|
| 1. | Remote station address: | (01 to FE hexadecimal) | -- |
| 2. | Remote location name: | | ----- |
| 3. | Maximum number of active sessions: | (1-64) | -- |
| 4. | Number of preestablished sessions: | | -- |
| 5. | Maximum number of I-frames: | (1-7) | -- |
| 6. | Location activated: | (0-No 1-Yes) | -- |
| 7. | Slow poll: | (0-5) | -- |
| 8. | Phone list name: | | ----- |

13.0 SNA Peer Subsystem Parameters

- | | | | |
|----|------------------------------------|------------------------|-------|
| 1. | Remote station address: | (01 to FE hexadecimal) | -- |
| 2. | Remote location name: | | ----- |
| 3. | Maximum number of active sessions: | (1-64) | -- |
| 4. | Number of preestablished sessions: | | -- |
| 5. | Maximum number of I-frames: | (1-7) | -- |
| 6. | Location activated: | (0-No 1-Yes) | -- |
| 7. | Slow poll: | (0-5) | -- |
| 8. | Phone list name: | | ----- |

13.0 SNA Peer Subsystem Parameters

- | | | | |
|----|------------------------------------|------------------------|-------|
| 1. | Remote station address: | (01 to FE hexadecimal) | -- |
| 2. | Remote location name: | | ----- |
| 3. | Maximum number of active sessions: | (1-64) | -- |
| 4. | Number of preestablished sessions: | | -- |
| 5. | Maximum number of I-frames: | (1-7) | -- |
| 6. | Location activated: | (0-No 1-Yes) | -- |
| 7. | Slow poll: | (0-5) | -- |
| 8. | Phone list name: | | ----- |

SNA Peer Subsystem Planning Chart

13.0 SNA Peer Subsystem Parameters

- | | | | |
|----|------------------------------------|------------------------|-------|
| 1. | Remote station address: | (01 to FE hexadecimal) | --- |
| 2. | Remote location name: | | ----- |
| 3. | Maximum number of active sessions: | (1-64) | ----- |
| 4. | Number of preestablished sessions: | | ----- |
| 5. | Maximum number of I-frames: | (1-7) | --- |
| 6. | Location activated: | (0-No 1-Yes) | --- |
| 7. | Slow poll: | (0-5) | --- |
| 8. | Phone list name: | | ----- |

13.0 SNA Peer Subsystem Parameters

- | | | | |
|----|------------------------------------|------------------------|-------|
| 1. | Remote station address: | (01 to FE hexadecimal) | --- |
| 2. | Remote location name: | | ----- |
| 3. | Maximum number of active sessions: | (1-64) | ----- |
| 4. | Number of preestablished sessions: | | ----- |
| 5. | Maximum number of I-frames: | (1-7) | --- |
| 6. | Location activated: | (0-No 1-Yes) | --- |
| 7. | Slow poll: | (0-5) | --- |
| 8. | Phone list name: | | ----- |

13.0 SNA Peer Subsystem Parameters

- | | | | |
|----|------------------------------------|------------------------|-------|
| 1. | Remote station address: | (01 to FE hexadecimal) | --- |
| 2. | Remote location name: | | ----- |
| 3. | Maximum number of active sessions: | (1-64) | ----- |
| 4. | Number of preestablished sessions: | | ----- |
| 5. | Maximum number of I-frames: | (1-7) | --- |
| 6. | Location activated: | (0-No 1-Yes) | --- |
| 7. | Slow poll: | (0-5) | --- |
| 8. | Phone list name: | | ----- |

13.0 SNA Peer Subsystem Parameters

- | | | | |
|----|------------------------------------|------------------------|-------|
| 1. | Remote station address: | (01 to FE hexadecimal) | --- |
| 2. | Remote location name: | | ----- |
| 3. | Maximum number of active sessions: | (1-64) | ----- |
| 4. | Number of preestablished sessions: | | ----- |
| 5. | Maximum number of I-frames: | (1-7) | --- |
| 6. | Location activated: | (0-No 1-Yes) | --- |
| 7. | Slow poll: | (0-5) | --- |
| 8. | Phone list name: | | ----- |

BSC 3270 Subsystem Planning Chart

1.0 Subsystem Member Configuration

1. Subsystem configuration member name (8 characters) _ _ _ _ _
2. Subsystem library name (8 characters) _ _ _ _ _
- Select:
1. Create new member 4. Delete a member
2. Edit existing member 5. Review a member
3. Create new member from existing member
3. Enter selection: _ _ _ _ _
4. Existing member name: _ _ _ _ _
5. Existing member library name: _ _ _ _ _

2.0 Common SSP-ICF Parameters for Each Subsystem

1. SSP-ICF common queue space: (2 - 42 K) _ _
2. Define the subsystem type: 8 _
 - 1 Intra 2 BSC IMS/IRSS
 - 3 BSC EL 4 BSC CICS
 - 5 BSC CCP 6 SNA Upline
 - 7 SNA Peer 8 BSC 3270
 - 9 SNA 3270 10 Finance

3.0 General Subsystem Parameters

1. Location name: (8 characters) _ _ _ _ _
2. Subsystem queue space: (0-40 K) _ _
3. Subsystem support swappable: (0-No 1-Yes) _
4. Maximum user record length: (0-4075) _ _ _ _

4.0 Line Information for SSP-ICF Subsystem

2. Local station address: (2 hex) _ _

14.0 3270 Subsystem General Parameters

1. Line buffer size: (256-4096) _ _ _ _
2. Delay count: (0-255) _ _ _

15.0 BSC 3270 Subsystem Device Parameters

1. Device address 40 C1 C2 C3 C4 C5 C6 C7 C8 C9 4A 4B 4C 4D 4E 4F
2. Device type* (1, 2, 3, or 5) _ _ _ _ _
3. S/34 logical ID _ _ _ _ _
4. Lowercase (0-No 1-Yes) _ _ _ _ _

5. Device address 50 D1 D2 D3 D4 D5 D6 D7 D8 D9 5A 5B 5C 5D 5E 5F
6. Device type* (1, 2, 3, or 5) _ _ _ _ _
7. S/34 logical ID _ _ _ _ _
8. Lowercase (0-No 1-Yes) _ _ _ _ _

*1-Program 2-3277 Display 3-3277 with Numeric Lock 5-3288 Printer

SNA 3270 Device Emulation Planning Chart

1.0 Subsystem Member Configuration

- | | | |
|----|--|-------|
| 1. | Subsystem configuration member name (8 characters) | ----- |
| 2. | Subsystem library name (8 characters) | ----- |
| | Select: | |
| | 1. Create new member | |
| | 2. Edit existing member | |
| | 3. Create new member from existing member | |
| | 4. Delete a member | |
| | 5. Review a member | |
| 3. | Enter selection: _____ | |
| 4. | Existing member name: | ----- |
| 5. | Existing member library name: | ----- |

2.0 Common SSP-ICF Parameters for Each Subsystem

- | | | |
|----|--|------------|
| 1. | SSP-ICF common queue space: (2 - 42 K) | _ _ |
| 2. | Define the subsystem type: | <u>9</u> _ |
| | 1 Intra | |
| | 2 BSC IMS/IRSS | |
| | 3 BSC EL | |
| | 4 BSC CICS | |
| | 5 BSC CCP | |
| | 6 SNA Upline | |
| | 7 SNA Peer | |
| | 8 BSC 3270 | |
| | 9 SNA 3270 | |
| | 10 Finance | |

3.0 General Subsystem Parameters

- | | | |
|----|---|-------|
| 1. | Location name: (8 characters) | ----- |
| 2. | Subsystem queue space: (2-40 K) | _ _ |
| 3. | Subsystem support swappable: (0-No 1-Yes) | _ |

4.0 Line Information for SSP-ICF Subsystem

- | | | |
|----|--------------------------------|-----|
| 1. | Line type: | _ |
| | 2-Nonswitched Pt-Pt | |
| | 3-Switched Pt-Pt | |
| 2. | Local station address: (2 hex) | _ _ |
| 3. | Switch type: | _ |
| | 1 Manual call | |
| | 2 Auto answer | |
| | 3 Manual answer | |

SNA 3270 Device Emulation Planning Chart

8.0 SNA General Subsystem Parameters

- | | | | |
|----|-------------------------------|---------------|-------------|
| 1. | SDLC Buffer pool size: | (2-8 K) | — |
| 2. | Number of transmit buffers: | (1-15) | — — |
| 4. | Maximum receive pacing count: | (1-63) | — — |
| 5. | Local ID: | (Hexadecimal) | — — — — |
| 6. | LU configuration library name | | — — — — — — |
| 7. | LU configuration member name | | — — — — — — |

9.1 SNA Upline/3270 Station Parameters (Extra copies of this section are included.)

- | | | | |
|----|-----------------------|--------------|-------------|
| 1. | Remote location name: | | — — — — — — |
| 2. | SSCPID: | (0-65535) | — — — — — — |
| 3. | Phone list name: | | — — — — — — |
| 4. | Location activated: | (0-No 1-Yes) | — |

16.0 SNA 3270 Subsystem Device Parameters

- | | | |
|----|---------------------------|---------------------|
| 1. | Logical unit address | — — — — — — — — — — |
| 2. | Device type* (2, 3, or 5) | — — — — — — — — |
| 3. | S/34 logical ID | — — — — — — — — |
| 4. | Lowercase (0-No 1-Yes) | — — — — — — — — |
| 5. | Logical unit address | — — — — — — — — — — |
| 6. | Device type* (2, 3, or 5) | — — — — — — — — |
| 7. | S/34 logical ID | — — — — — — — — |
| 8. | Lowercase (0-No 1-Yes) | — — — — — — — — |

*2-3277 Display 3-3277 with Numeric Lock 5-3288 Printer

SNA 3270 Device Emulation Planning Chart

1.0 Subsystem Member Configuration

1. Subsystem configuration member name (8 characters) _ _ _ _ _
2. Subsystem library name (8 characters) _ _ _ _ _
- Select:
 1. Create new member
 2. Edit existing member
 3. Create new member from existing member
 4. Delete a member
 5. Review a member
3. Enter selection: _ _ _ _ _
4. Existing member name: _ _ _ _ _
5. Existing member library name: _ _ _ _ _

2.0 Common SSP-ICF Parameters for Each Subsystem

1. SSP-ICF common queue space: (2 - 42 K) _ _
2. Define the subsystem type: 9 _

1 Intra	2 BSC IMS/IRSS
3 BSCCL	4 BSC CICS
5 BSC CCP	6 SNA Upline
7 SNA Peer	8 BSC 3270
9 SNA 3270	10 Finance

3.0 General Subsystem Parameters

1. Location name: (8 characters) _ _ _ _ _
2. Subsystem queue space: (2-40 K) _ _
3. Subsystem support swappable: (0-No 1-Yes) _

4.0 Line Information for SSP-ICF Subsystem

1. Line type: _

2-Nonswitched Pt-Pt
3-Switched Pt-Pt
2. Local station address: (2 hex) _ _
3. Switch type: _

1 Manual call	2 Auto answer
3 Manual answer	

SNA 3270 Device Emulation Planning Chart

8.0 SNA General Subsystem Parameters

- | | | | |
|----|-------------------------------|---------------|-----------|
| 1. | SDLC Buffer pool size: | (2-8 K) | — |
| 2. | Number of transmit buffers: | (1-15) | — — |
| 4. | Maximum receive pacing count: | (1-63) | — — |
| 5. | Local ID: | (Hexadecimal) | — — — — — |
| 6. | LU configuration library name | | — — — — — |
| 7. | LU configuration member name | | — — — — — |

9.1 SNA Upline/3270 Station Parameters (Extra copies of this section are included.)

- | | | | |
|----|-----------------------|--------------|-----------|
| 1. | Remote location name: | | — — — — — |
| 2. | SSCPID: | (0-65535) | — — — — — |
| 3. | Phone list name: | | — — — — — |
| 4. | Location activated: | (0-No 1-Yes) | — |

16.0 SNA 3270 Subsystem Device Parameters

- | | | | |
|----|---------------------------|--|-----------|
| 1. | Logical unit address | | — — — — — |
| 2. | Device type* (2, 3, or 5) | | — — — — — |
| 3. | S/34 logical ID | | — — — — — |
| 4. | Lowercase (0-No 1-Yes) | | — — — — — |
| 5. | Logical unit address | | — — — — — |
| 6. | Device type* (2, 3, or 5) | | — — — — — |
| 7. | S/34 logical ID | | — — — — — |
| 8. | Lowercase (0-No 1-Yes) | | — — — — — |

*2-3277 Display 3-3277 with Numeric Lock 5-3288 Printer

SNA 3270 Device Emulation Planning Chart

9.1 SNA Upline/3270 Station Parameters

- 1. Remote location name: _____
- 2. SSCPID: (0-65535) _____
- 3. Phone list name: _____
- 4. Location activated: (0-No 1-Yes) _____

9.1 SNA Upline/3270 Station Parameters

- 1. Remote location name: _____
- 2. SSCPID: (0-65535) _____
- 3. Phone list name: _____
- 4. Location activated: (0-No 1-Yes) _____

9.1 SNA Upline/3270 Station Parameters

- 1. Remote location name: _____
- 2. SSCPID: (0-65535) _____
- 3. Phone list name: _____
- 4. Location activated: (0-No 1-Yes) _____

9.1 SNA Upline/3270 Station Parameters

- 1. Remote location name: _____
- 2. SSCPID: (0-65535) _____
- 3. Phone list name: _____
- 4. Location activated: (0-No 1-Yes) _____

SNA 3270 Device Emulation Planning Chart

9.1 SNA Upline/3270 Station Parameters

- 1. Remote location name: _____
- 2. SSCPID: (0-65535) _____
- 3. Phone list name: _____
- 4. Location activated: (0-No 1-Yes) _____

9.1 SNA Upline/3270 Station Parameters

- 1. Remote location name: _____
- 2. SSCPID: (0-65535) _____
- 3. Phone list name: _____
- 4. Location activated: (0-No 1-Yes) _____

9.1 SNA Upline/3270 Station Parameters

- 1. Remote location name: _____
- 2. SSCPID: (0-65535) _____
- 3. Phone list name: _____
- 4. Location activated: (0-No 1-Yes) _____

9.1 SNA Upline/3270 Station Parameters

- 1. Remote location name: _____
- 2. SSCPID: (0-65535) _____
- 3. Phone list name: _____
- 4. Location activated: (0-No 1-Yes) _____

Finance Subsystem Planning Chart

1.0 Subsystem Member Configuration

- | | | | |
|----|---|--------------------|-------|
| 1. | Subsystem configuration member name | (8 characters) | ----- |
| 2. | Subsystem library name | (8 characters) | ----- |
| | Select: | | |
| | 1. Create new member | 4. Delete a member | |
| | 2. Edit existing member | 5. Review a member | |
| | 3. Create new member from existing member | | |
| 3. | Enter selection: _____ | | |
| 4. | Existing member name: ----- | | |
| 5. | Existing member library name: ----- | | |

2.0 Common SSP-ICF Parameters for Each Subsystem

- | | | |
|----|--------------------------------------|-------------------|
| 1. | SSP-ICF common queue space: (2-42 K) | _ _ |
| 2. | Define the subsystem type: | <u>1</u> <u>0</u> |
| | 1 Intra | 2 BSC IMS/IRSS |
| | 3 BSCEL | 4 BSC CICS |
| | 5 BSC CCP | 6 SNA Upline |
| | 7 SNA Peer | 8 BSC 3270 |
| | 9 SNA 3270 | 10 Finance |

3.0 General Subsystem Parameters

- | | | | |
|----|------------------------------|----------------|-------|
| 1. | Location name: | (8 characters) | ----- |
| 2. | Subsystem queue space: | (0-40 K) | _ _ |
| 3. | Subsystem support swappable: | (0-No 1-Yes) | _ |

3.1 SDLC General Subsystem Parameters

- | | | | |
|----|---------------------------|------------|---|
| 2. | SDLC receive buffer size | (2 or 4 K) | _ |
| 3. | SDLC transmit buffer size | (2 or 4 K) | _ |

Finance Subsystem Planning Chart

4.0 Line Information for SSP-ICF Subsystem

- | | | | |
|----|--------------|---|---|
| 1. | Line type: | 1-Multipoint
2-Nonswitched Pt-Pt
3-Switched Pt-Pt | — |
| 3. | Switch type: | 1 Manual call
2 Auto answer
3 Manual answer | — |

17.0 Finance Subsystem Parameters (Extra copies of this section are included.)

- | | | | |
|----|----------------------------------|---------------------|---|
| 1. | Remote station address: | (01—FE hexadecimal) | — |
| 2. | Remote location name: | | — |
| 3. | Number of logical work stations: | (1—30) | — |
| 4. | Delayed entry: | (0-No 1-Yes) | — |
| 5. | Automatic recovery: | (0-No 1-Yes) | — |
| 6. | Location activated: | (0-No 1-Yes) | — |
| 7. | Exchange ID: | (5 hexadecimal) | — |
| 8. | System monitor session: | (0-No 1-Yes) | — |

Finance Subsystem Planning Chart

1.0 Subsystem Member Configuration

- | | | | |
|----|---|--------------------|-------|
| 1. | Subsystem configuration member name | (8 characters) | ----- |
| 2. | Subsystem library name | (8 characters) | ----- |
| | Select: | | |
| | 1. Create new member | 4. Delete a member | |
| | 2. Edit existing member | 5. Review a member | |
| | 3. Create new member from existing member | | |
| 3. | Enter selection: _____ | | |
| 4. | Existing member name: | | ----- |
| 5. | Existing member library name: | | ----- |

2.0 Common SSP-ICF Parameters for Each Subsystem

- | | | | |
|----|--------------------------------------|----------------|-------------------|
| 1. | SSP-ICF common queue space: (2-42 K) | | -- -- |
| 2. | Define the subsystem type: | | <u>1</u> <u>0</u> |
| | 1 Intra | 2 BSC IMS/IRSS | |
| | 3 BSCEL | 4 BSC CICS | |
| | 5 BSC CCP | 6 SNA Upline | |
| | 7 SNA Peer | 8 BSC 3270 | |
| | 9 SNA 3270 | 10 Finance | |

3.0 General Subsystem Parameters

- | | | | |
|----|------------------------------|----------------|-------|
| 1. | Location name: | (8 characters) | ----- |
| 2. | Subsystem queue space: | (0-40 K) | -- |
| 3. | Subsystem support swappable: | (0-No 1-Yes) | -- |

3.1 SDLC General Subsystem Parameters

- | | | | |
|----|---------------------------|------------|----|
| 2. | SDLC receive buffer size | (2 or 4 K) | -- |
| 3. | SDLC transmit buffer size | (2 or 4 K) | -- |

Finance Subsystem Planning Chart

4.0 Line Information for SSP-ICF Subsystem

- | | | | |
|----|-----------------|---|---|
| 1. | Line type: | 1-Multipoint
2-Nonswitched Pt-Pt
3-Switched Pt-Pt | — |
| 3. | Switch type: | | |
| | 1 Manual call | 2 Auto answer | — |
| | 3 Manual answer | | |

17.0 Finance Subsystem Parameters (Extra copies of this section are included.)

- | | | | |
|----|----------------------------------|---------------------|-----------|
| 1. | Remote station address: | (01—FE hexadecimal) | — — |
| 2. | Remote location name: | | — — — — — |
| 3. | Number of logical work stations: | (1—30) | — — — — — |
| 4. | Delayed entry: | (0-No 1-Yes) | — |
| 5. | Automatic recovery: | (0-No 1-Yes) | — |
| 6. | Location activated: | (0-No 1-Yes) | — |
| 7. | Exchange ID: | (5 hexadecimal) | — — — — — |
| 8. | System monitor session: | (0-No 1-Yes) | — |

Finance Subsystem Planning Chart

17.0 Finance Subsystem Parameters

- | | | | |
|----|----------------------------------|---------------------|-------|
| 1. | Remote station address: | (01—FE hexadecimal) | -- |
| 2. | Remote location name: | | ----- |
| 3. | Number of logical work stations: | (1—30) | -- |
| 4. | Delayed entry: | (0-No 1-Yes) | -- |
| 5. | Automatic recovery: | (0-No 1-Yes) | -- |
| 6. | Location activated: | (0-No 1-Yes) | -- |
| 7. | Exchange ID: | (5 hexadecimal) | ----- |
| 8. | System monitor session: | (0-No 1-Yes) | -- |

17.0 Finance Subsystem Parameters

- | | | | |
|----|----------------------------------|---------------------|-------|
| 1. | Remote station address: | (01—FE hexadecimal) | -- |
| 2. | Remote location name: | | ----- |
| 3. | Number of logical work stations: | (1—30) | -- |
| 4. | Delayed entry: | (0-No 1-Yes) | -- |
| 5. | Automatic recovery: | (0-No 1-Yes) | -- |
| 6. | Location activated: | (0-No 1-Yes) | -- |
| 7. | Exchange ID: | (5 hexadecimal) | ----- |
| 8. | System monitor session: | (0-No 1-Yes) | -- |

17.0 Finance Subsystem Parameters

- | | | | |
|----|----------------------------------|---------------------|-------|
| 1. | Remote station address: | (01—FE hexadecimal) | -- |
| 2. | Remote location name: | | ----- |
| 3. | Number of logical work stations: | (1—30) | -- |
| 4. | Delayed entry: | (0-No 1-Yes) | -- |
| 5. | Automatic recovery: | (0-No 1-Yes) | -- |
| 6. | Location activated: | (0-No 1-Yes) | -- |
| 7. | Exchange ID: | (5 hexadecimal) | ----- |
| 8. | System monitor session: | (0-No 1-Yes) | -- |

17.0 Finance Subsystem Parameters

- | | | | |
|----|----------------------------------|---------------------|-------|
| 1. | Remote station address: | (01—FE hexadecimal) | -- |
| 2. | Remote location name: | | ----- |
| 3. | Number of logical work stations: | (1—30) | -- |
| 4. | Delayed entry: | (0-No 1-Yes) | -- |
| 5. | Automatic recovery: | (0-No 1-Yes) | -- |
| 6. | Location activated: | (0-No 1-Yes) | -- |
| 7. | Exchange ID: | (5 hexadecimal) | ----- |
| 8. | System monitor session: | (0-No 1-Yes) | -- |

Finance Subsystem Planning Chart

17.0 Finance Subsystem Parameters

- | | | | |
|----|----------------------------------|---------------------|-------|
| 1. | Remote station address: | (01—FE hexadecimal) | -- |
| 2. | Remote location name: | | ----- |
| 3. | Number of logical work stations: | (1—30) | -- |
| 4. | Delayed entry: | (0-No 1-Yes) | -- |
| 5. | Automatic recovery: | (0-No 1-Yes) | -- |
| 6. | Location activated: | (0-No 1-Yes) | -- |
| 7. | Exchange ID: | (5 hexadecimal) | ----- |
| 8. | System monitor session: | (0-No 1-Yes) | -- |

17.0 Finance Subsystem Parameters

- | | | | |
|----|----------------------------------|---------------------|-------|
| 1. | Remote station address: | (01—FE hexadecimal) | -- |
| 2. | Remote location name: | | ----- |
| 3. | Number of logical work stations: | (1—30) | -- |
| 4. | Delayed entry: | (0-No 1-Yes) | -- |
| 5. | Automatic recovery: | (0-No 1-Yes) | -- |
| 6. | Location activated: | (0-No 1-Yes) | -- |
| 7. | Exchange ID: | (5 hexadecimal) | ----- |
| 8. | System monitor session: | (0-No 1-Yes) | -- |

17.0 Finance Subsystem Parameters

- | | | | |
|----|----------------------------------|---------------------|-------|
| 1. | Remote station address: | (01—FE hexadecimal) | -- |
| 2. | Remote location name: | | ----- |
| 3. | Number of logical work stations: | (1—30) | -- |
| 4. | Delayed entry: | (0-No 1-Yes) | -- |
| 5. | Automatic recovery: | (0-No 1-Yes) | -- |
| 6. | Location activated: | (0-No 1-Yes) | -- |
| 7. | Exchange ID: | (5 hexadecimal) | ----- |
| 8. | System monitor session: | (0-No 1-Yes) | -- |

17.0 Finance Subsystem Parameters

- | | | | |
|----|----------------------------------|---------------------|-------|
| 1. | Remote station address: | (01—FE hexadecimal) | -- |
| 2. | Remote location name: | | ----- |
| 3. | Number of logical work stations: | (1—30) | -- |
| 4. | Delayed entry: | (0-No 1-Yes) | -- |
| 5. | Automatic recovery: | (0-No 1-Yes) | -- |
| 6. | Location activated: | (0-No 1-Yes) | -- |
| 7. | Exchange ID: | (5 hexadecimal) | ----- |
| 8. | System monitor session: | (0-No 1-Yes) | -- |

address: A name, label, or number that identifies a register, location in storage, or any other data source.

allocate: To assign a resource, such as a disk file or a diskette file, to perform a specific task.

alphabetic character: Any one of the letters A through Z, or one of the special characters #, \$, and @.

alphanumeric character: An alphabetic character, or one of the digits 0 through 9.

assign/free area: The available space in the supervisor for control areas.

Attn (key): A key that the operator presses to communicate with the system or another display station. Pressing the Attn key causes the INQUIRY menu to appear on the display screen. See also *inquiry*.

autocall: In data communications, the capability of a station to initiate, without operator intervention, a call over a switched line.

autowriter: A function that causes the spool writer to be loaded without operator intervention whenever output exists in the spool file. See also *spool writer*.

backup copy: A copy of a file or a library member that is kept in case the original file or library member is destroyed.

backup diskette: A diskette that contains information that was copied from another diskette or disk. A backup diskette is used if the original information is unintentionally altered or destroyed.

BASIC (Beginner's All-purpose Symbolic Instruction Code): A programming language used to encourage nonprogrammers to use computers for simple problem-solving operations and for scientific, mathematical, or business applications.

basic data exchange: A data file format for exchanging data on diskettes between systems or devices. Basic data exchange refers to diskette files only, not entire diskettes. For diskette 1 diskettes, use 128-byte format. For diskette 2D diskettes, use 256-byte format.

binary: (1) Relating to, being, or belonging to a system of numbers having 2 as its base; for example, the binary digits 0 and 1. (2) Involving a choice or condition of two alternatives, such as on-off or yes-no.

binary synchronous communications (BSC): A flexible form of line control that provides a set of rules for transferring data over a communications line connecting two or more devices that use a communications adapter.

blank: (1) The storage equivalent of hexadecimal 40. (2) The space on a document caused by the absence of a printed or written character.

block: (1) A record or collection of contiguous records recorded or processed as a unit. (2) In System/34, a 10-sector unit of disk storage that contains 2560 bytes.

BSC: Binary synchronous communications.

buffer: (1) Storage or programming that compensates for a difference in rate of flow of data, or time of occurrence of events, when transmitting data from one part of a computer system to another. (2) An area of storage, temporarily reserved for use in performing an input/output operation, into which data is read or from which data is written.

byte: (1) The representation of a character. (2) A sequence of 8 adjacent bits that are operated on as a unit and that constitute the smallest addressable unit in System/34 that can be addressed. (3) The representation of a character by 8 bits; the amount of storage required for one EBCDIC character.

CE: Customer engineer.

CE panel: A panel containing indicator lights and switches that the CE uses during system maintenance.

character: A digit, letter, or other symbol that is used as part of the control, organization, or representation of data.

character set: A group of characters used for a specific purpose; for example, the set of characters a printer can print.

checkpoint record file: A disk file containing a collection of records that contain the status of a job and the system at the time the records are written by the checkpoint facility. These records provide the information necessary for restarting a job without having to return to the beginning of the job.

checkpoint/restart facility: A facility for restarting the execution of a program at some point other than the beginning, after the program was terminated due to a program or system failure. The restart begins at a checkpoint and uses checkpoint records to reinitialize the job.

COBOL (COmmon Business Oriented Language): A high-level programming language for System/34 users who need to solve business problems efficiently.

command: A request for the performance of an operation or the execution of a particular program. See also *control command*, *procedure command*.

command display station: A display station defined during system configuration as being able to request and initiate jobs, as well as being acquirable by an executing program. See also *data display station*.

command mode: A mode that a display station can be placed in. In command mode, a display station is capable of requesting jobs or initiating jobs. See also *command display station*.

command statement: A statement that requests the performance of a particular function. A command statement always contains the name of the command and may include parameters or data. The two types of command statements are control commands and procedure commands. See *control command*; *procedure command*.

compress: (1) To use the COMPRESS procedure or the \$FREE or \$PACK utility program to move files together on disk to create one contiguous area of unused space. (2) To use the CONDENSE procedure or the \$MAINT utility program to move library members together in order to create one continuous area of free space within a library.

concurrent processing: A method of processing in which two or more jobs appear to be processing at the same time. The instructions of each job are processed one at a time, but alternate in such a fashion as to make the most efficient use of the system.

configuration: The group of machines, devices, and programs that make up a data processing system. See also *system configuration*.

configuration record: See *system configuration record*.

configure: To communicate information (to the control program) about the devices and optional features installed on a system.

control command: A command statement used by an operator to control system or display station operation. A control command does not run a procedure and cannot be used in a procedure. See also *command*, *procedure command*.

cylinder: All disk or diskette tracks that can be accessed without repositioning the disk drive or diskette drive access mechanism.

data display station: A display station that was defined during system configuration as only being acquirable by an executing program. A data display station cannot request or initiate jobs. See also *command display station*.

data file utility: Part of the Utilities Program Product used to create, maintain, and display or print data files.

data mode: A mode that a display station can be placed in. In data mode, a display station can only be used for data entry. See also *data display station*.

dedicated system: A system that is executing a program that cannot execute concurrently with another user program.

delete: To remove a unit of data; for example, a character, field, record, or file. A deleted file is one that has been removed from the volume table of contents (VTOC).

DFU: Data file utility.

directory: Same as *library directory*.

disk file: An organized collection of related records on disk that are treated as a unit.

diskette: A thin, flexible, magnetic disk permanently enclosed in a semi-rigid protective jacket.

Diskette 1: A diskette that can contain data on one side.

Diskette 2D: A diskette that can contain data on both sides, with two times the number of bytes being stored in the same physical space as diskette 1.

display station: An input/output device that contains a display screen on which data is displayed, and an attached keyboard from which data is entered. It can be used to request jobs and/or enter data. A display station can be designated as the system console or as a command or data display station at system configuration time. Contrast with *system console*.

Dump File Analysis: A utility that retrieves selected data from the dump file and formats that data so it is easily understood. The utility then displays the formatted data to the customer engineer.

EDDM: Extended disk data management.

EDF: Extendable disk file.

extendable disk file (EDF): A feature of the SSP that provides the capability to dynamically increase the size of shared and nonshared files.

field: One or more bytes of related information in a record.

file: An organized collection of related records treated as a unit.

file name: An arbitrary symbol created by the programmer or program to identify and refer to a collection of related records. See also *label*.

FORMAT: A diskette capacity specifying 128 bytes per sector on diskette 1 diskettes and 256 bytes per sector on diskette 2D diskettes.

FORMAT2: A diskette capacity specifying 512 bytes per sector on diskette 1 diskettes and 1024 bytes per sector on diskette 2D diskettes.

FORTRAN IV: A high-level programming language used primarily for scientific, engineering, and mathematical applications.

history file: An area on disk where a log of specified types of system actions and operator responses is recorded.

HK bytes: One-half K or 512 bytes.

I-Exchange: A file format for exchanging data on diskettes between systems or devices that support diskette exchange type I. I-exchange refers to diskette files only, not entire diskettes.

ID: Identification.

initial program load (IPL): A sequence of events that loads the system programs and prepares the system for execution of jobs.

initialize: To use the \$INIT utility program to prepare (format) a diskette for initial use.

input job queue: A list of jobs waiting to be processed by the system. The list is maintained on the disk. Each entry in the list references a procedure stored in a library on the disk.

inquiry: (1) A request (entered from a display station) for information in storage. See also *inquiry program*. (2) A request for information that puts the system into inquiry mode (the operator initiates an inquiry by pressing the Attn key).

inquiry mode: A method of operation when the system is responding to an inquiry. (The operator puts a display station in inquiry mode by pressing the Attn key.)

inquiry program: (1) A program that enables the operator to access information from a disk file. See *inquiry*. (2) A program that is executed while the system is in inquiry mode.

Interactive Communication Feature: A feature of the SSP that includes interactive support for BSC and SNA communications as well as communications between programs within the system.

IPL: Initial program load.

K bytes: 1024 bytes.

label: The name in the disk or diskette volume table of contents that identifies a file.

library: An area on disk that can contain load members, procedure members, source members, and subroutine members. See also *system library*.

library directory: A variable-sized area that contains information about each member in the library; for example, the member name and the location.

library member: A named collection of records or statements in a library. See *load member*, *procedure member*, *source member*, *subroutine member*.

load member: A collection of instructions that the system can execute to perform a particular function, regardless of whether the function is requested by the operator or specified in an OCL statement. Load members can also contain display screen formats and message members. Load members are stored in a library.

local work station: A work station within 1520 meters (5000 feet) of the 5340 System Unit and attached to it via a cable. Contrast with *remote work station*.

log: To record; for example to log all messages on the system printer.

logical ID: A two-character value that is referenced in the OCL of your applications and is used by the SSP to help identify active jobs in the system.

MB: Megabyte.

menu: A displayed list of items (usually jobs) from which the operator makes a selection.

MICR: Magnetic ink character recognition.

minimum SSP: The least amount of programming support required to operate the system. Minimum SSP does not contain support for any optional program additions such as OLE, MRJE, and BSC.

MLCA: Multiline communications adapter.

MRJE: MULTI-LEAVING Remote Job Entry.

MULTI-LEAVING Remote Job Entry (MRJE): An SSP function that allows the user to communicate with a system over a communications line using BSC.

multiple-program mode: A mode of operation during which more than one job is processing concurrently. Contrast with *single-program mode*.

network: (1) A *public network* is a network established and operated by common carriers or telecommunications administrations for the specific purpose of providing circuit-switched, packet-switched, and nonswitched-circuit services to the public. (2) A *user application network* is a configuration of data processing products (such as processing units or work stations) established and operated by users for the purpose of data processing or information exchange, which may use transport services offered by common carriers or telecommunications administrations.

nucleus: The portion of the System/34 SSP that always remains in main storage.

OCL: Operation control language.

OLE: Overlay linkage editor.

operation control language (OCL): A programming language used to identify a job and its processing requirements to the System Support Program Product (SSP).

overlay: (1) To repeatedly use the same blocks of main storage during different stages of a program. When one module is no longer needed in storage, another module can replace all or part of it. (2) A program segment or phase that is loaded into main storage. It replaces all or part of a previously loaded segment.

overlay linkage editor: A program that catalogs object members as subroutine members in the library on disk; links object members into an object program and catalogs the program as a load member in the library on disk; and allows the user to manually determine overlays for programs.

parameter: (1) A variable that is assigned a particular value for a specific purpose or process. (2) A value that is specified in a command statement or a control statement.

permanent file: A file that remains in existence until deleted by using the \$DELET utility program. A permanent file is created with a retain parameter of P for disk or 999 for diskette.

PID: Program information department. The IBM group responsible for distributing a program release.

print belt: A belt containing the characters that the IBM 5211/3262 Printer can print.

print image: The character set loaded into storage that corresponds to the characters on the print belt being used.

procedure: A set of related OCL statements, and possibly utility control statements, that cause a specific function or set of functions to be performed. A procedure in a library is called a procedure member.

procedure command: A command statement that runs a procedure. A procedure command is a special form of the INCLUDE OCL statement. See also *command*, *control command*.

procedure member: A procedure that is stored in a library.

program: A sequence of instructions to a computer that are written in a special form the computer can interpret. A program tells the system where to get input, how to process it, and where to put the results.

program date: The date associated with a program (job step). The program date is specified by a DATE OCL statement or the DATE procedure used between the LOAD and RUN OCL statements for the program. If a program date is not specified, the program date is the same as the session date. See also *session date*, *system date*.

program product: An IBM-written, licensed program for which a monthly charge is made. A program product performs functions related to processing user data.

program product utility: Any portion of the Utilities Program Product (DFU, sort, WSU, SEU, or SDA).

program temporary fix (PTF): A temporary solution or bypass of a problem diagnosed by IBM as the result of a defect in a current release of a program.

prompt: A message issued by a program that requests either information or an operator action to continue processing.

PTF: Program temporary fix. A temporary solution or bypass of a problem diagnosed by IBM as the result of a defect in a current release of a program.

record: (1) A collection of related data that is treated as a unit. For example, one line of an invoice could constitute a record. A complete set of records could form a file. (2) To store data on a reusable input/output medium, such as a disk, diskette, or punched cards.

remote work station: A work station that uses data communications to interface with the system unit. Contrast with *local work station*.

right-adjust: The placement of data in a field or register, so that the last significant byte at the right end of the data is placed in the rightmost position of the field or register.

RPG II: A commercially oriented programming language for writing application programs that meet common business data processing requirements.

screen design aid: Part of the Utilities Program Product that is used to create, add, update, and delete entire formats in a screen format generator utility load member.

SDA: Screen design aid.

SDLC: Synchronous data link control.

SEU: Source entry utility.

sector: (1) An area on a disk or diskette track reserved to record a unit of data. (2) The smallest amount of data that can be transferred to or from a disk or diskette by a single data transfer operation.

session: The period of time during which programs or devices can communicate with each other; the elapsed time that starts when an operator signs on the system and ends when the operator signs off the system.

session date: The date associated with a session. The session date is specified by a DATE OCL statement or DATE procedure used before the first program is run from the display station, or by the SET procedure or the \$SETCF utility program. If the session date is not specified, the session date is the same as the system date. See also *program date*, *system date*.

sign-on: The procedure by which an operator begins a display station session.

single-program mode: A mode of operation during which one job is completely processed before another job begins. Contrast with *multiple-program mode*.

SNA: Systems network architecture.

sort program: A portion of the Utilities Program Product that arranges records in a predetermined sequence, according to data contained in one or more specific fields within the records.

source entry utility (SEU): A portion of the Utilities Program Product that the operator uses to enter and update procedures and source programs in a library.

source member: A collection of records (such as RPG II specifications or sort sequence specifications) that are used as input for a program. Source members are stored in a library.

spool file: An area on disk where spooled printer output is stored while waiting to be printed.

spool writer: A program that causes printer output, which has been stored in the spool file, to be printed. See also *spooling*.

spooling: A part of the SSP that provides temporary storage of print data on disk. See also *spool writer*.

SRJE: SNA/SDLC remote job entry.

SSP: System Support Program Product.

SSP utility program: An SSP control program used by programmers in their daily system operations. For example, SSP utility programs can be used to copy files or initialize diskettes.

SSP-ICF (System Support Program Product-Interactive Communications Feature): See *Interactive Communications Feature*.

subroutine member: A subroutine that needs to be link edited (joined) before being loaded for execution. Subroutine members are stored in a library.

supervisor: A program that manages system resources such as the printer(s), display station(s), disk, main storage, input job queue, and print spooling.

swapping: Temporarily removing an active job from main storage, saving it on disk, and processing another job in the area formerly occupied by the first job. A process which enables jobs to execute when there is an overcommitment of main storage.

system configuration: A process that specifies the various components and devices that form a particular operating system. System configuration combines user-specified options and parameters with IBM programs to produce a system having the desired form and capacity.

system configuration record: Information stored on disk that describes system characteristics and programming support; for example, system date format, disk capacity, and main storage capacity.

system console: A display station designated to activate certain system functions, and to control and monitor system operation, in addition to functioning as a display station. Contrast with *display station*.

system date: The date assigned by the system operator during the initial program load procedure. Generally, the system date is the same as the actual date. See also *program date*, *session date*.

system library: The library that contains the members that are part of the SSP. The system library is labeled #LIBRARY and cannot be deleted from disk. See also *library*, *user library*.

system measurement facility: SSP routines that, in conjunction with control storage routines, may be invoked to monitor system activity, system device, and SSP work area utilization, and record this data in a disk file.

system printer: The printer, designated at system configuration time, that is used for system and display station printed output, unless the output is specifically directed to another printer.

system unit: That part of System/34 that houses the disk, diskette drive, and processing unit.

task work area: An area on disk containing control information and work areas related to a specific task.

track: A circular path on the surface of a disk or diskette upon which information is magnetically recorded and from which recorded information is read.

unit address (local work station): A two-digit address. The first digit indicates the port or cable address. Valid first digits are 0 through 3. The second digit indicates the address assigned to a work station. Valid second digits are 0 through 6. If the first digit is 0, the second digit must be 0 or 1.

unit address (remote work station): A two-digit address. The first digit must be 0. The second digit indicates the unit address assigned to the work station. Valid second digits are 0, 2-9.

user library: A library created by the user. A user library is in addition to the system library and may contain any type of library member.

Utilities Program Product: A multipurpose program product for:

- Creating, maintaining, listing, and sorting files
- Creating, maintaining, and listing source and procedure members in a library
- Creating and maintaining display screen formats and menus
- Performing interactive data entry and edit functions

utility control statement: A control statement that provides a utility program with information concerning the way the program is to perform its function or the output it is to produce.

volume table of contents (VTOC): An area on a disk or diskette that describes the location, size, and other characteristics of each file on the disk or diskette.

VTOC: Volume table of contents.

work station: A device that lets a person transmit information to or receive information from a computer, or both, as needed to perform his job; for example, a display station or printer.

work station configuration record: An area on disk that describes a command display station's environment. The work station configuration record contains information such as the session date, the work station ID of the printer to be used for the display station's output, and the region size for jobs submitted from the display station.

work station utility: A part of the Utilities Program Product that performs an interactive data entry and edit function.

WSU: Work station utility.

128-byte format: A format for diskette 1 diskettes with 128 bytes per sector and 26 sectors per track.

256-byte format: A format for diskette 2D diskettes with 256 bytes per sector and 26 sectors per track.

512-byte format: A format for diskette 1 diskettes with 512 bytes per sector and 8 sectors per track.

1024-byte format: A format for diskette 2D diskettes with 1024 bytes per sector and 8 sectors per track.

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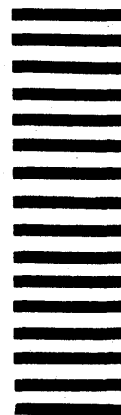


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