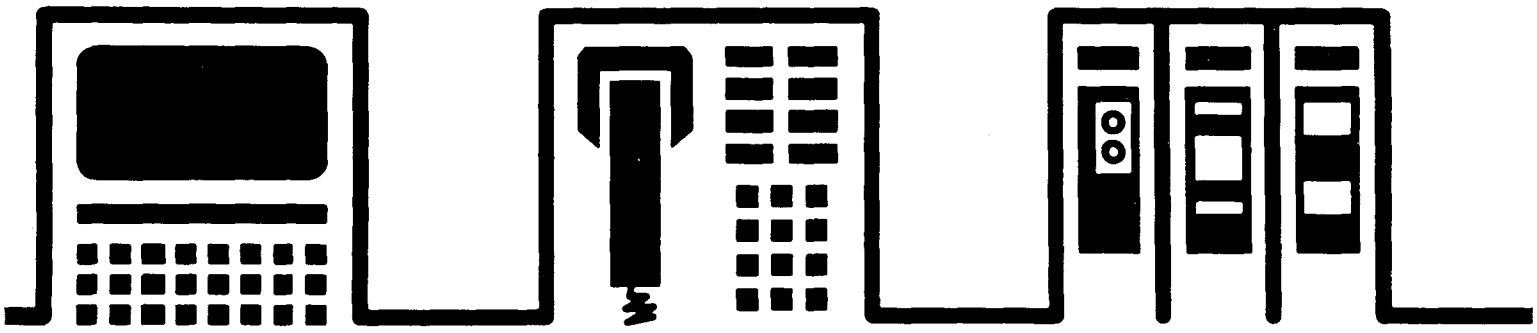
555-520-500
Issue 1, June 1987

AT&T SYSTEM 25

ADMINISTRATION MANUAL FOR R1V2



TO ORDER COPIES OF THIS DOCUMENT REFER TO DOCUMENT NUMBER 555-520-500.

Contact: Your AT&T sales representative or

Call: 800-432-6600, Monday to Friday between 7:30 am and 6:00 EST, or

Write: AT&T Customer Information Center
2855 North Franklin Road
PO. Box 19901
Indianapolis, Indiana 46219

Every effort was made to ensure that the information in this document was complete and accurate at the time of printing. However, information is subject to change. This document will be reissued periodically to incorporate changes.

Administration Manual for R1V2
Prepared by System 25
Document Development Group and the
Technical Publications Group

FCC WARNING STATEMENT

Federal Communications Commission (FCC) Rules require that you be notified of the following:

- This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause interference to radio communications.
- It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment.
- Operation of this equipment in a residential area is likely to cause interference in which case the user at his or her own expense will be required to take whatever measures may be required to correct the interference.

System 25 Documents

The following System 25 product documents are available for your reference. Copies may be purchased from the Customer Information Center (CIC) by calling 800-432-6600.

DOCUMENT	ORDER NUMBER
■ Administration Manual for R1V2	555-520-500
■ An Introduction to AT&T System 25	555-520-021
■ Implementation Manual for R1V2	555-520-650
■ Installation and Test Manual	555-520-100
■ Maintenance Manual	555-520-105
■ New Capabilities Manual for R1V2	555-520-205
■ Planning Manual	555-520-600
■ Reference Manual	555-520-200
■ Terminal Operations Manual	555-520-710
■ User Guides	
– Switched Loop Attendant Console User Guide	555-520-706
– Direct Trunk Attendant Console User Guide	555-520-701
– Data Features User Guide	555-520-704
– Multiline Terminal User Guide	555-520-703
– Single-Line Terminal User Guide	555-520-702
– Multifeature Single-Line Terminal User Guide	555-520-707

To expand your System 25's communications and networking capabilities, AT&T offers the following optional software packages:

Advanced Administration Software Package

Communications Access Manager Software Package

STARLAN NETWORK ACCESS Software Package

Contents

5 Administering Trunks

6 Administering Auxiliary Equipment

7 Administering Voice Stations

8 Administering Data Line and STARLAN CP Ports

Introduction

This manual provides the information you need to administer AT&T System 25 station, network access, and system features. This includes configuring the system for initial service (that is, *initializing* the system) and making day-to-day changes required for efficient operation. This manual is for Release 1, Version 2 systems only. If you have a Release 1, Version 1 system, obtain an Administration Manual numbered 555- *500* -500.

This manual assumes that:

- You have attended the System 25 (Customer or Systems Technician) Training Course.
- System 25 equipment has been installed and tested.
- All stations have been tested by the Systems Technician.
- You have available a System Administration Terminal (SAT) with which you will enter the configuration data. For more information, see Chapter 17, *Requirements for the SAT*.

Implementation Planning Forms

During implementation planning, you worked with the AT&T Account Team to assign the features you need for your system and for individual terminals using the forms in the *AT&T System 25 Implementation Manual for R1V2,*.

These forms, as explained in the Implementation Manual, provide the information necessary to enter the initial translations that customize the system. Therefore, the implementation forms *must* be completed before you can initialize the system. You should find the forms collected and filed in the *Administration Records Binder* (the binder the Implementation Manual comes in).

This manual also provides instructions for making day-to-day changes after the initial translations have been entered. **It is very important that you record these changes in the Administration Records Binder. If this is not done, future system administration will become increasingly difficult.**

The System Administrator's Role

System administration involves initializing the system and administering subsequent terminal and system changes. The AT&T systems technician is responsible for initializing the system. At your option, the system administrator or the systems technician may perform subsequent changes that do not require equipment additions or rearrangements. This manual is designed to support both the systems technician and the system administrator.

The system administrator is responsible for the following:

- Training other station users and the attendant.
- After the system has been initialized, assuring that any additions, changes, or deletions to system or terminal features are made. Your system administrator may make these changes or you can contact AT&T to have the technician make the changes.

- Maintaining system security.
- Notifying company management (and AT&T) about problems, alarms, and service complaints.

If you have questions about system hardware or features, you may want to refer to the *AT&T System 25 Reference Manual* for more information.

Using this Manual

Before you use the SAT to administer your system, you should have received hands-on training. You should also read and understand Chapter 2, *How to Use the System* and *Administering Tape Save/Restore Operations* in Chapter 13.

The administration procedures (chapters 4-15) provide detailed step-by-step instructions for adding trunks and stations and for changing system and station features and options. You should review the information about default trunk/station numbering in Chapter 3 before you administer changes. Note that, when adding stations, trunks, or auxiliary equipment connected to special feature ports, you should first follow the procedure for installing the equipment, then assign class-of-service information and then make button assignments.

If you are initializing a system, follow the instructions in Chapter 3. It will direct you to administration procedures in a specific sequence; it is important that you perform the steps in the indicated order.

Chapter 16 provides quick reference information. The tables in this section are intended to help those who are thoroughly familiar with system administration locate specific information without having to refer to the full text in the administration procedure chapters. Unless you are an experienced system administrator, however, you should follow the administration procedures.

Conventions Used in this Manual

The following conventions are used in this manual:

- *Commands and text you should type appear in this font (or style of lettering)*
- **System responses, such as prompts and values that appear on the screen, are shown in this font.**
- Names of keys on the SAT keyboard appear in oval boxes. For example: press **(Return)** The labels on your keyboard may vary, depending on the kind of terminal you use as an SAT.

How to Use the System

This chapter describes the way you interact with the system using the System Administration Terminal (SAT). First, it tells you how to log in to System 25. Then, how to use the Main Menu to access areas of the system you want to administer. Next, it tells you how to view and change the way your system operates by entering administration commands. Finally, it describes the kinds of warning, error, and text messages the system supplies.

Logging In to System 25

System Security

For security reasons, access to the administration capabilities of AT&T System 25 is controlled by a password. Your password is available from your AT&T Account Team. If you want to change your password, see the instructions under *Administering System-Wide Options.*

To prevent an unauthorized person from learning the password, the password characters are not displayed when they are entered.

If system security is not a problem, because access to the SAT and to this manual are restricted, you may want to write your password here for convenience: _____

Entering Your Password

After you turn on the SAT, you see the following prompt:

```
Enter Password- >
```

If you do not see this prompt, press **(Return)**

Enter your password followed by **(Return)**

Invalid Password Entry

If you enter an invalid password, you see an error message followed by the password prompt:

```
That is not the password!
Enter Password- >
```

Successful Log-in

When you enter the correct password, the terminal displays the Main Menu from which you can select administration functions.

Leaving an Administration Session

When you complete an administration session, or if you want to interrupt a session at any point, just turn off the terminal.

You can also end an administration session by:

- Unplugging the cable from the modular jack connecting the terminal to the system.
- Disconnecting the RS232 connector from the terminal.
- Hanging up to drop the DTR signal on disconnect if you are connected via a modem.

Correcting Typing Errors

You can correct a typing error by pressing the backspace key. If your keyboard does not have a backspace key, press **(Control)** (sometimes abbreviated CTL or CTRL) at the same time you press *h* to generate the equivalent of a backspace key.

When you press the backspace key, you see a new line with the last character deleted. For example, if at the prompt you type four characters and discover that you need only the first two, you press the backspace key twice. Your terminal responds to the first backspace character by displaying a line with your last input character removed; it responds to the second by displaying the line once again with the third input character removed. You can use this technique (on both video display terminals and printing terminals) to remove unneeded characters or to replace incorrectly typed characters.

Strange Output

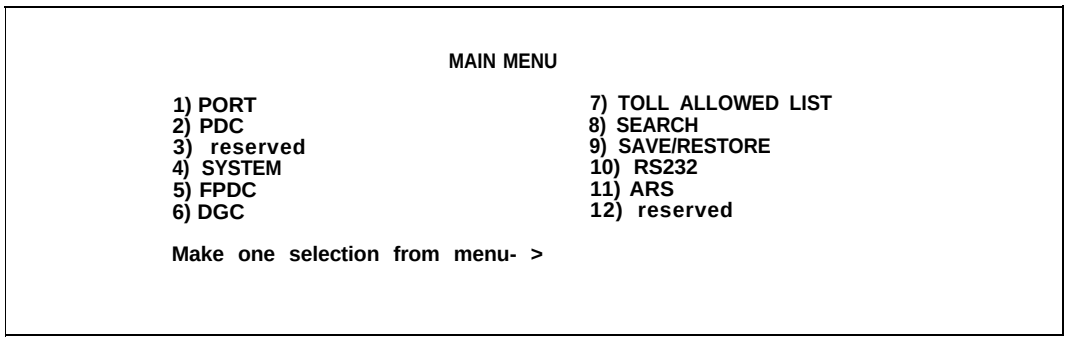
Under unusual circumstances (such as accidentally hitting **(Escape)**) your SAT may display highly abbreviated or unreadable responses. This indicates the SAT is operating in a mode used for personal computer based administration or is running at the wrong speed. The best thing to do at this point is to turn off the SAT for five seconds, turn it back on, press **(Return)** several times, and log in again. Be sure to check the last items you were administering before proceeding. For further information, see *Requirements for the SAT.*

Making Backup Tapes

If your system is equipped with a digital tape unit (DTU), it's a good idea to make backup tapes. A backup tape allows you to restore system translations if they are ever lost or damaged–from an inadvertent cold start, for example. You should make a new backup tape whenever you make changes to the system. It is strongly recommended that you maintain a minimum of three backup tapes, updating at least two of them regularly. For more information, see *Administering Tape Save/Restore Operations.*

The System 25 Administration Main Menu

When you log in to the administration terminal, you see the Main Menu. This menu allows you to enter one of several command areas (Port, PDC, etc.). The Main Menu looks like this (you may find minor variations on your display):



SCREEN 2-1 Main Menu

When you select an item from the Main Menu, you enter a command area consisting of action items and data items. You use the action and data items to access specific system parameters and features. Some command areas require an additional target parameter. These are discussed in detail in the *Command Formats* section.

Main Menu Items

The following list describes the features and parameters you can administer through each of the Main Menu items:

PORT: Allows you to administer station, trunk, data port, or special port parameters by physical port number. A physical port number is written in the form **CSSPP,** where **C** is the one-digit cabinet number, **SS** is the two-digit slot number, and **PP** is the two-digit port number.

PDC: Allows you to administer station parameters by Personal Dial Code (PDC) or Data Dial Code (DDC). PDCs and DDCs are similar to extension numbers.

reserved: (Reserved for future expansion.)

SYSTEM: Allows you to administer system-wide parameters.

FPDC: Allows you to administer Floating PDC numbers.

DGC: Allows you to administer Direct Group Calling (DGC) groups.

TOLL ALLOWED LIST: Allows you to administer Toll Calls Allowed Lists.

SEARCH: Allows you to search various groups of system parameters as well as review a log of system detected errors.

SAVE/RESTORE: Allows you to write translations to, read translations from, and compare the system translations to translations on the digital tape unit (DTU).

RS232: Allows you to assign Administration, DTU, and SMDR port options.

ARS: Allows you to administer Automatic Route Selection.

reserved: (Reserved for future expansion.)

Selecting a Main Menu Item

To select an item from the Main Menu, just type the number of the item you want followed by **(Return)**

If you type **(Return)** by itself or if you type a number that is not between 1 and 12, you see the following message:

```
Must be a number from 1-12
Make one selection from menu- >
```

Administration Commands

Once you select an item from the Main Menu, you can administer the features and parameters accessible in that command area by entering commands. You use commands to tell the system what feature or parameter you want to change and the value you want to change it to. The basic format of a system administration command consists of two items: an *action* number, and a *data* value. Some commands also require a third information number, a *target*. The functions of these command items are described below:

Action: An action number defines a specific system administration function. You choose an action (by number) to examine or change System 25 attributes.

Data: A data value controls a specific System 25 function. In general, a data value is the current value of the parameter specified by the associated action number. To change an administration parameter, you change its data value.

Target: The target can be a:

- Personal Dial Code (PDC)
- Data Dial Code (DDC)
- Port number
- Direct Group Calling (DGC) number
- Toll Calls Allowed List number
- RS232 Channel number.

Please note that the words “Action” and “Data” actually appear on command lines. The word “Target” does *not* appear on a command line—instead, the target type (e. g., Port, as shown below) is displayed.

The following example shows the format of a completed command line for the Port command area (Main Menu item 1):

```
Port=10401    Action=1    Data=201
```

In this command line, **Port = 10401** tells the system to go to cabinet 1, slot 04, port 01–the physical location of the port. **Action = 1** tells the system to administer the type of terminal. In this case, **Data = 201** indicates a single-line voice terminal without a message waiting indicator. If you wanted to make this station a single-line voice terminal with a message waiting indicator, you would change the data value to 202. (Action numbers and data values for all command areas appear in tables in the *Command Reference* chapter.)

Command Functions

The previous section introduced you to the basic command formats. This section shows you how to enter or change: an action number, data value, or target value.

Entering Commands

Keep the following considerations about the Return key in mind as you enter commands:

- As you will see in the section below, to "enter" information means to type the required numbers or letters and press **(Return)** The Return key is included in the examples in this chapter to accustom you to using it. Beginning with the administration procedures in Chapter 4, however, the Return key is not included. When you are instructed to enter something in an administration procedure, remember to press **(Return)** after entering the required information.
- The basic, single-letter commands described below are: **a** for action, **d** for data, **t** for target, **c** for continue, and **m** for Main Menu. You can enter these commands at any time to access prompts and change the current action, data, target, or menu, You do not press **(Return)** after typing these commands.

Changing an Action Number

The basic command format shows the current value of a parameter associated with its action number and the target (if any) that you indicated for that command.

If you want to move to another action number, type *A* or *a* on the keyboard. When you see the **Action =** prompt, you enter the number of a valid action followed by **(Return).**

Here is an example of the *A* command:

You see:

```
Port = 10604 Action = 1 Data = 304
>
```

You enter *A 7* **(Return)** and see:

```
> Action = 7
Port = 10604 Action = 7 Data = 0
>
```

The action numbers for all command areas are described in detail in the administration procedure chapters. Some commands require more than one action for their completion. These commands are described under *Action Groups* in this chapter.

Changing a Data Value

To change the data value associated with an action, first display the current value (as described above), then type *D* or *d* on the keyboard. When you see **Data =** enter the new data value followed by **(Return).**

Here is an example of the **D** command:

You see:

```
Port = 10604 Action = 7 Data = 0
>
```

To change, you enter *D 5* **(Return)** and see:

```
> Data = 5
Port = 10604 Action = 7 Data = 5
>
```

Changing a Target Value

You can change target values under the following Main Menu items:

- Port
- PDC
- DGC
- Toll Allowed List
- RS232

As examples, the next two sections show you how to change a target value under the Port and PDC Main Menu items. You change target values under the other command areas in the same way.

Under Port A port number describes the location of a station, trunk, data port, or special feature port. It is entered in the form CSSPP (described earlier).

If you've selected Main Menu item 1 and you want to change the port you're administering , type *T* or *t* (target select) on the keyboard. (Remember, you do not have to enter **(Return)** with a single-letter command.)

When you see **Port =** enter the new port number, followed by **(Return).**

Here is an example of the **T** (target select) command with Port (Main Menu item 1):

You see:

```
Port = 20403 Action = 1 Data = 201
>
```

You enter *T 20608* **(Return)** and see:

```
> Port = 20608
Action =
```

Under PDC You can modify stations by selecting the PDC Main Menu item. Instead of specifying the physical location of the port, as you did in the preceding example, you specify its PDC.

Here is an example of the **T** (target select) command with PDC (Main Menu item 2):

You see:

```
PDC = 9876 Action = 1 Data = 201
>
```

You enter *T 8765* **(Return)** and see:

```
> PDC = 8765
Action =
```

Action Groups

Some action numbers are part of *groups.* These groups are sets of closely related system parameters that need to be changed as a group. For example, when you assign a voice terminal, you must also assign a PDC. (See the example at the end of this section.) Action groups are marked with **[AG]** in the administration procedures.

The number of actions may vary from group to group, but no group contains more than five actions. All action values within a particular group are consecutive. Within a *group,* whenever you change a parameter, the system advances you automatically to the next action; this process continues through the last action in that group.

After modifying a parameter that is part of an action group, you must complete the modifications to the group by entering data values for the remaining action numbers. This protects System 25 from acting on partially complete data. When changing data values associated with these groups of action numbers you automatically advance to the next action after you change the data value.

You change action numbers with the **A** command as before.

> **Note** If you change to an action number outside of the group you are currently in, all the data values entered for that group remain as they were before you began modifying the group. In other words, if you leave a group (by selecting an action outside the group) before entering the last data value for that group, all changes for that group are abandoned.

Here is an example of administering an action group:

You see:

```
Port = 10408 Action = 1 Data = 0
```

You enter *D 207* **(Return)** and see:

```
> Data = 201
Port = 10408 Action = 1 Data = 201
>
Port = 10408 Action = 2 Data = 0
> Data =
```

Notice in the fourth line of this display how the system automatically brings up the next member of the group.

You enter *6789* **(Return)** and see:

```
> Data = 6789
 Port = 10408 Action = 2 Data = 6789
>
```

There are no more members in this action group, so the system does not prompt for more data values.

Display Support IDs

The Display Support feature lets you enter an ID (or name) for each PDC, DDC, FPDC, DGC access code, and trunk, creating a database for use during system administration. For systems with a Switched Loop Attendant Console (SLAC), it is essential that you enter this information. For systems with a Direct Trunk Attendant Console (DTAC), entering this information is optional.

In a SLAC system, the Display Support database provides call information to attendants on the SLAC display. Display IDs also provide a convenient way to search for information during administration. DTAC system administrators may also find it helpful to use the Display Support search functions (see Action numbers 40-43 in Chapter 14).

Keep the following parameters in mind when entering Display IDs:

- The maximum number of Display IDs the system can store is 272.
- Display IDs can contain 11 characters or less, and must be enclosed in double quotes. Acceptable characters include any printable ASCII character (including spaces), except the double quote. Note that only the first 9 characters are shown on the SLAC display.
- To remove a Display ID, you enter two double quotes, with no space in between.
- When entering a Display ID name, it is recommended that you use the format "last name, first name"

Procedures for entering specific Display IDs are included in the applicable administration procedure chapter.

Lists, Searches, and Port Removal

Lists

Several Main Menu command areas involve administering a group or "list." These areas are DGC, FPDC, Toll Allowed List, and ARS. There are also Night Service Trunk lists under the Port and PDC Main Menu items.

Each of these areas includes a "display" action that shows the members of the list. When you select this action, the system displays the first member of the list. To see the next member in the list, type *C* or *c* to continue. For example, if you select Main Menu item 5 (FPDC) and want to display active FPDCs:

You see:

```
> Action =
```

You enter *1* **(Return)** and see:

```
> Action = 1
 c to continue list, anything else to abort
>
 FPDC:  Action=1  Data=6666
>
```

You enter *C* and see:

```
FPDC: Action = 1 Data = 7777
>
```

You enter *C* and see:

```
FPDC: Action = 1 Data = 8888
>
```

You enter *C* and see:

```
FPDC: Action = 1 Data = 9999
>
```

You enter *C* and see:

```
P16: END OF LIST
FPDC:  Action=1  Data=0
>
```

You may also "abort" the list by typing **a, d, or m.**

Searches

The Search menu item is similar to the lists described above. However, most types of searches require at least two steps:

- **Action = 1 Data =** [data value] to identify the type of search you want.
- **Action = 2 Data =** [data value] to narrow the range of the search.
- A few search areas require a third step, **Action = 3 Data =** [data value] to further narrow the range of search—to just *translated* or *untranslated* ports, for example.

When you enter the type of search and the required qualifiers, you begin the actual search by typing *C* or *c*, "commence search."

Removing Ports

When (under Port or PDC on the Main Menu) you try to remove a port from the system, there are several kinds of associations you may want to investigate before you remove that port from the system. These associations (for example, the appearance of a trunk on several station buttons or an external alert associated with a station) are called *blocks.* System 25 generates warning messages about these blocks so you do not perform an administration function that goes beyond your intent. For each type of association, you will see a warning message. To go on with the action, you respond to the system message **c for continue, any other key for abort.** When there are no more associations with a station port you want to remove, you see the warning message,

W18: NO MORE BLOCKS.

The system displays this message to prevent you from accidentally removing a port from the system.

The next section describes system responses, such as warning messages, in more detail.

System Responses

During an administration session, there are occasions when you may enter inappropriate information at a prompt. While System 25 does not catch all input errors, it does catch many of them. System 25 has three means of responding to incorrect input:

- Error messages
- Print messages
- Warnings

Error Messages

Error messages are in the general form:

Error nnnn [Where nnnn is a number]
aaaaa aaaa [Where aaaaa aaaa is a message]

A second level of help is also available. If you need more information about an error message in the form above, you can type a question mark, "?," at the next prompt. You will see a second message in the this general form:

Error nnnn [Where nnnn is a number]
bbbbb bbbb [Where bbbbb bbbb is an expanded message]

Consider a specific example. You can only change a station PDC to a number that does not already exist in the dial plan. Say that you attempt to change PDC 1654 to 1653 which is being used elsewhere:

To change a station PDC

1 At the Main Menu prompt, enter *2* to access the PDC menu.

2 At **PDC =** , enter the PDC you want to change, *7654.*

3 At **Action =** , enter *2* to tell the system you want to enter a new PDC.

4 Type *d* and at **Data =** , enter the new dial code, *1653*

If you see:

Error 7012
inappropriate request
Data =

that station may already exist.

5 To request additional help on this error message, type *?* You see the second level error message followed by a new prompt:

Error 7012
PDC already exists
Data =

The system continues to prompt for correct data.

Print Messages

This kind of message is straightforward–it conveys information. A print message does not describe an error condition.

A print message appears at the end of certain search lists. For example, if you enter the Search option (item 8 from the Main Menu) and search the table of most recent system errors, you see the following message when you reach the end of that list:

```
P16: END OF LIST
```

Warning Messages

A warning message gives you the opportunity to reconsider the administration activity you are about to perform. One of the more vivid possibilities for serious repercussions would be your command to *cold start* the system.

A cold start removes all the current translations in the system, installs default translations, and cancels all calls in progress on the system. The cold start command, which can be issued from Main Menu item 9 (Save/Restore), produces serious system disruption. (This command should be used only by qualified systems technicians.)

If you issue an administration command to *force a system cold start*, you see the following warning message:

```
W23: YOU ARE ABOUT TO FORCE A COLD START
c for continue, any other key for abort
>
```

At this point, you can still change your mind and back out of the cold start action by entering any character except “c.”

Initializing the System

This section outlines the procedure for administering initial system translations (that is, for *initializing)* the system).

To initialize the system, you must know the desired configuration. The System 25 implementation forms contain all the information necessary to initialize the system; they also form the basis for system *Administration Records.* These forms should be properly organized in the *Administration Records Binder.*

As the system is initialized, **it is essential** that you write all port assignments on the forms as the ports are translated. Failure to do this will make future changes and additions very difficult.

The steps outlined in the *Initialization Sequence* below **should be followed in the sequence indicated** to set up the system. Difficulties may arise if this sequence is not followed.

Default Translations

Two types of cold starts are possible with System 25, which differ in the extent of their default assignments. A "full default" cold start is usually reserved for an extreme system disruption, such as might result from a damaged system translation tape or from replacing a memory board.

The other type of cold start is a "limited default" cold start. It assigns only system defaults (from menu 4) to the system, leaving port assignments (menu 1) blank. This type of cold start may be particularly useful during system initialization, if the dial plan you want to administer is greatly different from the one System 25 assigns in a full-default cold start. The next two sections describe these cold starts in more detail. For specific cold start procedures, see Action=20 under *Administering Tape Save/Restore Operations.*

Full-Default Cold Start

With a full-default cold start, System 25 assigns default dial codes and trunk numbers as shown in Table 3-1. As you attempt to assign dial codes to stations and trunks following the steps outlined in the next chapter, you may encounter error messages indicating that the numbers/codes you are trying to assign are already assigned. It may be that the default numbering plan conflicts with the one you are implementing. If this happens, change the conflicting default code by first removing the present dial code, then replacing it with the one you want.

TABLE 3-1 Default Dial Code Assignments

Port	Default Code
Trunk Numbers (not part of dial plan)	0001-0104
Station Dial Codes:	
Multiline voice terminals	200-238 300-355
Single-line voice terminals	400-599
Data terminals	600-704
System Dial Codes:	
Trunk Access Codes:	
Loop start	100
Ground start	101
Tie trunks	102
Attendant Call Park	800-807
Night Service	810
Modem Request Code (Pooled Modem)	820
ARS	9

Limited Default Cold Start

If you have many conflicting default codes, you may want to perform a limited default cold start. This type of cold start does not assign a numbering plan to the system, except for the 800-series numbers and the ARS code listed in Table 3-1. Since the system does not assign defaults for stations and trunks, it is easier for you to assign numerous new dial codes, since you don't have to remove default-assigned dial codes before you can add the new codes.

A limited default cold start does assign most of the system defaults from menu 4, except the modem request code and CO trunk pool access code. You need to reassign those codes after a limited default cold start. (See Action=60 and Action= 71 in *Administering System-Wide Options.)*

Unassigned Trunk Ports

It is also important to *untranslate* (or remove) any unassigned trunk ports on System 25. To untranslated, follow the procedure for removing a trunk. This tells the system that no facility is assigned to that port. Since outgoing trunk selection of pooled facilities is made in reverse order of trunk assignment (last assigned is first selected), *default assigned* trunks that are not actually connected to incoming facilities will result in the selection of unconnected port circuits for outgoing calls. System users will receive a reorder tone when trying to access such ports. The circuit pack will display a red alarm LED and the attendant console will display a green alarm LED. Then you will have to untranslate the port.

Initialization Sequence

Begin with a Cold Start

When you administer the initial translations, it is important that you begin from a known condition. You can establish a known condition by forcing a cold start (Menu 9, Action=20, Data=1 or 2). As explained in the previous section, a full default cold start (which takes about 3 minutes) causes the system to check all slots for valid circuit pack (CP) types and assign default translations to all ports (except auxiliary trunk ports). A limited default cold start, which takes about 30 seconds, causes the system to assign system-menu defaults but no port-specific translations.

During a full default cold start, the SAT lists all circuit packs in the system. When the cold start is complete, every CP (except the Memory and Auxiliary Trunk) should show a green LED; in addition, the yellow LED on the Service Circuit should be flashing or steady and the CPU green LED should be flashing. No red LEDs should be on.

When a limited default cold start is complete, the yellow LED on the Service Circuit should. be flashing or steady, the CPU green LED should be flashing, and the green Tone Detector LED should be steady. No red LEDs should be on.

If you cannot bring your system to the state you want, refer to the System 25 Maintenance Manual before proceeding.

To Initialize the System

The implementation forms provide the information you need to complete the administration procedures in the following chapters and enter initial translations. When you initialize the system, you should accept default values for **all** options and parameters **not listed** on the implementation forms. These defaults have been chosen to provide good service for most customers.

The next table lists the order of administration procedures and implementation forms you need to initialize the system.

TABLE 3-2 Initialization Sequence

From the information provided on this form,	Enter these translations:
1 System Options Form	Enter system toll restriction options, pooled modem options, and other system options following the procedures in *Administering System-Wide Options.*
2 Toll Calls Allowed Lists Form	Enter these lists following the procedures in *Administering System-Wide Options*
3 Floating Personal Dial Code List	Enter all Floating PDCs following the procedure in *Administering System-Wide Options*
4 System Speed Dialing List	Enter System Speed Dialing numbers following the procedure in *Administering System-Wide Options*
5 Virtual Facility List	Enter virtual facility codes following the procedure in *Administering System-Wide Options.*
6 Trunk forms	Assign all trunk ports and assign each trunk's class of service following the procedures in *Administering Trunks.* **Be sure to record port assignments on the trunk forms.**
7 Auxiliary Equipment Options form	Assign and set up any special feature ports following the procedures in *Administering Auxiliary Equipment.* **Again, be sure to record port assignments.**

Continued on next page

TABLE 3-2 Initialization Sequence (continued)

8 Voice and Data Station Records form	Assign all station ports (except for attendant consoles), following the procedures in *Administering Voice Stations* and *Administering Data Line and STARLAN CP Ports.* Do *not* enter class-of-service parameters yet. There are some procedures you cannot complete until *all* stations are assigned, such as button assignments. **Be sure to record each station's port assignment on the individual voice terminal or data terminal forms as you assign them.**
9 Attendant Options and Attendant Console forms	Assign ports and enter class-of-service, attendant features, and button feature assignments for the attendant console(s) following the procedures in *Administering Attendant Equipment* and *Administering Button Assignments.*
10 Terminal forms	Enter class-of-service information for all voice and data stations (and button assignments for multiline voice terminals) following the procedures in *Administering Voice Stations, Administering Data Line and STARLAN CP Ports,* and *Administering Button Assignments.*
11 Direct Group Calling List	Enter DGC groups following the procedure in *Administering Direct Group Calling (DGC) Groups.*
12 Automatic Route Selection Forms	Enter ARS options and patterns following the procedure in *Administering Automatic Route Selection (ARS).*
13 Tape Save/Restore	Save the system translations and verify their accuracy following the procedures in *Administering Tape Save/Restore Operations.*

When you have completed these steps, the system is initialized. Be sure to test that the system is properly initialized following the procedures in the *System 25 Installation and Test Manual.*

Administering System-Wide Options

This section describes how to set system-wide options which include:

- Toll Restrictions
- Call Coverage
- Pooled Modem Options
- Time of Day
- Date
- Call accounting options which include:
  - SMDR
  - Number of digits used for account codes
- Miscellaneous system options which include:
  - Maintenance Busy for Ground Start Trunks
  - CO trunk pool access code
  - Number of DID digits used for PDCs
- Expert mode prompt
- Administration password
- Toll Calls Allowed Lists
- Floating PDCs (FPDCs)
- Virtual Facilities
- System Speed Dialing

Toll Restriction Options

From the Main menu prompt, enter *4*, then set the following toll restriction options:

To specify your area code

1 At **Action =** , enter *30*.

2 At **Data =** , enter your area code.

To allow toll restricted stations to make toll calls within your area code

1 At **Action = ,** enter *31.*

2 At **Data = ,** enter *1* for yes or *0* for no. The default is **1.**

Specify whether your CO requires you to dial " 1" before dialing calls *outside* your area code

1 At **Action = ,** enter *32.*

2 At **Data = ,** enter *1* for yes or *0* for no. The default is **1.**

Specify whether your CO requires you to dial "1" before dialing toll calls *within* your area code

1 At **Action = ,** enter *33.*

2 At **Data = ,** enter *1* for yes or *0* for no. The default is **0.**

To check toll restrictions on calls made over inter-PBX trunks (trunk type 805) that start with one specific digit

1 At **Action = ,** enter *34.*

2 At **Data = ,** enter the single-digit CO access code of the other PBX, 1-9 or 0 for none. The default is **9.**

Call Coverage Options

From the Main menu prompt, enter *4,* then set the following Call Coverage options:

To set call coverage ringing on internal calls

1 At **Action = ,** enter *40.*

2 At **Data = ,** enter:

- *1* to provide call coverage ringing on internal calls.
- *0* if you do not want to provide this call coverage option.

The default is **1.**

To specify the number of rings before calls are sent to call coverage or call following calls return to their home station

1 At **Action = ,** enter *41.*

2 At **Data = ,** enter a number between *0* and *31* for the number of rings. The default is **2.**

Pooled Modem Options

From the Main menu prompt, enter *4* then set the following Pooled Modem options:

To specify the Modem Request Code

1 At **Action = ,** enter *60.*

2 At **Data = ,** enter a number between *1* and *9999.* The default is **820.**

To set the receiver to respond to remote loop

1 At **Action = ,** enter *61.*

2 At **Data = ,** enter *1* for yes or *0* for no. The default is **1@.**

To set disconnect on loss of carrier

1 At **Action = ,** enter *62.*

2 At **Data = ,** enter *1* for yes or *0* for no. The default is **1@.**

To set pins CF and CB as common

1 At **Action = ,** enter *63.*

2 At **Data = ,** enter *1* for yes or *0* for no. The default is **1@.**

@ Strongly recommended this value be used.

To state whether there is disconnect on received space

1 At **Action = ,** enter *64.*

2 At **Data = ,** enter *1* for yes or *0* for no
The default is **1@.**

To state whether the system should send a space character on disconnect

1 At **Action = ,** enter *65.*

2 At **Data = ,** enter *1* for yes or *0* for no.
The default is **1@.**

Time of Day

To set the time of day

1 From the Main menu prompt, enter *4.*

2 At **Action = ,** enter *50.*

3 At **Data = ,** enter the time of day in the form HHMM where HH = hour (00 through 23) and MM = minutes (00 through 59).

Date

To set the date

1 From the Main menu prompt, enter *4.*

2 At **Action = ,** enter *51.*

3 At **Data = ,** enter the date in the form MMDDYY where MM = month (01 through 12), DD = day (01 through 31), and YY = year (00 through 99).

@ Strongly recommended this value be used.

Call Accounting Options

From the Main menu prompt, enter *4,* then set the following call accounting options:

SMDR

Specify whether SMDR records should be sent to the SMDR port

1 At **Action = ,** enter *52.*

2 At **Data = ,** enter *1* for yes or *0* for no. The default is **1@.**

To specify the minimum length (number of seconds) of outgoing calls that are reported by SMDR

1 At **Action = ,** enter *53.*

2 At **Data = ,** enter a number between 10 and 255. The default is **40.**

Account Codes

To assign the number of digits used for account codes

1 At **Action = ,** enter *73.*

2 At **Data = ,** enter a number between 1 and 15. The default is **15.**

@ Strongly recommended this value be used.

Miscellaneous System Options

From the Main menu prompt, enter *4,* then set the following system options:

To block maintenance busy of Ground Start trunks

1 At **Action = ,** enter *70.*

2 At **Data = ,** enter *0* for no or *1* for yes. The default is **0@.**

To assign the Central Office trunk pool access code

Note This code cannot be changed after any trunks have been assigned with this facility access code.

1 At **Action = ,** enter *71.*

2 At **Data = ,** enter the CO trunk access code. The default is 100, 101, or 102, depending on the trunk type.

To set the number of DID digits used to match against station PDCs

1 At **Action = ,** enter *72.*

2 At **Data = ,** enter a number between 2 and 4. The default is **3.**

Expert Mode Prompt

To change the expert mode prompt

1 From the Main menu prompt, enter *4.*

2 At **Action = ,** enter *74.*

3 At **Data = ,** enter the new prompt (nine or fewer printable characters). The default is **"Command:".**

@ Strongly recommended this value be used.

Administration Password

To change the administration password

1 From the Main menu prompt, enter *4*.

2 At **Action = ,** enter *75*.

3 At **Data = ,** enter the new password (eight or fewer printable characters, with no spaces). For security, the display always shows **????????.**

Toll Calls Allowed (TCA) Lists

There are four Toll Calls Allowed Lists. Therefore, you must specify a *target* value from 1 through 4 to access these lists. The total number of entries must not exceed 64 for all 4 lists combined.

To access a Toll Calls Allowed List

1 From the Main menu prompt, enter *7*.

2 At the prompt, **TOLL ALLW= ,** enter the number, from 1 through 4, of the list you want to access.

Continue to administer the Toll Calls Allowed List as described below.

To list members of a TCA group

1 At **Action = ,** enter *1*

2 To continue the list, enter *c* after each code is printed.

To add a code to the list

1 At **Action = ,** enter *2*.

2 At **Data = ,** enter the code number in the form NXX or NPA-NXX, where:

- NXX is a 3-digit CO exchange code
- NPA-NXX is a combination of an area code (NPA) and a CO code (optionally separated by a hyphen)

You can use the WILDCARD character (•) in the CO exchange code part (NXX) of these codes. That is, you can enter NXX as NXX, NX•, N••, or •••.
To specify an entire NPA, enter NPA-•••.

To delete a code from the list

1 At **Action = ,** enter *3.*

2 At **Data = ,** enter the code you want to delete exactly as it was listed using Action=1.

Floating PDCs (FPDCs)

From the Main menu prompt, enter *5;* then follow the procedure below to list, add, or delete an FPDC.

To list FPDCs

1 At **Action = ,** enter *1.*

2 To continue the list, enter *c* after each FPDC is printed.

To add an FPDC

1 At **Action = ,** enter *2.*

2 At **Data = ,** enter the FPDC you want to add (1-9999).

To delete an FPDC

1 At **Action = ,** enter *3.*

2 At **Data = ,** enter the FPDC you want to delete.

Note When you remove an FPDC, any Display ID for that FPDC is also removed.

Display Support

To assign or remove an FPDC Display ID

1 At **Action = ,** enter *4.*

2 At **Data = ,** enter the FPDC.

3 Type *a* and at **Action = ,** enter *5.*

4 At **Data = ,** enter the FPDC ID (not more than 11 characters, enclosed in double quotes), or "" to remove the ID.

Virtual Facilities

A Virtual Facility (VF) is a call-routing facility which is not defined by the physical facility (trunk) over which calls are routed. Instead, the facility is defined by a combination of access codes, authorization codes, and coded characters that allow special handling of the destination telephone number. VFs can be used to automatically route calls via other carrier networks, private networks, or tie trunks.

Virtual Facilities can also be used in ARS patterns to ensure that users who place these types of calls use the route (the virtual facility) the system administrator has defined. For more information, see the *System 25 Reference Manual.*

Keep the following parameters in mind when assigning VFCs:

- Virtual Facility Codes (VFCs) range from # 190 through # 199 (including the # sign)
- The number you assign to a VFC can contain up to 28 digits and/or special characters.
- You can use the following special characters within a Virtual Facility Number (VFN):

*	sends a 1.5-second pause
##	sends a #
#*	sends a *
#3	changes signaling from dial pulse to Touch Tone (end-to-end signaling)
#5	tells the system to insert the destination telephone number (dialed digits) at this point in the VFN

To assign or remove a virtual facility

1 At **Action =** , enter *25.*

2 At **Data =** , enter the access code, 190-199 (do not enter the # character).

3 To assign or remove a VFN, type *a* and at **Action =** , enter *26.*

4 At **Data =** , enter

- the number you want to assign to this VFC (allowable characters are listed at the beginning of this section).
- *0* to remove the number currently displayed

To permit dial access to this virtual facility

1 At **Action =** , enter *27.*

2 At **Data =** , enter *1* for yes or *0* for no. The default is **0.**

System Speed Dialing

System Speed Dialing allows you to enter a four-character code at any terminal to call the associated phone number.

Keep the following considerations in mind when assigning System Speed Dialing codes:

- Speed Dialing Codes range from # 100 through # 189 (including the # sign).
- The number you assign to a Speed Dialing Code can contain up to 28 characters or digits and/or special characters.
- You can use the following special characters within a System Speed Dialing number:

*	sends a 1.5-second pause
##	sends a #
#*	sends a *
#3	changes signaling from dial pulse to Touch Tone (end-to-end signaling)
#19x	embeds a Virtual Facility Code (# 190-# 199) as the first part of a Speed Dialing Code (Note that you cannot embed another Speed Dialing Code within a Speed Dialing Code.)

- There is a limited amount of storage space available in the system for use with speed dialing and repertory dialing numbers. Consequently, it is important that you remove any unused speed dialing numbers (using the procedure below) to conserve memory.

To administer System Speed Dialing

From the Main menu prompt, enter *4;* then follow the procedure below to assign or remove a System Speed Dialing number.

Enter or remove a number from the Speed Dialing list

1 At **Action = ,** enter *25.*

2 At **Data = ,** enter the access code — a number between 100 and 189 (do not enter the # character).

3 To assign or remove the speed dialing number associated with this code, enter *a* and at **Action = ,** enter *26.*

At **Data = ,** enter:

- the number you want to assign to this access code (allowable Speed Dialing characters are listed at the beginning of this section).
- *0* to remove the number currently displayed

Administering Trunks

This section shows you how to:

- Assign and remove trunks
- Assign class-of-service parameters for various types of trunks

Assigning a Trunk

To assign a trunk **[AG]**

From the Main menu prompt, enter *1*, then follow the procedures below to define the trunk type and assign a trunk number.

Define the trunk type:

1 From the Main menu prompt, enter *1*.

2 At **Port =** , enter the carrier/slot/port (CSSPP) to which you want to assign the trunk.

3 At **Action =** , enter *1*.

4 At **Data =** , enter the trunk type number. Select the number from the next table.

TABLE 5-1 Trunk-Type Codes

If the Trunk Type is:	You Enter:
Ground Start, CO	701*
Ground Start, WATS, FX	702
Loop Start, CO	801*
Loop Start, WATS, FX	802
PBX/Centrex	805†
DID Immediate Dial	901
DID Wink Start	902*
Auto-in/Auto-out	1001
Auto-in/Immediate Dial-out	1002
Immediate Dial-in/Auto-out	1003
Immediate Dial-in/Immediate Dial-out	1004
Wink Dial-in/Auto-out	1005
Wink Dial-in/Wink Dial-out	1006*
Delay Dial-in/Auto-out	1007
Delay Dial-in/Delay Dial-out	1008

* Default Type

† You must select this code for Centrex operation.

Assign a trunk number:

1 You see the prompt, **Action=2.**

2 At **Data= ,** enter a four-digit trunk number from 0001 through 9999.

Note Trunk numbers beginning with 9 (”9xxx”) have special significance when used with Dial-in tie trunks (types 1003-1008). System administrators should read the section in the Reference Manual called *Tandem Trunking* thoroughly before using *any* 9xxx-format numbers for tie trunks.

Removing a Trunk

To remove a trunk

1 From the Main menu prompt, enter *1.*

2 At **Port =** , enter the physical port you want to remove in the form CSSPP.

3 At **Action =** , enter *1.*

4 At **Data =** , enter *0.*

Note When you remove a trunk, any Display ID associated with the trunk is also removed.

Assigning Class of Service to DID Trunks

To assign class-of-service to a DID trunk

1 From the Main menu prompt, enter *1.*

2 At **Port =** , enter the physical port to which you want to assign class of service.

3 At **Action =** , enter *3.*

4 At **Data =** , enter the class-of-service code which is a number (1, 2, 3, or 4) equal to the number of digits the CO sends over this trunk. The default is **3.**

Assigning Class of Service to All Other Trunks

To assign class of service to all other trunks

Note This section assumes that your trunks and their trunk numbers have been assigned.

1 From the Main menu prompt, enter *1.*

2 At **Port =** , enter the physical port to which you want to assign class of service in the form CSSPP.

3 At **Action =** , enter *3.*

4 At **Data =** , enter the trunk class of service code from the next table. The default is **8.** For dial-in tie trunks, only codes 0-7 are valid.

TABLE 5-2 Trunk Class of Service (for all trunks except DID)

COS CODE	NIGHT SERVICE	OUTWARD SIGNALING	IN ONLY	SHORT DISCONNECT
0		TT		
1		TT	●	
2		TT		●
3		TT	●	●
4		DP		
5		DP	●	
6		DP		●
7		DP	●	●
8	●	TT		
9	●	TT	●	
10	●	TT		●
11	●	TT	●	●
12	●	DP		
13	●	DP	●	
14	●	DP		●
15	●	DP	●	●

TT = Touch-Tone
DP = Dial-Pulse

Class-of-Service Options

Follow the procedures below to assign class-of-service options to this trunk.

Pooled Facility Access Group: Is this trunk in a pooled facility access group?

1 At **Action = ,** enter *4.*

2 At **Data = ,** if the trunk is in a pooled facility access group, enter the facility access code (FAC). Enter *0* if the trunk is not in any group. The defaults are as follows:

- **100** for Loop Start trunks
- **101** for Ground Start trunks
- **102** for Tie trunks

Dial Access

1 At **Action = ,** enter *5.*

2 At **Data = ,** enter *1* if you want to allow dial access, enter *0* if you do not. The default is **1@.**

DGC Group: To assign this trunk to a DGC group

Note This item is not administerable for trunk types 1003-1008.

1 At **Action = ,** enter *6.*

2 At **Data = ,** enter the DGC group number (l-32, or 0 for none). The default is **0.**

Night Service: To choose either Directed or Trunk-Answer-from-Any-Station (TAAS) Night Service for this trunk

To receive either form of night service, this trunk's class of service must include night service (that is, for Action=3, Data must be between 8 and 15). Also, a NIGHT button must be assigned to the attendant console.

- For Directed Night Service, at least one station must be assigned to receive night service calls from this trunk (see *Administering Voice Stations).*
- For TAAS Night Service, an external alert must be assigned for night service use.

(continued)

@ Strongly recommended this value be used

1 At **Action = ,** enter *7.*

2 At **Data = ,** enter:

- *1* to select Directed Night Service
- *0* to select TAAS Night Service.

The default is **1.**

Delay Announcement: To assign a Night Service delay announcement

1 At **Action = ,** enter *8.*

2 At **Data = ,** enter *1* for first delay announcement, *2* for second delay announcement, or *0* for none. The default is **0.** (See the procedure for assigning Directed Night Service Delay Announcement under *Administering Auxiliary Equipment.)*

Type of Incoming Signaling (tie trunks only)

1 At **Action = ,** enter *9.*

2 At **Data = ,** enter *1* for Touch-Tone signals, or *0* for Dial-Pulse signals. The default is **0.**

Note To connect this tie trunk directly to another PBX, see the "Port Options" table in *Command Reference.*

Pooled Trunk Hunting Order: {Read Only}

For outgoing calls, each trunk in a trunk group is selected in a certain sequence. The value returned from this action/data pair tells you what position in the list this trunk occupies (e.g., first, second, third...). The order in which trunks are used is the reverse of the order in which the trunks were assigned. For example, if you installed four trunks in the order 1, 2, 3, and 4, those trunks would be used in the order 4, 3, 2, and 1.

1 At **Action = ,** enter *10.* Data shown (1, 2, etc.) is the order in which that particular trunk will be used (1st, 2nd, etc.).

Assigning Trunk Options to a SLAC System

The following options apply only to systems using the Switched Loop Attendant Console (SLAC), and are not administerable for DID trunks:

To set the priority of a trunk to ring in the attendant-console queue

1 At **Action = ,** enter *11.*

2 At **Data = ,** enter a trunk priority number, 0-7:

- *1* - highest priority
- *7* - lowest priority
- *0* - the trunk won't ring in the queue

The default is **0.**

Specify which attendant should receive calls from this trunk

1 At **Action = ,** enter *12.*

2 At **Data = ,** enter the attendant position number, 0-2:

- *1* - first attendant
- *2* - second attendant
- *0* - either attendant

The default is **0.**

Display Support

To assign or remove a trunk Display ID

Note This feature is not administerable for DID trunks.

1 At **Action = ,** enter *90.*

2 At **Data = ,** enter the Display ID (not more than 11 characters, enclosed in double quotes), or "" to remove the ID.

Administering Auxiliary Equipment

This section discusses how to assign and remove AT&T System 25 auxiliary equipment associated with special ports. It assumes that you know what special equipment is required and that you have read the *System 25 Implementation Manual for R1V2* and/or the Reference Manual to understand which circuit boards you require to connect this special equipment. See the "Special Feature Port Type Codes" table in *Command Reference.*

For all procedures in this section, you must first specify the port you want to assign.

To assign or remove auxiliary equipment options listed in this chapter, begin with this step

1 From the Main menu prompt, enter *1.*

2 At **Port =** , enter the port number in the form CSSPP.

External Alerts (Port Type 253)

To assign an external alert for a station **[AG]**

1 At **Action =** , enter *1.*

2 At **Data =** , enter *253.*

3 You see the prompt: **Action = 2.**

4 At **Data =** , enter the PDC of the associated station, or *0* for Night Service Alert.

Paging (Associated with Auxiliary Trunk Port)

You can assign Paging to up to three zones. Each paging zone must be assigned to a separate port. Follow the procedure below to assign an access code and dial restriction to each zone. If, in addition, you want to assign one access code to all zones, follow the procedure below entitled "To assign an All-Zone access code."

To assign a paging zone access code **[AG]**

1 Type *t* and at **Port =** , enter the port number for the paging zone you're administering

2 At **Action =** , enter *1.*

3 At **Data =** , enter

- *1301* for Zone 1
- *1302* for Zone 2
- *1303* for Zone 3

4 You see the prompt **Action = 2.**

5 At **Data =** , enter an access code (PDC) for this zone, or *0* for none.

6 Type *a* and at **Action =** , enter *1* to dial restrict the zone, or *0* not to.

To assign an All-Zone access code (if more than one zone)

1 At **Action =** , enter *3.*

2 At **Data =** , enter a PDC for All-Zone access, or *0* for none.

Note The system automatically copies this value to all paging zones.

Paging (Associated with CO Trunk Port)

If the paging system is connected to a loop or ground start trunk port, simply assign a trunk facility access code for the port(s) so connected.

DGC Delay Announcement

To assign DGC Delay Announcement

1 At **Action = ,** enter *1.*

2 At **Data = ,** enter *255.*

Directed Night Service Delay Announcement

To assign Directed Night Service Delay Announcement **[AG]**

1 At **Action = ,** enter *1.*

2 At **Data = ,** enter

- *251* (Delay Announcement #1)
- *252* (Delay Announcement #2)

Assign number of rings before delay announcement

1 You see the prompt: **Action = 2.**

2 At **Data = ,** enter the number of rings before an unanswered call receives delay announcement (1-15).

Music-on-Hold

To assign Music-on-Hold **[AG]**

1 At **Action = ,** enter *1.*

2 At **Data = ,** enter *254.*

3 Special Hold: A caller is placed on Special Hold when a multiline set user presses either Transfer or Conference. You need to indicate whether or not callers will hear music during the short interval when they are on Special Hold.

(continued)

You see **Action = 2.** At **Data = ,** enter:

- **0** - if you do *not* want Music on Special Hold
- **1** - if you *want* Music on Special Hold

Pooled Modem

To assign a Pooled Modem circuit pack

Note See the procedure for setting pooled modem options under *Administering System-Wide Options.*

1 At **Action = ,** enter *1.*

2 At **Data = ,** enter *1901.*

Additional Tone Detector

To assign an Additional Tone Detector circuit pack

1 At **Action = ,** enter *1.*

2 At **Data = ,** enter *2101.*

Dictation

To assign Dictation **[AG]**

1 At **Action = ,** enter *1.*

2 At **Data = ,** enter

- *2201* if Auxiliary Trunk interface
- *201* if Station Port interface

Assign the access code

1 You see the prompt: **Action = 2.**

2 At **Data = ,** enter the PDC.

Administering Voice Stations

- Assign voice terminals
- Remove voice terminals
- Assign and change station dial codes
- Assign class of service

Using the Port and PDC Menus: Class-of-service options for single-line and multiline voice terminals can be administered from either the PDC menu (Main Menu item 2) or from the Port menu (Main Menu item 1). This makes it convenient for you to administer a station based on the information you have. If you know the station PDC, use Menu 2; if you know the station location (CSSPP) but not the PDC, use Menu 1.

Adding a Voice Station

You cannot add a voice terminal to a port where a station already exists. You must first remove the existing station, then add the new station. See the procedure entitled *Removing a Station.*

To add a voice terminal **[AG]**

1 At the Main Menu prompt, enter *1.*

2 At **Port = ,** enter the carrier/slot/port (CSSPP) for the voice terminal you're adding. For example, enter *10608* if you want to add a voice terminal to port eight, slot six, in carrier one.

If the port is available, you see the following message:

Port not translated

3 At **Action = ,** enter *1.*

4 At **Data = ,** enter the code for the voice terminal type you're adding. Table 7-1 shows the code associated with each terminal type.

Note The only way to change an existing terminal type is to remove and reinstall the station.

5 Next, assign a Personal Dial Code (PDC):

You see the prompt, **Action = 2.**
At **Data = ,** enter the PDC for this station. The valid range is 1-9999.

6 To administer class of service for this voice terminal, see *Assigning Class of Service Options* in this chapter.

TABLE 7-1 Voice Terminal Type Codes

Terminal Type:	Code:
Single-line without message waiting indicator	201
Single-line with message waiting indicator	202
5-Button MERLIN CS Voice Terminal, Z7302H01	302
MERLIN CS Hands-Free-Answer Voice Terminal, Z7309H01	303
10-Button MERLIN CS Voice Terminal, Z7303H01	304
MERLIN CS Built-in-Speakerphone Voice Terminal, Z7305H03	305
34-Button MERLIN CS Voice Terminal, Z7305H01	306
34-Button Deluxe MERLIN CS Voice Terminal, Z7305H02 (non-attendant)	307
MERLIN CS Built-in-Speakerphone Voice Terminal with 16-Character Display, Z7305H04C (non-attendant)	308
Direct Trunk Attendant Console (34-Button Deluxe MERLIN CS Voice Terminal, Z7305H02)	309
Switched Loop Attendant Console (MERLIN CS Built-in-Speakerphone Voice Terminal with 16-Character Display, Z7305H04C)	310
MET Voice Terminal	401

Display Support

To assign or remove a PDC Display ID

1 At **Action =** , enter *90*.

2 At **Data =** , enter the Display ID (not more than 11 characters, enclosed in double quotes), or "" to remove the ID.

Removing a Voice Station

To remove a voice terminal

Note When you remove a station, any Display ID associated with that PDC will also be removed.

1 From the Main Menu prompt, enter *1*.

2 At **Port =** , enter the CSSPP for the station you're removing.

3 At **Action =** , enter *1*.

(continued)

4 At **Data = ,** enter *0*.

If this station is associated with another station(s) for features such as Call Coverage, Automatic Intercom, etc., you will see a warning message for each type of association. To go on with the action, respond to the system message, **c for continue, any other key for abort.** When there are no more associations with the station you want to remove, you see:

NO MORE BLOCKS
c for continue, any other key for abort

5 Enter *c*.

You see the following display when the station is removed:

Action = 1 Data = 0

Note If you remove a station that is associated with other stations, you may need to reassign features on those other stations as well.

Changing a Station Dial Code

You can only change a dial code to one that does not conflict with any existing number. For more information, see the "Dial Plan" description in the *System 25 Implementation Manual for R1V2.* To determine if a dial code exists, use the Search function described later in this chapter.

There are other circumstances that might prevent you from changing a dial code. For example, the existing station number might be part of a DGC group or call pickup group. Again, use the Search function to see if the dial code is a member of any group.

To change a station dial code

1 At the Main Menu prompt, enter *2.*

2 At **PDC = ,** enter the PDC you want to change.

3 At **Action = ,** enter *2.*

4 At **Data = ,** enter the new dial code.

If you see **Error 7012,** that dial code may already be assigned.

Moving a Voice Station

Use this procedure when you want to move a station – its features, button assignments, and PDC — to another port. Keep these considerations in mind when you move a station:

- The moved-to port must be vacant.
- The terminal types must be the same; that is, you can only move a station to the same physical type (e.g., multiline voice terminal to multiline voice terminal port).

To move a station to a new port

1 From the Main Menu prompt, enter *2.*

2 At **PDC = ,** enter the PDC of the station you want to move.

3 At **Action = ,** enter *0.*

The system displays the station's present port assignment at **Data =** CSSPP

4 Type *d,* and at **Data = ,** enter the new port assignment (CSSPP).

Assigning Class of Service Options

This section describes the class of service options– the calling restrictions and features– you can administer for:

- Single-line voice terminals
- Multiline voice terminals, including attendant consoles

Single-Line Voice Stations

To assign class of service to a single-line voice terminal

1 From the Main Menu prompt, enter *2.*

2 At **PDC = ,** enter the PDC of the station to which you want to assign class of service.

Calling Restrictions

To restrict dial access to the Central Office trunk pool

1 At **Action = ,** enter *3.*

2 At **Data = ,** enter *1* for yes or *0* for no. The default is **0.**

To restrict dial access to all other trunk pools

1 At **Action =** , enter *4.*

2 At **Data =** , enter *1* for yes or *0* for no. The default is **0.**

To restrict this station from making any outward calls

1 At **Action =** , enter *13.*

2 At **Data =** , enter *1* for yes or *0* for no. The default is **0.**

To assign a toll restriction class

1 At **Action =** , enter *14.*

2 At **Data =** , enter the toll class number, 0-4, from the following list (the default is **0):**

0 - Not Toll Restricted
1 - Toll call allowed lists 1-4
2 - Toll call allowed lists 2-4
3 - Toll call allowed lists 3-4
4 - Toll call allowed list 4 (only)

To assign an ARS Facility Restriction Level (FRL)

1 At **Action =** , enter *15.*

2 At **Data =** , enter the FRL number, *0-3* , from the following list (the default is **3):**

Level		**Allowed FRL Pools**
0	-	0
1	-	0,1
2	-	0,1,2
3	-	0,1,2,3

Features

Extended/Off-Premises Station: To make this voice terminal an extended station

1 At **Action =** , enter *10.*

2 At **Data =** , enter *1* or *0,* based on physical connection information.

Station Hunting: To administer this station to hunt to another station if busy

1 At **Action =** , enter *12.*

2 At **Data =** , enter the PDC of the station to hunt to next, or *0* for none. The default is **0.**

Group Call Coverage: To specify which receiver group will cover this station's calls

1 At **Action =** , enter *7.*

2 At **Data =** , specify which "receiver" group will answer this station's calls. Enter:

- a call coverage group number, 1-32
- a DGC call coverage group number, 101-132. This number actually corresponds to a DGC group number 1-32 (the "1" in the hundreds' place indicates DGC coverage instead of standard call coverage).
- *0* for none.

The default is **1.**

Call Pickup: To assign this station to a call pickup group

1 At **Action =** , enter *11.*

2 At **Data =** , enter the group number, 1 through 16, or *0* for none. The default is **0.**

Personal Speed Dialing: To enable personal speed dialing at this station

1 At **Action =** , enter *16.*

2 At **Data =** , enter *1* for yes or *0* for no. The default is **1.**

Night Service: To display the number of any trunks assigned to this station for Night Service

1 At **Action =** , enter *51.*

2 To continue the list, enter *C* after each trunk number is printed.

To assign a trunk to this station for Night Service

1 At **Action = ,** enter *52.*

2 At **Data = ,** enter a four-digit trunk number.

Note Any given trunk can have no more than four Night Service coverage stations assigned to it.

To delete a trunk from this station's Night Service list

1 At **Action = ,** enter *53.*

2 At **Data = ,** enter a four-digit trunk number.

Multiline Voice Stations

To assign class of service to a multiline voice station (including an attendant console)

1 From the Main Menu prompt, enter *2.*

2 At **PDC = ,** enter the PDC of the multiline voice station to which you want to assign class of service.

Calling Restrictions

To restrict dial access to the Central Office trunk pool

1 At **Action = ,** enter *3.*

2 At **Data = ,** enter *1* for yes or *0* for no. The default is **0.**

To restrict dial access to all other trunk pools

1 At **Action = ,** enter *4.*

2 At **Data = ,** enter *1* for yes or *0* for no. The default is **0.**

To restrict this station from making any outward calls

1 At **Action = ,** enter *13.*

2 At **Data = ,** enter *1* for yes or *0* for no. The default is **0.**

To assign a toll restriction class

1 At **Action = ,** enter *14.*

2 At **Data = ,** enter a toll class number, 0-4, from the following list (the default is **0):**

0 - Not toll restricted

1 - Toll call allowed lists 1-4

2 - Toll call allowed lists 2-4

3 - Toll call allowed lists 3-4

4 - Toll call allowed list 4 (only)

To assign an ARS Facility Restriction Level (FRL)

1 At **Action = ,** enter *15.*

2 At **Data = ,** enter the FRL number, 0-3, from the following list (the default is **3):**

Level		Allowed FRL Pools
0	-	*0*
1	-	0,1
2	-	*0,1,2*
3	-	*0,1,2,3*

Features

Line Preference: To assign ringing line preference

1 At **Action = ,** enter *5.* †

2 At **Data = ,** enter *1* for yes or *0* for no. The default is **1@.**

To assign prime line preference

1 At **Action = ,** enter *6.*

2 At **Data = ,** enter the button on which this line appears (the preferred button number), or enter *0* for no line preference. The default is **7.** (See the "Multiline Set Button Defaults" table under *Administering Button Assignments).*

---

† This is a Read-Only feature for the SLAC.

@ Strongly recommended this value be used.

Group Call Coverage: To specify which receiver group will cover this station's calls

1 At **Action =** , enter *7.* ‡

2 At **Data =** , enter

- a call coverage group number, 1-32
- a DGC coverage group number, 101-132. This number actually corresponds to the DGC group number 1-32 (the "1" in the hundreds' place indicates DGC coverage instead of standard call coverage).
- *0* for none.

The default is **1.**

To assign Call Coverage Ring on No Answer to a station that has call coverage

1 At **Action =** , enter *8.* ‡

2 At **Data =** , enter *1* for yes or *0* for no. The default is **1@.**

To assign Call Coverage Ring on Busy to a station that has call coverage

1 At **Action =** , enter *9.* ‡

2 At **Data =** , enter *1* for yes or *0* for no. The default is **1@.**

Call Pickup: To assign this station to a call pickup group

1 At **Action =** , enter *11.*

2 At **Data =** , enter the Call Pickup group number, 1-16, or *0* for none. The default is **0.**

Personal Speed Dialing: To enable Personal Speed Dialing at this station

1 At **Action =** , enter *16.*

2 At **Data =** , enter *1* for yes or *0* for no. The default is **0.**

---

‡ This feature is not administrable for the SLAC.

@ Strongly recommended this value be used.

Night Service: To display the number of any trunks assigned to this station for Night Service

1 At **Action =** , enter *51.*

2 To continue the list, enter *C* after each trunk number is printed.

To assign a trunk to this station for Night Service

Note Any given trunk can have no more than four Night Service coverage stations assigned to it.

1 At **Action =** , enter *52.*

2 At **Data =** , enter a four-digit trunk number.

To delete a trunk from this station's Night Service list

1 At **Action =** , enter *53.*

2 At **Data =** , enter a four-digit trunk number.

To display attendant position number (Read Only)

1 At **Action =** , enter *60.*

2 You see either:

- **Data = 1** for the first attendant
- **Data = 2** for the second attendant

Administering Data Line and STARLAN CP Ports

Procedures in this section apply to:

- A data terminal connected to a Data Line Card (DLC) via an ADU, but *not* to a data terminal connected via a modem
- A STARLAN Interface Circuit Pack (STARLAN CP) in DLC-compatibility mode.

This section describes how to:

- Assign data stations to ports
- Remove data stations from ports
- Assign and change Data Dial Codes (DDCs)
- Assign class-of-service to data ports

Using the Port and PDC Menus: Class-of-service options for data terminals can be administered from either the PDC menu (Main Menu item 2) or from the Port menu (Main Menu item 1). This makes it convenient for you to administer a station based on the information you have. If you know the station DDC, use Menu 2; if you know the station location (CSSPP) but not the DDC, use Menu 1.

Adding a Data Station

You cannot add a data station to a port where a station already exists. You must first remove the existing station, then add the new station. See the procedure entitled *Removing a Data Station.*

To add a data terminal **[AG]**

1 At the Main Menu prompt, enter *1.*

2 At **Port = ,** enter the carrier/slot/port (CSSPP) for the data terminal you're adding. For example, enter *10608* if you want to add a station to port eight, slot six, in carrier one.

If the port is available, you see the following message:

Port not translated

3 At **Action = ,** enter *1.*

(continued)

4 At **Data = ,** enter the code for the data terminal you're adding:

- *1801* for a DLC (ZTN126 or TN726)
- *1802* for a STARLAN CP (ZTN84).

Note The only way to change an existing terminal type is to remove and reinstall the station.

5 Next, assign a Data Dial Code (DDC):

You see the prompt, **Action = 2.**
At **Data = ,** enter the DDC for this station. The valid range is 1-9999.

6 To administer class of service for this station, see *Assigning Class of Service Options* in this chapter.

Display Support

To assign or remove a DDC Display ID

1 At **Action = ,** enter *90.*

2 At **Data = ,** enter the Display ID (not more than 11 characters, enclosed in double quotes), or "" to remove the ID.

Removing a Data Station

To remove a data terminal

Note When you remove a station, any Display ID associated with that DDC will also be removed.

1 From the Main Menu prompt, enter *1.*

2 At **Port = ,** enter the CSSPP for the station you're removing.

3 At **Action = ,** enter *1.*

4 At **Data = ,** enter *0.*

If this station is associated with another station(s) for a feature such as Third-Party Call Set-Up, you will see a warning message for each type of association. To go on with the action, respond to the system message, **c for continue, any other key for abort.** When there are no more associations with the station you want to remove, you see:

(continued)

NO MORE BLOCKS
c for continue, any other key for abort

5 Enter *c.*

You see the following display when the station is removed:

Action = 1 Data = 0

Note If you remove a station that is associated with other stations, you may need to reassign features on those other stations as well.

Changing a Data Dial Code

You can only change a dial code to one that does not conflict with any existing number. For more information; see the "Dial Plan" description in the *System 25 Implementation Manual for R1V2.* To determine if a dial code exists, use the Search function described later in this chapter.

There are other circumstances that might prevent you from changing a dial code. For example, the existing station number might be part of a DGC group or call pickup group. Again, use the Search function to see if the dial code is a member of any group.

To change a data dial code

1 At the Main Menu prompt, enter *2.*

2 At **PDC =** , enter the DDC you want to change.

3 At **Action =** , enter *2.*

4 At **Data =** , enter the new dial code.

If you see **Error 7012,** that DDC may already be assigned.

Moving a Data Station

Use this procedure when you want to move a station to another port. Keep these considerations in mind when you move a station:

- The moved-to port must be vacant.
- The terminal types must be the same; that is, you can only move a station to the same physical type (e.g. data terminal to data terminal port).

(continued)

To move a data station to a new port

1 From the Main Menu prompt, enter *2.*

2 At **PDC = ,** enter the DDC of the station you want to move.

3 At **Action = ,** enter *0.*

The system displays the station's present port assignment at **Data =** CSSPP

4 Type *d,* and at **Data = ,** enter the new port assignment (CSSPP).

Assigning Class-of-Service Options

This section describes the class-of-service options — the calling restrictions and features — you can administer for data stations.

When assigning class-of-service options to a STARLAN CP, data port type code 1802, the default values are relevant for the first installed port on the board. **Unless otherwise noted, values assigned to these action items on any of the four ports will be copied to all four ports on the STARLAN CP. Therefore, default values listed below may not apply to a STARLAN CP port, if you have previously changed that value for any port on the board.**

To assign class of service to a data terminal

1 From the Main Menu prompt, enter *2.*

2 At **PDC = ,** enter the DDC of the terminal to which you want to assign class of service.

Note If you are administering a STARLAN CP, the DDC you assign to the first port will not be copied to the other ports on the board. You will need to administer each port separately for this action.

Assign Calling Restrictions

To restrict access to Central Office trunk pool

1 At **Action = ,** enter *3.*

2 At **Data = ,** enter *1* for yes or *0* for no. The default is **0.**

To restrict access to all other trunk pools

1 At **Action = ,** enter *4.*

2 At **Data = ,** enter *1* for yes or *0* for no. The default is **0.**

To set calls to this station to hunt to another station if this station is busy

1 At **Action = ,** enter *12.*

2 At **Data = ,** enter the DDC of the station to hunt to, or *0* for no hunt. The default is **0.**

Note If you are assigning this option to a STARLAN CP, the value you assign to the first port will not be copied to the other ports on the board. You need to administer each port separately for this action.

To restrict this station from making any outward calls

1 At **Action = ,** enter *13.*

2 At **Data = ,** enter *1* for yes or *0* for no. The default is **0.**

To assign a toll restriction class

1 At **Action = ,** enter *14.*

2 At **Data = ,** enter a toll restriction class number, 0-4, from the following list (the default is **0):**

0 - Not toll restricted

1 - Toll call allowed lists 1-4

2 - Toll call allowed lists 2-4

3 - Toll call allowed lists 3-4

4 - Toll call allowed list 4 (only)

To assign ARS Facility Restriction Level (FRL)

1 At **Action =** , enter *15.*

2 At **Data =** , enter the FRL number, 0-3, from the following list (the default is **3):**

Level	Allowed FRL Pools
0	0
1	0,1
2	0,1,2
3	0,1,2,3

To enter an associated voice/data station

1 At **Action =** , enter *21.*

2 At **Data =** , enter:

- the PDC or DDC of the associated station. See Action=22 next to restrict Third-Party Call Set-Up to just this associated station.
- *0* for none; either to allow this terminal to dial calls for *any* voice/data station, or to totally disable the feature for this terminal. See Action=22 next.

Note This action is not administrable for the STARLAN CP; the value is fixed at 0.

To restrict Third-Party Call Set-Up so the user can only establish calls for the associated station

1 At **Action =** , enter *22.*

2 At **Data =** , enter:

- *1* to restrict Third-Party Call Set-Up to just the associated station specified with Action=21, or to totally disable the feature for this terminal (if you entered Data=0 for Action= 21).
- *0* to allow this terminal to call *any* endpoint station, or to enable this feature for a STARLAN CP.

The default is **1.**

Set Baud Rate and Parity

Note For each data terminal, indicate all permissible operating speeds and any required parity.

To auto-adjust baud rate on call origination

1 At **Action =** , enter *61.* ‡

2 At **Data =** , enter *1* for yes or *0* for no.

The default is **1** for DLC and **0** for STARLAN CP.

Can this terminal operate at a low data rate?

1 At **Action =** , enter *62.* ‡

2 At **Data =** , enter *1* for yes or *0* for no. The default is **0.**

Can this terminal operate at a baud rate of 300 bps?

1 At **Action =** , enter *63.* ‡

2 At **Data =** , enter *1* for yes or *0* for no. The default is **1.**

Can this terminal operate at a baud rate of 1200 bps?

1 At **Action =** , enter *64.* ‡

2 At **Data =** , enter *1* for yes or *0* for no. The default is **1.**

Can this terminal operate at a baud rate of 2400 bps?

1 At **Action =** , enter *65.* ‡

2 At **Data =** , enter *1* for yes or *0* for no. The default is **1.**

---

‡ This is a Read-Only feature for the STARLAN CP

Can this terminal operate at a baud rate of 4800 bps?

1 At **Action = ,** enter *66.* ‡

2 At **Data = ,** enter *1* for yes or *0* for no. The default is **0.**

Can this terminal operate at a baud rate of 9600 bps?

1 At **Action = ,** enter *67.* ‡

2 At **Data = ,** enter *1* for yes or *0* for no. The default is **0.**

Can this terminal operate at a baud rate of 19200 bps?

1 At **Action = ,** enter *68.* ‡

2 At **Data = ,** enter *1* for yes or *0* for no. The default is **1.**

To assign the parity setting to correspond to the terminal's parity setting

Note This setting only specifies the parity the data port will use when sending text messages to the terminal. All data is transmitted eight bits per character.

1 At **Action = ,** enter *69.* ‡

2 At **Data = ,** enter a number that represents one of the following parity settings (the default is **2):**

0 = zero in the parity bit

1 = one in the parity bit

2 = even parity (may be used for none)

3 = odd parity

Assign Other Data Features

To enable keyboard dialing (also referred to as Command Mode)

1 At **Action = ,** enter *70.* ‡

2 At **Data = ,** enter *1* for yes or *0* for no. The default is **1.** Generally, set this to *1* for data terminals and *0* for hosts.

---

‡ This is a Read-Only feature for the STARLAN CP.

To allow the user to configure data port parameters

1 At **Action = ,** enter *71.* ‡

2 At **Data = ,** enter *1* for yes or *0* for no. The default is **1.** For a STARLAN CP, the default is **0.**

To permit mismatch of baud rate between this port and a called port

1 At **Action = ,** enter *72.* ‡

2 At **Data = ,** enter *1* for yes or *0* for no. The default is **0.**

To echo dialed characters during call setup

1 At **Action = ,** enter *73.* ‡

2 At **Data = ,** enter *1* for yes or *0* for no. The default is **1.**

To set your disconnect code

1 At **Action = ,** enter *74.* ‡

2 At **Data = ,** enter:

1 for two short BREAKS

0 for one long BREAK.

The default is **1.**

To display call progress text messages

1 At **Action = ,** enter *75.* ‡

2 At **Data = ,** enter *1* for yes or *0* for no. The default is **1.**

To display connection indication message

1 At **Action = ,** enter *77.* ‡

2 At **Data = ,** enter *1* for yes or *0* for no. The default is **1.**

‡ This is a Read-Only feature for the STARLAN CP.

Administering Attendant Equipment

System 25 can have two attendant consoles, either Switched Loop Attendant Consoles (SLACs) or Direct Trunk Attendant Consoles (DTACs). You cannot mix a DTAC and a SLAC in the same system; both consoles must be the same type.

If you have two attendant consoles, you will sometimes need to distinguish between the first and second consoles during administration. For administration purposes, the first attendant console you assign to the system (or the default attendant assignment) is known to the system as the "first" attendant. The second console you assign to the system is called the "second" attendant.

This section explains how to:

- Assign a SLAC
- Assign a second attendant console
- Move an attendant console
- Change the attendant's PDC
- Remove an attendant console
- Assign a selector console(s)
- Assign attendant Display IDs
- Assign attendant class-of-service parameters
- Assign attendant console options, including message-center-like operation

Default Attendant Assignments

DTAC By default, System 25 assigns a DTAC to the first ATL port in the system. That attendant console has a default PDC of 200. You can use that PDC, or you can change the PDC by following that procedure in this section. Users can also reach the attendant by dialing 0.

If you don't have an attendant console, you need to remove the default assignment before you can add a voice terminal to this port.

SLAC To install a SLAC, you need to remove the default attendant assignments for the DTAC first, then assign the new console and attendant PDC.

Direct Extension Selector (DXS) Console System 25 assigns by default a selector (DXS) console, associated with the first attendant console, to the second ATL port in the system. Therefore, if you do not have a DXS console, you need to remove the default assignments before you can reassign this port.

Assign a Switched Loop Attendant Console

To replace the default DTAC with a SLAC

1. From the Main Menu prompt, enter *1.*
2. At **Port = ,** enter the default port assignment for the attendant console (CSSPP).
3. At **Action = ,** enter *1.*
4. At **Data = ,** enter *0.*
5. You will see several warning messages for feature associations the attendant console has with other stations. Each message ends with **c to continue, any other key to abort.** Type *c* for each of these until you see the message,

   Action = 1 Data = 0
6. Type *d* and at **Data = ,** enter *310.*
7. Now reenter the attendant console PDC (since the default PDC [200] was removed in step 5 above). Type *a* and at **Action = ,** enter *2.*
8. At **Data = ,** enter the PDC for the attendant.

Assign a Second Attendant Console

To assign a second attendant console (DTAC or SLAC; same type as the first console) **[AG]**

1. From the Main menu, enter *1.*
2. At **Port = ,** enter the CSSPP for the second attendant console.
3. At **Action = ,** enter *1.*
4. At **Data = ,** enter
   - *309* for a DTAC
   - *310* for a SLAC
5. You see the prompt, **Action = 2.**
6. At **Data = ,** enter the PDC for the second attendant console.

Move an Attendant Console

To move an attendant console to a different port (DTAC or SLAC)

1 From the Main menu prompt, enter *2.*

2 At **PDC =** , enter the PDC for the attendant you want to move.

3 At **Action =** , enter *0*

4 At **Data =** , enter the new CSSPP for this attendant console.

Change an Attendant PDC

To change the attendant PDC

1 From the Main menu prompt, enter *1.*

2 At **Port =** , enter the CSSPP for the attendant console.

3 At **Action =** , enter *2.*

4 At **Data =** , enter the new PDC for the attendant.

Remove an Attendant Console

Note If you have two DTACs, you must remove the *second* console before you remove the first console. (If you need to check the attendant position number, see Action=60 under *Assigning Class-of-Service Options* for multiline voice stations.) SLACs can be removed in any order.

(continued)

To remove an attendant console

1 From the Main Menu prompt, enter *1.*

2 At **Port = ,** enter the CSSPP for the attendant console you're removing.

3 At **Action = ,** enter *1.*

4 At **Data = ,** enter *0.*

You will see a warning message for each type of association the attendant console has with another station, for example, for personal lines or Night Service coverage. To go on with the action, type *c* each time you see the system message, **c for continue, any other key for abort.**

You see the following display when the attendant console is removed:

Action = 1 Data = 0.

Note When you remove an attendant console, any Display ID associated with the attendant dial code will also be removed.

Assign a Direct Extension Selector Console(s)

By default, System 25 assigns a DXS console, associated with first attendant console, to the second port on the first ATL circuit pack. Follow the procedures in this section if you want to:

- Assign a DXS console to the second attendant console
- Move the DXS console to a port other than the default port
- Remove a DXS console

To assign a DXS console at the second attendant position

1 From the Main menu prompt, enter *1.*

2 At **Port = ,** enter the CSSPP for the second DXS console.

3 At **Action = ,** enter *1.*

4 At **Data = ,** enter *1602.*

To move the DXS console to a port other than the default port

1 From the Main menu prompt, enter *1.*

2 At **Port = ,** enter the CSSPP for the DXS console you want to move.

3 At **Action = ,** enter *1.*

4 At **Data = ,** enter *0* to remove the current DXS port assignment.

(continued)

5 Type *t* and at **Port =** , enter the new CSSPP for the DXS console.

6 At **Action =** , enter *1.*

7 At **Data =** , enter

- *1601* for the first DXS console
- *1602* for the second DXS console.

Note When you move a DXS console, System 25 automatically reassigns the group select buttons you had administered for the previous port assignment. You do not have to readminister those buttons at the new port assignment.

To remove a selector (DXS) console

1 From the Main menu prompt, enter *1.*

2 At **Port =** , enter the CSSPP for the selector console you want to remove.

3 At **Action =** , enter *1.*

4 At **Data =** , enter *0.*

Display Support

To assign or remove an attendant Display ID

1 At **Action =** , enter *90.*

2 At **Data =** , enter the Display ID (not more than 11 characters, enclosed in double quotes), or "" to remove the ID.

Assign Class-of-Service to an Attendant Console

This procedure is the same as for multiline voice stations. See the procedure for assigning class-of-service options to multiline voice stations in *Administering Voice Stations.*

Assign Attendant Options (DTAC and SLAC)

To assign options to an attendant console

From the Main menu prompt, enter *4.*
Assign options to the DTAC or SLAC as described below.

To assign the number of rings before unanswered calls extended by the attendant return to the console

1 At **Action = ,** enter *3.*

2 At **Data = ,** enter the number of rings (1-31). The default is **5.**

To allow DID calls coming in to unassigned DID numbers to ring at the attendant console

1 At **Action = ,** enter *4.*

2 At **Data = ,** enter *1* for yes or *0* for no. The default is **1@.**

To allow calls to FPDCs that are not logged in anywhere to ring at the attendant console

1 At **Action = ,** enter *5.*

2 At **Data = ,** enter *1* for yes or *0* for no. The default is **1@.**

To assign the number of second; before a *camped-on* call returns to the attendant console

1 At **Action = ,** enter *6.*

2 At **Data = ,** enter the number of seconds (1-120; 0 means camp-on is not allowed). The default is **30@.**

@ Strongly recommended this value be used

To assign the number of rings before unanswered DGC calls are sent to the delay announcement or a button appearance

1 At **Action = ,** enter *7.*

2 At **Data = ,** enter the number of rings, 1-31. The default is **5.**

To assign PDCs used to access calls parked by the attendant

Action = 11 with a default Data of **800** is the first of eight possible PDCs used to access a call on the DXS console which has been parked by the attendant. The remaining seven PDCs use Actions 12 through 18. Corresponding default PDCs for **Data =** are 801 through 807.

1 At **Action = ,** enter a number from 11-18.

2 At **Data = ,** enter a PDC or *0.*

Switched Loop Attendant Console Options

In addition to the preceding options, you can assign the following options to a SLAC:

To assign SLAC options

From the Main Menu prompt, enter *4.* Assign additional SLAC features as described below.

To set audible tone at expiration of hold timer

1 At **Action = ,** enter *81.*

2 At **Data = ,** enter *1* for yes or *0* for no (the default is **0.**

To assign the call coverage group for which the queue should act as coverage receiver

1 At **Action = ,** enter *82.*

2 At **Data = ,** enter the call coverage group number, 1-32, or *0* for none. The default is **0.**

To set the length of hold timer

1 At **Action = ,** enter *83.*

2 At **Data = ,** enter the number of seconds before the hold timer expires, 10-255. The default is **20.**

To assign a DID access code to the SLAC

1 At **Action =** , enter *84.*

2 At **Data =** , enter the DID access code people outside the system will use to call the attendant. (PDC format, no leading zeros, can't exist in system number plan prior to this).

To enable Automatic Hold

1 At **Action =** , enter *85.*

2 At **Data =** , enter *1* for yes or *0* for no. The default is **0.**

To set calls to return to the common queue after second hold timer expires

1 At **Action =** , enter *86.*

2 At **Data =** , enter *1* for yes or *0* for no. The default is **0.**

To specify the PDC of the station serving as coverage when the attendant is in POS BUSY mode (for single-SLAC systems only)

1 At **Action =** , enter *87.*

2 At **Data =** , enter the PDC of a station that is currently assigned to the system. The backup station should be a multiline voice terminal with a System Access - Originate Only button.

Note This PDC will be cleared if a second SLAC is added.

Should this SLAC receive a single-ring reminder whenever a call arrives in the queue? (Administer for each SLAC separately.)

1 From the Main menu prompt, enter *1.*

2 At **Action =** , enter *61.*

3 At **Data =** , enter *1* for yes or *0* for no.

The default is **1.**

SLAC Call-Type Options

Call-type options let you set priorities for the eight types of calls that come into the attendant console queue. By default, the system sets the priorities for all call types to four, as shown in Table 9-1.

TABLE 9-1 Standard Call Type Defaults

CALL TYPE	CODE	DEFAULT PRIORITY	DEFAULT ATTENDANT
Dial Attendant (0)	1	4	0
Call Following -- Logged into SLAC	2	4	NA
Non logged in FPDC	3	4	0
Unassigned DID	4	4	0
Attendant DID access code	5	4	0
PDC of Attendant	6	4	NA
Coverage	7	4	0
Returning	8	4	0

If you have a single-SLAC system, and want to change a default priority, see the section entitled *Setting Call-Type Options.*

If you have a dual-SLAC system, you can direct each type of call to attendant 1, attendant 2, or both attendants; as well as change call-type priorities. The standard set of default priorities and attendant specifications is shown in Table 9-1. You can, however, select an alternative set of defaults called "Message-Center-Like Call-Type Defaults" (Table 9-2). Consider each set of defaults and decide which is the best match to the call-type set-up you want for your system. Keep in mind that if you select message-center-like defaults, there is no single-step procedure for changing all call types to the standard defaults. You would have to administer each call type separately.

TABLE 9-2 Message-Center-Like Call-Type Defaults

CALL TYPE	CODE	DEFAULT PRIORITY	ASSIGNED ATTENDANT
Non logged in FPDC	3	4	(selected with Action 90)
Unassigned DID	4	4	"
Coverage	7	4	"
Returning	8	4	"
Dial Attendant (0)	1	4	(opposite of
Attendant DID Access Code	5	4	Action 90 selection)
Call Following -- Logged into SLAC	2	4	NA
PDC of Attendant	6	4	NA

Assigning Message-Center-Like Defaults

To specify which attendant console should have message-center-like operation (for dual-SLAC systems only)

1 At **Action = ,** enter *90.*

2 At **Data = ,** enter

- *1* for the first attendant
- *2* for the second attendant
- *0* for neither attendant

The default is **0.**

Setting Call-Type Options

Follow the procedures below for each call-type priority you want to change

> **Note** When you change a message-center-like default, the data value for Action=90 reverts to 0. The rest of the message-center-like values, the defaults (see Table 9-2) and those you've changed, stay the same. Do not respecify an attendant with Action=90 unless you want to revert to the original set of message-center-like defaults.

To specify a call-type priority

1 At **Action = ,** enter *91.*

2 At **Data = ,** enter the call-type code, 1-8. See Table 9-1.

3 Type *a,* and at **Action = ,** enter *92.*

4 At **Data = ,** enter the priority for this call type, 0-7:

- *0* = calls disallowed
- *1* = highest priority, with 2, 3,...6 following
- *7* = the lowest priority

The default is **4.**

(continued)

To specify which attendant should receive each call type (dual-SLAC systems only)

1 At **Action = ,** enter *91.*

2 At **Data = ,** enter the call-type code, 1-8 (see Table 9-1).

3 Type *a* and at **Action = ,** enter *93.*

4 At **Data = ,** enter the attendant position number, 0-2:

- *1* for the first attendant
- *2* for the second attendant
- *0* for either attendant

Note Call-type codes 2 and 6 are not administrable.

Administering Button Assignments

This section describes how to assign buttons to:

- Multiline sets
- Attendant consoles
- Selector consoles

> **Note** Some button assignment features (e. g., Auto Intercom and Station-to-Station Message Waiting) require administering buttons on more than one voice terminal. Such features become fully operable (and available for testing) only after you administer *both* voice terminals.

Assigning Features to Buttons

Assigning buttons to multiline sets and the attendant console(s) is done through Main menu item 2 (PDC). Minimally, you need to complete two actions, **Action = 100** and **Action = 101.** At **Action = 100,** you select the button you're assigning the feature to. At **Action = 101,** you identify the feature you're assigning. In some cases, you need to enter additional Action/Data information to complete a button assignment.

Default Button Assignments

AT&T System 25 provides default button assignments. These assignments are identified on the button-assignment tables on the following pages.

DTAC

The default button assignments shown for the DTAC are for the first console. If you move the first attendant console to another port, the button assignments stay the same. When you assign a second DTAC or if you remove then readminister the first DTAC, the default button assignments are the same except that trunk terminations, pooled facilities, and night service do not have default button assignments (the buttons are blank).

SLAC

The default button assignments shown for the SLAC apply to both the first and second consoles.

MET Sets

For button assignment purposes, the MET set is treated as a 5-button MERLIN CS set. The top five buttons are numbered 7 through 11. Even though the MET set has ten buttons, only three of these buttons are assignable for System 25. The remaining buttons are fixed and cannot be assigned. See the table "MET Set Button Defaults" (on the following pages) for the button functions.

Selector Console (DXS)

The selector console (DXS) has seven group select buttons that can be assigned, or "programmed." (It also has a non-programmable test button located at the right-hand end of the button row.) Each of the programmable buttons is a "base" number. For example, if the first programmable DXS group select button is set to "10••," the attendant can press this button to access PDCs 1000 through 1099. If the second button is set to "2••," the attendant can access the PDCs 200 through 299, etc.. Default assignments are shown in Table 10-5.

First and Second DXS Consoles

If you have two DXS consoles, they will always have identical assignments. If you change a button assignment on either DXS console, the corresponding button is automatically reassigned on the other DXS console.

Button Assignment Tables

TABLE 10-1 Multi line Set Button Defaults

7 - SYS ACCESS†	12 - FLEX DSS	17 - FLEX DSS	29 - FLEX DSS
8 - SYS ACCESS†	13 - ACCT ENTRY	18 - FLEX DSS	30 - FLEX DSS
9 - REP DIAL	14 - SEND ALL CALLS	19 - FLEX DSS	31 - FLEX DSS
10 - REP DIAL	15 - FLEX DSS	20 - FLEX DSS	32 - FLEX DSS
11 - LAST # DIALED	16 - FLEX DSS	21 - FLEX DSS	33 - FLEX DSS
		22 - FLEX DSS	34 - FLEX DSS
		23 - FLEX DSS	35 - FLEX DSS
		24 - FLEX DSS	36 - FLEX DSS
		25 - FLEX DSS	37 - FLEX DSS
		26 - FLEX DSS	38 - FLEX DSS
		27 - FLEX DSS	39 - FLEX DSS
		28 - FLEX DSS	40 - FLEX DSS

TABLE 10-2 Switched Loop Attendant Console Button Defaults (Type 310)

7 - LOOP†	12 - ALARM†	17 - LOCAL†	29 - SCROLL†
8 - LOOP†	13 - POS BUSY	18 - FLEX DSS	30 - FORCED RELEASE†
9 - LOOP†	14 - FLEX DSS	19 - FLEX DSS	31 - LAST # DIALED
10 - LOOP†	15 - SOURCE†	20 - FLEX DSS	32 - FLEX DSS
11 - LOOP†	16 - DESTINATION	21 - FLEX DSS	33 - FLEX DSS
		22 - FLEX DSS	34 - FLEX DSS
		23 - FLEX DSS	35 - FLEX DSS
		24 - FLEX DSS	36 - FLEX DSS
		25 - FLEX DSS	37 - FLEX DSS
		26 - CANCEL†	38 - JOIN†
		27 - START†	39 - RELEASE†
		28 - ATT MSG†	40 - INSPECT†

† These buttons/features cannot be reassigned

TABLE 10-3 Direct Trunk Attendant Console (Cold Start Defaults)

7 - SYS ACCESS†	12 - FLEX DSS	17 - Trunk 0001	29 - Trunk 0009
8 - SYS ACCESS†	13 - ACCT ENTRY	18 - Trunk 0002	30 - Trunk 0010
9 - REP DIAL	14 - ATT MSG	19 - Trunk 0003	31 - Trunk 0011
10 - REP DIAL	15 - NIGHT	20 - Trunk 0004	32 - Trunk 0012
11 - LAST # DIALED	16 - ALARM†	21 - Trunk 0005	33 - Trunk 0013
		22 - Trunk 0006	34 - Trunk 0014
		23 - Trunk 0007	35 - Trunk 0015
		24 - Trunk 0008	36 - Pool 100
		25 - COVER-GRP	37- Pool 101
		26 - RTN-DA†	38 - Pool 102
		27 - RTN-BUSY†	39 - CANCEL†
		28 - START†	40 - RELEASE†

TABLE 10-4 Direct Trunk Attendant Console (Administration-installed defaults)

7 - SYS ACCESS†	12 - FLEX DSS	17-0	29-0
8 - SYS ACCESS†	13 - ACCT ENTRY	18-0	30-0
9 - REP DIAL	14 - ATT MSG	19-0	31-0
10 - REP DIAL	15-0	20-0	32-0
11 - LAST # DIALED	16 - ALARM†	21-0	33-0
		22-0	34-0
		23-0	35-0
		24-0	36-0
		25 - COVER-GRP	37-0
		26 - RTN-DA†	38-0
		27 - RTN-BUSY†	39 - CANCEL†
		28 - START†	40 - RELEASE†

† These buttons/features cannot be reassigned

TABLE 10-5 DXS Console Button Defaults

2..	3..	4..	5..	6..	7..	8..	TEST†

TABLE 10-6 MET Set Button Defaults

7 - SYS ACCESS†
8 - SYS ACCESS†
9 - REP DIAL
10 - REP DIAL
11 - LAST # DIALED
Message†
Drop†
Conference†
Transfer†
Hold†

† These buttons/features cannot be reassigned.

Assigning Buttons to Multiline Terminals and Attendant Consoles

To assign a feature to a button on a multiline voice terminal or attendant console, begin with this step

1 From the Main menu prompt, enter *2.*

2 At **PDC = ,** enter the PDC of the voice terminal or attendant console.

3 At **Action = ,** enter *100.*

4 At **Data = ,** enter the button number (from the preceding tables) you're assigning the feature to.

To complete a button assignment, find the feature you want to assign from the list below. Enter the button function number after **Action = 101.** Any additional required actions are described with that feature. Repeat this procedure, beginning with **Action = 100,** for each button you want to assign to the voice terminal.

To assign System Access (Originate only) (SYS ACC-O)

1 At **Action = ,** enter *101.*

2 At **Data = ,** enter *1.* †

To assign Direct Facility Access (FACILITY) **[AG]**

1 At **Action = ,** enter *101.*

2 At **Data = ,** enter *2.*

3 You see the prompt, **Action = 102.**

4 At **Data = ,** enter the facility access code.

To assign a personal line (PERS LINE) **[AG]**

1 At **Action = ,** enter *101.*

2 At **Data = ,** enter *3.* †

3 You see the prompt, **Action = 102.**

4 At **Data = ,** enter the trunk number.

(continued)

† This feature cannot be administered on a SLAC.

5 You see the prompt, **Action = 103.**

6 Is this station the "owner" of this line?
At **Data =** , enter *1* for yes or *0* for no.

7 You see the prompt, **Action = 104.**

8 At **Data =** , enter *1* to enable ringing at this set, *0* otherwise.

To assign Exclusion (EXCLUSION)

1 At **Action =** , enter *101.*

2 At **Data =** , enter *4.*

To assign Station-to-Station Messaging (MSG WAIT) **[AG]** (This is a two-station feature.)

1 At **Action =** , enter *101.*

2 At **Data =** , enter *5.*

3 You see the prompt, **Action = 102.**

4 At **Data =** , enter the PDC of the other station.

5 You see the prompt, **Action = 103.**

6 At **Data =** , enter the (MSG WAIT) button number at the other station.

To assign Call Coverage Message Waiting (COVER MSG)

1 At **Action =** , enter *101.*

2 At **Data =** , enter *6.* †

To assign Manual Signaling (SIGNAL) **[AG]** (This is a two-station feature.)

1 At **Action =** , enter *101.*

2 At **Data =** , enter *7.*

3 You see the prompt, **Action = 102.**

4 At **Data =** , enter the signaled station's PDC.

---

† This feature cannot be administered on a SLAC.

To assign Automatic Intercom (AUTO ICOM) **[AG]** (This is a two-station feature.)

1 At **Action = ,** enter *101.*

2 At **Data = ,** enter *8.*

3 You see the prompt, **Action = 102.**

4 At **Data = ,** enter the called station's PDC.

5 You see the prompt, **Action = 103.**

6 At **Data = ,** enter the called station's Automatic Intercom button number.

To assign a Data button **[AG]**

1 At **Action = ,** enter *101.*

2 At **Data = ,** enter *9.*

3 You see the prompt, **Action = 102.**

4 At **Data = ,** enter the DDC of the associated data station.

To assign a Call Coverage Group "Receiver" button (COVER-GRP) **[AG]**

1 At **Action = ,** enter *101.*

2 At **Data = ,** enter *10.* †

3 You see the prompt, **Action = 102.**

4 At **Data = ,** enter a coverage group number (1-32).

5 You see the prompt, **Action = 103.**

6 At **Data = ,** enter *1* to enable ringing (strongly suggested), *0* otherwise.

To assign Send All Calls (SEND ALL CALLS) **[AG]**

1 At **Action = ,** enter *101.*

2 At **Data = ,** enter *11.* †

3 You see the prompt, **Action = 102.**

4 At **Data = ,** enter *1* to enable single ring reminder, *0* otherwise.

---

† This feature is not administrable on a SLAC.

To assign Call Coverage-Individual (COVER-IND) **[AG]**

1 At **Action =** , enter *101.*

2 At **Data =** , enter *12.* †

3 You see the prompt, **Action = 102.**

4 At **Data =** , enter the covered station's PDC.

5 You see the prompt, **Action = 103.**

6 At **Data =** , enter *1* to enable ringing (strongly recommended), *0* otherwise.

Note The SLAC cannot be assigned as the covered PDC for individual call coverage.

To assign Direct Station Selection (flexible) (FLEX DSS)

1 At **Action =** , enter *101.*

2 At **Data =** , enter *13.*

To assign Direct Station Selection (not flexible) (DSS) **[AG]**

1 At **Action =** , enter *101.*

2 At **Data =** , enter *14.*

3 You see the prompt, **Action = 102.**

4 At **Data =** , enter the called PDC.

To assign Account Code Entry (ACCT ENTRY)

1 At **Action =** , enter *101.*

2 At **Data =** , enter *15.*

To assign Repertory Dialing (REP DIAL)

1 At **Action =** , enter *101.*

2 At **Data =** , enter *20.*

---

† This feature cannot be administered on a SLAC.

To assign an AUTO ANS button

1 At **Action = ,** enter *101.*

2 At **Data = ,** enter *21.*

To assign Last Number Dialed (LAST # DIALED)

1 At **Action = ,** enter *101.*

2 At **Data = ,** enter *35.*

Assigning Attendant-Console-Specific Buttons

Button Default Tables for Multiline Set, Primary Attendant Console, Secondary Console, and DXS Console appear earlier in this chapter. Table 16-3 in *Command Reference* summarizes button codes and associated translation items. Most button assignments for the Attendant Console are the same as for multiline terminals (see previous section). Some buttons may only be assigned to the Attendant Console; these are listed below. Note that buttons marked with a † in the default tables (at the beginning of this chapter) cannot be changed.

To assign attendant-console-specific features to buttons

1 From the Main menu prompt, enter *2.*

2 At **PDC = ,** enter the attendant console PDC.

3 At **Action = ,** enter *100.*

4 At **Data = ,** enter the button number.

To complete a button assignment, find the feature you want to assign from the list below. Enter the button function number after the **Action = 101** prompt. Additional actions, if any, are described. Repeat this procedure (beginning with **Action = 100)** for each button you want to assign.

To assign Night Service (NIGHT) **[AG]**

1 At **Action = ,** enter *101.*

2 At **Data = ,** enter *17.*

3 You see the prompt, **Action = 102.**

4 At **Data = ,** enter the PDC for the Night Service access code. The default is **810.**

To assign Position Busy (POS BUSY)

Note For a DTAC, this feature can only be administered when there are two attendant consoles. For a SLAC, this feature can be administered when there are one or two consoles. For a system with only one SLAC, see the procedure for assigning a covering station PDC for the attendant (Action= 87) under *Assign Attendant Options.*

1 At **Action = ,** enter *101.*

2 At **Data = ,** enter *18.*

To assign Attendant Message Waiting (ATT MSG)

1 At **Action = ,** enter *101*

2 At **Data = ,** enter *19.* †

Assigning Selector (DXS) Console Buttons

See the introduction to *Administering Button Assignments* for a description of button assignments for the Selector (DXS) Console, defaults, and a brief explanation of the button functions.

To assign DXS console buttons, begin with this step

1 From the Main menu prompt, enter *1.*

2 At **Port = ,** enter the DXS console location (CSSPP).

To assign PDC ranges to the DXS console group select buttons

Note There are seven possible DXS console PDC ranges the attendant can access with group select buttons. **Action = 21** assigns a PDC hundreds group to the first DXS group select button. **Action = 22** does the same for the second group select button. You assign the additional PDC ranges using the numbers 23 through 27 at **Action = .**

1 At **Action = ,** enter a number, 21-27.

2 At **Data = ,** enter the hundreds group followed by two periods. The allowable range is from . . (PDCS from 1 through 99) through 99.. (PDCS from 9900 through 9999). The defaults are 2.. through 8.. .

† This feature is only administrable for the DTAC.

Administering Direct Group Calling (DGC) Groups

This section tells you how to add DGC groups, assign access codes to DGC groups, and add and remove DGC group members. Keep the following considerations in mind as you administer DGC groups:

- You can assign a maximum of 32 DGC groups; therefore, *target* values (i.e., your response to the "DGC =" prompt) will be a number from 1 through 32.
- Each group can have a maximum of 10 members
- A station can be a member of only one DGC group. If you attempt to add to a DGC group a station already assigned to another DGC group, the system generates a warning message. If you enter *c* to continue at this point, the system generates another warning, **NO MORE BLOCKS.** If you really want to remove the member from its current group and add it to the new target group, you enter another *c.* If you do *not* want to make this change, just press any other key to abort.
- If a DGC group has no associated delay announcement, it is useful to administer Personal Line appearances for the trunks assigned to the DGC group. Assign the Personal Line appearances to a voice terminal providing coverage for the group, for example, to a secretary or principal to the group. (Program these line appearances to ring.) Then, if all stations in the group are busy, incoming DGC calls will ring on these buttons, providing an overload indication.

To assign a DGC group

1 From the Main menu prompt, enter *6.*

2 At **DGC = ,** enter the DGC group number, from 1 through 32. Continue with the procedures below to administer the DGC group.

Assign a DGC group access code

Using **Action = 1 ,** you can determine the access code of an existing DGC group or assign an access code to a new group. If you assign 0 to an existing group, the group will be removed.

1 At **Action = ,** enter *1.*

2 At **Data = ,** enter the DGC access code, or *0.*

Note When you remove or change a DGC access code, the display ID is also removed.

To disable DGC queuing

1 At **Action =** , enter *2.*

2 At **Data =** , enter *1* for yes or *0* for no. The default is **0.**

To list stations in a DGC group

1 At **Action =** , enter *11.*

2 To continue the list, enter *c* PDC or DDC is printed.

To add a station to a DGC group

1 At **Action =** , enter *12*

2 At **Data =** , enter the PDC or DDC of the station you're adding to the group. The maximum is 10 stations per group.

To delete a DGC group member

1 At **Action =** , enter *13.*

2 At **Data =** , enter the PDC or DDC of the station you're deleting.

Display Support

To assign or remove a DGC access code display ID

1 At **Action =** , enter *14.*

2 At **Data =** , enter the DGC access code name (up to 11 characters, enclosed in double quotes), or "" to remove a name.

Administering Automatic Route Selection (ARS)

The procedures in this section show you how to define ARS patterns and lists. If you do not define these patterns and lists, then ARS calls will be routed over the local CO facility. For more information about making ARS choices, see the Reference Manual.

To administer ARS, begin with this step

1 From the Main Menu prompt, enter *11.*

Assign ARS Access Code

Note This dial code accesses ARS routing.

1 At **Action = ,** enter *401.*

2 At **Data = ,** enter the ARS access code. The default is **9.**

Assign ARS pattern for **international** dialing

1 At **Action = ,** enter *402.*

2 At **Data = ,** enter the routing pattern to be used for international dialing. The default is 0 (none).

Assign emergency telephone numbers

Up to three seven-digit emergency telephone numbers (ETN) may be assigned. ARS calls to these numbers are routed over the local CO facility. No restrictions of any kind are enforced.

1 At **Action = ,** enter *601, 602,* or *603.*

2 At **Data = ,** enter the ETN.

ARS Patterns

The next set of procedures tells you how to assign routing patterns for "A" and "B" subpatterns. Each subpattern consists of a set of routes and associated Facility Restriction Levels (FRLs) plus DDD overflow authorization with an associated FRL. The information required for subpatterns A and B is similar except that start times and stop times are associated only with A subpatterns.

> **Note** If you *change* a routing pattern, the associated route FRL does not remain at its previous value, but reverts to 0. Therefore, you need to reenter the FRL of any route you change.

Define Subpattern A

Actions 100, 101, 102, and 110 through 141 define the routing patterns (1 through 8) for the "A" (prime time) subpatterns.

- Action 100 defines the pattern number.
- Action 101 sets the start time for subpattern A.
- Action 102 sets the stop time for subpattern A.
- Each pattern, 1 through 8, has its own start and stop times,

The following sequence of Action=/Data= pairs can be administered eight times to establish eight subpatterns (1A through 8A).

To assign a Pattern Number

1 At **Action = ,** enter *100.*

2 At **Data = ,** enter a pattern number, 1-8.

To assign a start time for subpattern A

1 At **Action = ,** enter *101.* †

2 At **Data = ,** enter the start time in the form HOUR, MINUTES (HHMM).

---

† **Action = 100** must be entered first.

To assign a stop time for subpattern A	**1** At **Action =** , enter *102.* † **2** At **Data =** , enter the stop time in the form HOUR, MINUTES (HHMM).
To assign Route 1 for Subpattern A	**1** At **Action =** , enter *110.* † **2** At **Data =** , enter a Facility Access Code [FAC] or Virtual Facility Code [VFC].
To assign Facility Restriction Level (FRL) for Subpattern A, Route 1:	**1** At **Action =** , enter *111.* † **2** At **Data =** , enter an FRL from 0-3.
To assign Route 2 for Subpattern A	**1** At **Action =** , enter *120.* † **2** At **Data =** , enter an FAC or VFC.
To assign an FRL for Subpattern A, Route 2	**1** At **Action =** , enter *121.* † **2** At **Data =** , enter an FRL, 0-3.
To assign Route 3 for Subpattern A	**1** At **Action =** , enter *130.* † **2** At **Data =** , enter an FAC or VFC.
To assign an FRL for Subpattern A, Route 3:	**1** At **Action =** , enter *131.* † **2** At **Data =** , enter an FRL.

† **Action = 100** must be entered first.

To allow Subpattern A to overflow to DDD

1 At **Action =** , enter *140.* †

2 At **Data =** , enter *1* for yes or *0* for no, The default is **0,**

To assign an FRL for DDD overflow:

1 At **Action =** , enter *141.* †

2 At **Data =** , enter an FRL, 0-3.

Define Subpattern B

Actions 200 and 210 through 241 define the routing patterns (1 through 8) for the "B" subpatterns. These patterns are analogous to those assigned in the preceding section.

To enter a Pattern Number

1 At **Action =** , enter a Pattern Number, 1-8.

To assign Route 1 for Subpattern B

1 At **Action =** , enter *210.* ‡

2 At **Data =** , enter an FAC or VFC.

To assign an FRL for Subpattern B, Route 1:

1 At **Action =** , enter *211.* ‡

2 At **Data =** , enter an FRL, 0-3.

To assign Route 2 for Subpattern B

1 At **Action =** , enter *220.* ‡

2 At **Data =** , enter an FAC or VFC.

---

† **Action = 100** must be entered first.
‡ **Action = 200** must be entered first.

To assign an FRL for Subpattern B, Route 2:

1 At **Action = ,** enter *221.* †

2 At **Data = ,** enter an FRL, 0-3.

To assign Route 3 for Subpattern B

1 At **Action = ,** enter *230.* †

2 At **Data = ,** enter an FAC or VFC.

To assign an FRL for Subpattern B, Route 3:

1 At **Action = ,** enter *231.* †

2 At **Data = ,** enter an FRL, 0-3

To allow Subpattern B to overflow to DDD

1 At **Action = ,** enter *240.* †

2 At **Data = ,** enter *1* for yes or *0* for no. The default is **0.**

To assign an FRL for DDD overflow:

1 At **Action = ,** enter *241.* †

2 At **Data = ,** enter an FRL, 0-3.

Remaining ARS Patterns

Now go back and define ARS patterns 2 through 8 following the above procedures.

† **Action = 200** must be entered first.

Area Code Routing Table

All North American area codes are assigned to routing pattern 1 by default, except area codes N00 and N10, which default to 0.

To assign a different routing pattern to an area code **[AG]**

1 At **Action = ,** enter *300.*

2 At **Data = ,** enter the area code.

3 You see the prompt, **Action = 301.**

4 At **Data = ,** enter a routing pattern (1-8), or *0* for no pattern (CO routing). The default is **1.**

Note The Home Area Code routing pattern is assigned by first administering the Action=30/Data=[Area Code] under Main Menu item 4 (System) and then administering the Action=300 Data=[Home Area Code] and Action=301 Data=[Pattern Number] items.

Home Area Code Exception List

Note There can be as many as four exception lists. The maximum number of entries for all lists combined is 800. You can have up to eight seven-digit telephone numbers in these Home Area Code (HAC) Exception Lists.

Enter Home Area Code Exception List Number

1 At **Action = ,** enter *500.*

2 At **Data = ,** enter a list number (1-4).

Enter ARS Routing Pattern associated with this HAC exception list.

1 At **Action = ,** enter *501.* ‡

2 At **Data = ,** enter a pattern number (1-8).

† **Action = 500** must be entered first.

Add Central Office Code to this HAC exception list.	**1** At **Action = ,** enter *512.* ‡ **2** At **Data = ,** enter a three-digit Central Office Code (NXX).
Remove Central Office Code from this HAC exception list.	**1** At **Action = ,** enter *513.* ‡ **2** At **Data = ,** enter a three-digit Central Office Code (NXX)
Display Central Office Codes on this HAC exception list.	**1** At **Action = ,** enter *511.* ‡ **2** Enter *c* to continue the list.
Add a (7-digit) Telephone Number to this HAC exception list.	**Note** Only eight of these numbers can appear within the four lists. The wildcard character (•) can be used as the last three digits of these numbers (e.g., NXX-YYY•, NXX-YY••, or NXX-Y•••). **1** At **Action = ,** enter *522.* ‡ **2** At **Data = ,** enter the telephone number.
Remove a telephone number from this HAC exception list.	**1** At **Action = ,** enter *523.* ‡ **2** At **Data = ,** enter a seven-digit telephone number that matches exactly a telephone number in the list. The wildcard character (•) can be used as the last three digits in these numbers (e.g., NXX-YYY•, NXX-YY••, or NXX-Y•••).
Display telephone numbers on this HAC exception list.	**1** At **Action =** , enter *521.* ‡ **2** Enter *c* to continue list.

‡ **Action = 500** must be entered first.

Other Area Codes Exception List

Enter a Pattern Number to handle this Other Area Codes Exception Telephone Number.

1 At **Action =** , enter *800.*

2 At **Data =** , enter a pattern number (1-8).

Add a number to the Other Area Codes Exception List.

1 At **Action =** , enter *822.* †

2 At **Data =** , enter the first 8 digits of a 10-digit telephone number. The wildcard character (•) can be used as the last two digit positions (e. g., NPA-NXX-YY, NPA-NXX-Y•, or NPA-NXX-••).

Remove a number from the Other Area Codes Exception List.

1 At **Action =** , enter *823.* †

2 At **Data =** , enter the telephone number. The wildcard character (•) can be used in the last two digit positions.

Display entries in Other Area Codes Exception List.

1 At **Action =** , enter *821.* †

2 Enter *c* to continue list.

ARS Digit Translation Tables

This series of action/data pairs specifies digits to be removed from or prefixed to the dialed number prior to sending the number over the selected facility. Each facility (physical or virtual) specified in an ARS routing pattern has its own associated digit translation table.

Enter Facility Access Code or Virtual Facility Code

1 At **Action =** , enter *700.*

2 At **Data =** , enter the route (an FAC or VFC) for which digit translation is being specified.

---

† **Action = 800** must be entered first.

Assign "associated" Area Code.	**1** At **Action = ,** enter *701.* ‡ **2** At **Data = ,** enter the associated area code.
How many leading digits should be removed for calls to the associated Area Code?	**1** At **Action = ,** enter *702.* ‡ **2** At **Data = ,** enter the number of digits (0-10).
Specify digits to be prefixed, after deleting digits as specified by Action 702 above, for calls to the associated Area Code.	**1** At **Action = ,** enter *703.* ‡ **2** At **Data = ,** enter the digits to be prefixed (maximum of 5).
How many leading digits should be removed for calls *not* to the associated Area Code?	**1** At **Action = ,** enter *704.* ‡ **2** At **Data = ,** enter the number of digits (0-10).
Specify digits to be prefixed, after deleting digits as specified by Action 704 above, for calls *not* within the associated Area Code.	**1** At **Action = ,** enter *705.* ‡ **2** At **Data = ,** enter the digits to be prefixed (maximum of 5).

‡ **Action = 700** must be entered first.

Administering Tape Save/Restore Operations

If you do not have a digital tape unit, you should skip this chapter.

The procedures described below assume that your digital tape unit is correctly connected and turned on. See the *System 25 Installation and Test Manual* for further information. It is also assumed that you will use a high quality audio cassette tape. It is important that you make two backup tapes and that you verify each of those tapes every time you save translations.

Keep the following considerations in mind when performing tape save/restore operations:

- Be sure connector "3" is assigned to the "Save Restore Tape" capability (see *Administering RS232 Parameters* to reassign the connector).
- Be sure the tape deck is plugged into connector "3" of the cable.
- To save (Action=1), you must press the PLAY and RECORD buttons.
- To verify (Action=2) and restore (Action=3), you must press the PLAY button,

Caution Action=3 will interrupt phone service for about five minutes.

Save/Restore

It is most unlikely that your System 25 would encounter a major catastrophe in which all your translations were lost. However, if such an event were to occur, a backup tape would allow you to restore system translations (the most current you have saved) in about five minutes. It takes only a few minutes to make a backup tape. It's important that you keep at least three tapes of past translations, updating the two oldest tapes during system save procedures. This way, if something goes wrong during a save procedure and both tapes of the current system translations are damaged, you'll still have a previous version on tape to use as a backup.

Verify

You should always verify a completed tape save operation. Successful completion of the Verify command assures you that what you have saved on tape matches exactly the translations in your system.

Using the Digital Tape Unit

To insert the cassette and rewind the tape

1 Press the STOP/EJECT button on the tape unit. The plastic cover over the cassette well pops up.

2 Insert the cassette into the cassette well (Side A up) so that the exposed tape faces the tape unit's buttons. Press the cassette down until it snaps into place.

3 Close the plastic cover.

(continued)

4 Press the REWIND button, and wait for the tape unit to completely rewind tape. [You should do this before beginning any save, verify, or restore operation so you know that you are at the beginning of the tape.]

You do not have to be concerned about the clear "leader" material at the beginning and end of the tape. The system will start the tape at the correct point.

5 Press the STOP/EJECT button to disengage the REWIND button.

Save Your Translations

To begin

1 Insert cassette and rewind the tape.

2 Press the RECORD and PLAY buttons simultaneously. [The tape unit does not begin to operate yet.]

To Save

1 From the Main Menu prompt, enter *9* to select Save/Restore.

2 At **Action = ,** enter *1.* You see:

Save/Restore: Action = 1 Data =

3 Type *d* and at **Data =** enter *1.* You see this warning message:

W24: YOU ARE ABOUT TO START A TAPE SAVE
c for continue, any other key for abort

4 Type *c.* The line now reads:

Save/Restore: Action = 1 Data = 1

The tape unit automatically starts the Save procedure.

Caution: System 25 does not know whether your tape unit is actually running at this point. For example, if you forgot to press the RECORD button along with the PLAY button, the system cannot tell you that. You might only discover this problem by using the Verify function.

When the save is complete, the tape unit stops.

(continued)

If the save is successful, the SAT displays:

SAVE COMPLETED SUCCESSFULLY

5 Press the STOP/EJECT button on the tape unit.

6 Rewind the tape.

7 Follow the Verify procedure below.

To troubleshoot

If the Save is not successful, the SAT displays:

SAVE FAILED

1 Rewind the tape and repeat the Save procedure.

2 If this save is successful, follow steps 5 through 7 above.

3 If this save is not successful, contact your AT&T service representative.

Verify the Saved Translations

To begin

1 Insert cassette and rewind the tape (as required).

2 Press the PLAY button on the tape unit. (The tape unit does not begin to operate yet.)

To Verify

1 From the Main Menu prompt, enter *9* to select Save/Restore.

2 At **Action = ,** enter *2.* You see:

Save/Restore: Action = 2 Data =

3 Type *d* and at **Data = ,** enter *1.*

You see this warning message:

W25: YOU ARE ABOUT TO START A TAPE VERIFY
c for continue, any other key to abort

4 Type *c.* The entire line now reads:

Save/Restore: Action = 2 Data = 1

The tape unit automatically starts the Verify procedure.

The tape unit stops when the verification is complete.

If the verification is successful, the SAT displays:

VERIFY COMPLETED SUCCESSFULLY

(continued)

5 Rewind the tape.

6 Label the tape with the date and time. Store the tape in a safe place.

If the verification is unsuccessful, the SAT displays:

VERIFY FAILED

To troubleshoot

1 Rewind the tape and repeat the verification procedure.

2 If this verification is successful, follow steps 5 and 6 above.

3 If the verification fails a second time, save a new tape following the above procedures, and contact your AT&T service representative.

Restore the System Translations from a Backup Tape

Note This procedure will interrupt your phone service for about five minutes. Any calls in progress will be dropped!

To begin

1 Insert cassette and rewind the tape (as required).

2 Press the PLAY button on the tape unit. (The tape unit does not begin to operate yet.)

To Restore

1 From the Main Menu prompt, enter *9* to select Save/Restore.

2 At **Action =** , enter *3.* You see:

Save/Restore: Action = 3 Data =

3 Type *d* and at **Data =** , enter *1.* You see the message:

W26: YOU ARE ABOUT TO START A TAPE RESTORE
c for continue, any other key to abort

(continued)

4 Type *c.*

The line now reads:

Save/Restore: Action = 3 Data = 1

The tape unit automatically starts the Restore procedure at this point and stops when the restoration is complete.

If the restoration is successful, the SAT displays:

INITIATED WARM START

Following this procedure, the system automatically "warm starts" to initialize the system's ports with the options read into the system.

5 Rewind the tape.

6 Store the tape in a safe place.

If the restoration is not successful, the SAT displays:

RESTORE FAILED

To troubleshoot

1 Rewind the tape and perform the restoration procedure again. If the restoration fails a second time, get a blank tape. Using this tape, perform the Save and Verify procedures on the system's current translations. Then, perform the Restore procedure using this test tape.

2 If the restoration is successful using the test tape, your current system translation tape could be damaged. Perform the Restore procedure using a *previous* backup tape, or contact your AT&T service representative.

3 If this restoration is not successful, *do not* use your backup system translation tape. (Your digital tape unit may be malfunctioning. If that is the case, it could destroy the backup tape as well.) Contact your AT&T service representative.

System Searches

This section describes how to search for various system information.

Most searches require a minimum of two levels of search specification. The first level identifies what we might call the *kind* of search you want to begin (e.g., Search for Call Coverage Senders for a particular group). The second level generally identifies the specific search object (e.g., the Call Coverage Group). If there is a third level, it further defines the range of the search.

Note that stations are identified by their PDC, DDC, or Display ID. For example, if you wanted to search for the Call Coverage Senders for a particular group, your search session might run like this:

Example:

1 From the Main Menu prompt, enter *8.*

When the search is defined, type *C* to search.

2 At Action = , enter *1.*

3 At Data = , enter *1* for call coverage sender search.

To identify a search group:

1 At **Action = ,** enter *2.*

2 At **Data = ,** enter *5.*

3 Enter *C* to begin the search.

Note Whenever you select **SEARCH** from the Main Menu, you will see the message:

When search is defined type c to search.

You continue to enter *c* until you see **Data = 0** which indicates you have found all the searched-for items.

To search for an item

After entering *8* at the Main Menu, locate the kind of information you want to search for from the list below and complete the procedure.

PDCs of Group Call Coverage Sender Stations

1 At **Action =** , enter *1.*

2 At **Data =** , enter *1*

3 At **Action =** , enter *2.*

4 At **Data =** , enter the call coverage group number, from 1-32, or 101-132 for a DGC coverage group number.

5 Enter *C* to initiate the search — **here and in the remainder of search functions.**

PDCs of Stations in a Specified Call Coverage Receiver Group

1 At **Action =** , enter *1.*

2 At **Data =** , enter *2.*

3 At **Action =** , enter *2.*

4 At **Data =** , enter the call coverage group number, from 1 through 32.

If you want to list the stations in a DGC call coverage receiver group *(receiver group number* 101-132), see the search item for "PDCs of Stations in a DGC Group," where you will enter the *actual* DGC group number, 1-32.

PDCs of Call Coverage (Individual) Receiver Stations

1 At **Action =** , enter *1.*

2 At **Data =** , enter *3.*

3 At **Action =** , enter *2.*

4 At **Data =** , enter the covered station's PDC.

PDCs of Stations having an Auto-Intercom, Message Waiting, Manual Signaling, or Data Button

This search identifies stations that have buttons pointing to the specified station.

1 At **Action =** , enter *1.*

2 At **Data =** , enter *4.*

3 At **Action =** , enter *2.*

4 At **Data =** , enter the pointed-to station's PDC.

PDCs of Stations that Hunt to a Specified Station

1 At **Action =** , enter *1.*

2 At **Data =** , enter *5.*

3 At **Action =** , enter *2.*

4 At **Data =** , enter the hunted-to station's PDC.

DGC Group Number for a Specified Station

This search produces the DGC group number to which the specified station belongs.

1 At **Action =** , enter *1*

2 At **Data =** , enter *6.*

3 At **Action =** , enter *2.*

4 At **Data =** , enter the PDC of the station belonging to the searched-for DGC group.

PDCs of Stations in a DGC Group

1 At **Action =** , enter *1.*

2 At **Data =** , enter *7.*

3 At **Action =** , enter *2*.

4 At **Data =** , enter the DGC group number (1-32).

5 At **Action =** , enter *3.*

6 At **Data =** , enter:

- *1* to find NOT-Made-Busy (active) members
- *0* to find Made-Busy (inactive) members.

PDCs of Stations sharing a specific Personal Line

1 At **Action =** , enter *1.*

2 At **Data =** , enter *8.*

3 At **Action =** , enter *2.*

4 At **Data =** , enter a four-digit trunk number.

PDCs of Call Pickup Group Member Stations

1 At **Action =** , enter *1.*

2 At **Data =** , enter *9.*

3 At **Action =** , enter *2.*

4 At **Data =** , enter the call pickup group number, from 1 through 16.

Assigned PDCs

1 At **Action =** , enter *1.*

2 At **Data =** , enter *11.*

PDCs of Stations Associated with a specific Directed Night Service Trunk

1 At **Action =** , enter *1.*

2 At **Data =** , enter *12.*

3 At **Action =** , enter *2.*

4 At **Data =** , enter a four-digit trunk number.

Directed Night Service Trunks Associated with a specific PDC

1 At **Action =** , enter *1.*

2 At **Data =** , enter *13.*

3 At **Action =** , enter *2.*

4 At **Data =** , enter PDC of station whose Night Service assignments you are searching for.

Physical Board Locations

This search produces a found physical board location number in the form **CSS••.** You can search for physical board locations for any item in the two tables, "Board Type – Wildcard Representation" (Table 16-26) and "Port/Board Type–Specific Representation" (Table 16-27) in Chapter 16.

1 At **Action =** , enter *1.*

2 At **Data =** , enter *15.*

(continued)

Note This search expects input in the form **NNN** or in the form N•• where **N** is the initial digit or two digits identifying the station, trunk, special port, data, or empty board for which you are searching and •• is the wildcard representation. Output will be in the form **CSS••** where **C** is the cabinet number, **SS** is the number of the slot in that cabinet, and •• is the wildcard representation for the port numbers on that slot. For example, if you wished to search for ATL boards using the wildcard representation, you would enter **3••.** If you had an ATL board in cabinet 1, slot 4, the first item returned in the search would be **104••.** *You can find the data required for "Action=2" in Tables 16-26 and 16-27 in Chapter 16.*

3 At **Action =** , enter *2.*

4 At **Data =** , enter N•• (See tables in Chapter 16.)

To search for empty slots (board locations):

1 At **Action =** , enter *2.*

2 at **Data =** , enter *0.*

Physical Port Locations

Note This search (in its default "Action=3 Data=0" mode [translated ports]) produces a found physical port location number in the form **CSSPP.** You can search for physical port locations for any item in Tables 16-26 and 16-27 in Chapter 16 (except "Empty," Data=0). If you specify "Action=3 Data=1" below, your search will produce any found untranslated physical ports defined at the "Action=2" level.

1 At **Action =** , enter *1.*

2 At **Data =** , enter *16.*

3 To initiate the search:
At **Action =** , enter *2.*

4 At **Data =** , enter information from tables in Chapter 16.

5 Limit the search to "translated" ports or "untranslated" ports:
At **Action =** , enter *3.*

6 At **Data =** , enter *0* for translated ports or *1* for untranslated ports.

Translated Board Locations

1 At **Action = ,** enter *1*

2 At **Data = ,** enter *17.*

3 At **Action = ,** enter *2.*

4 At **Data = ,** enter information from tables 16-26 and 16-27 in Chapter 16.

To search for empty slots (board locations):

1 At **Action = ,** enter *2.*

2 at **Data = ,** enter *0.*

Translated Port Locations

Note This search (in its default "Action=3 Data=0" mode [translated ports]) produces a found translated port location number in the form **CSSPP.** It is true in this case (as it is true in the case of searching for translated board locations) that System 25 can have a translation for a port on a board when that board does not exist in the system. You can search for physical port locations for any item in Tables 16-26 and 16-27 in Chapter 16 (except "Empty," Data=0). If you specify "Action=3 Data=1" below, your search will produce any found untranslated physical ports defined at the "Action=2" level.

1 At **Action = ,** enter *1.*

2 At **Data = ,** enter *18.*

Note This search expects input in the form of the number itself or in the form **N••** where **N** is the initial digit or two digits identifying the station, trunk, special port or data for which you are searching and •• is the wildcard representation. Output will be in the form **CSSPP** where **C** is the cabinet number, **SS** is the number of the slot in that cabinet, and **PP** port number on that slot. For example, if you wished to search for ATL ports using the wildcard representation, you would enter **3••.** If you had an ATL port in cabinet 1, slot 4, the first item returned in the search would be **10401.** You can find the data required for Action=2 in Tables 16-26 and 16-27 in Chapter 16.

3 At **Action = ,** enter *2.*

4 At **Data = ,** enter information from tables in Chapter 16.

5 Limit the search to "translated" or "untranslated" ports: At **Action = ,** enter *3.*

6 At **Data = ,** enter *0* for translated ports or *1* for untranslated ports.

Port Location of External Alert

This search requires a PDC for input; it returns the port location (CSSPP) of the external alert associated with the station.

1 At **Action = ,** enter *1.*

2 At **Data = ,** enter *19.*

3 At **Action = ,** enter *2.*

4 At **Data = ,** enter the PDC of the station with external alert.

Button Location on Stations

This search yields a button number(s) that has assigned to it the function for which you are searching on a given station.

1 At **Action = ,** enter *1.*

2 At **Data = ,** enter *20.*

3 At **Action = ,** enter *2.*

4 At **Data = ,** enter the PDC of the station with the buttons.

5 At **Action = ,** enter *3.*

6 At **Data = ,** enter the button function code from the "Action 101" column in Table 16-3 (Chapter 16).

Area Codes Assigned to a Specific ARS Pattern

This search lists all area codes (NPAs) that will select a specified ARS Routing Pattern. These routing patterns were assigned in the section entitled *Area Code Routing Table* in *Administering Automatic Route Selection.* If the wildcard character "•" is entered, all NPA/Routing Pattern associations are provided.

1 At **Action = ,** enter *1.*

2 At **Data = ,** enter *21.*

3 At **Action = 2,** enter *2.*

4 At **Data = ,** enter the pattern number for the NPA association you're looking for, 1 through 8 or ••.

5 Enter *c* to list, enter *r* to remove.

DDCs that can dial for a station or data port via Third-Party Call Set-Up

1 At **Action = ,** enter *1.*

2 At **Data = ,** enter *22.*

3 At **Action = 2,** enter the PDC or DDC being "dialed for" (the *associated* station).

Permanent System Alarms

1 At **Action = ,** enter *1.*

2 At **Data = ,** enter *30.*

3 Enter *c* to list, enter *r* to remove.

Transient System Alarms

1 At **Action = ,** enter *1.*

2 At **Data = ,** enter *31.*

3 Enter *c* to list, enter *r* to remove.

Most Recent Errors

1 At **Action = ,** enter *1.*

2 At **Data = ,** enter *32.*

3 Enter *c* to list.

Display Support Searches

The Display Support feature lets you search for IDs (or names) associated with PDCs, DDCs, FPDCs, DGC groups, and trunk numbers. System 25 stores a maximum of 272 IDs in two alphabetical lists. One list is for trunk IDs, the other is for non-trunk IDs (the PDCs, DDCs, FPDCs, and DGCs). Two types of searches are available for both lists:

- Given number, get ID
- Given ID, get number

Matching Display IDs

To search for an ID, System 25 reads the name from left to right. Therefore, it is recommended that Display-ID names be entered in the format, *last name, first name.* If the system doesn't find a match for the full ID, it drops the last character and searches for the shortened string. The system continues to truncate the ID until it finds a match.

If the ID you enter does not match any Display ID, even on the first character, you see the following message:

Error 1071
inappropriate request

If you enter a ?, you see the following message:

Error 1071
name does not exist

If two users have the same last name, the system displays the first entry with that name in the list. To see the next alphabetical entry in a list, press *c.*

To see the *first* entry in a list

1 At **Action = ,** enter *1.*

2 At **Data = ,** enter a Display Support list:

- *42* for PDC/DDC/FPDC/DGC Display IDs
- *43* for trunk Display IDs.

3 At **Action = 2,** enter two double quotes with one space between them (" ").

4 Type *c* to see the first entry in the list.

Search for:

Display ID for a given number (non-trunk)

1 At **Action = ,** enter *1.*

2 At **Data = ,** enter *40.*

3 At **Action = 2,** enter the PDC, DDC, FPDC, or DGC access code.

Display ID for a Trunk LDN (trunks only)

1 At **Action = ,** enter *1.*

2 At **Data = ,** enter *41.*

3 At **Action = 2,** enter the trunk LDN.

Number for a given Display ID (non-trunk)

1 At **Action = ,** enter *1.*

2 At **Data = ,** enter *42.*

3 At **Action = 2,** enter the Display ID for the PDC, DDC, FPDC, or DGC Display ID (enclosed in double quotes).

Trunk number for a given Display ID (trunks only)

1 At **Action = ,** enter *1.*

2 At **Data = ,** enter *43.*

3 At **Action = 2,** enter the trunk Display ID (enclosed in double quotes).

Listing Circuit Packs

This item lets you list the board type, vintage, and cabinet location for each circuit pack in the system, except the CPU and Memory CPs. When you enter Data= 50 for this action item, you see:

SLOT CABINET 1 CABINET 2 CABINET 3

and the message, **Type c to list.**

When you type *c,* the system displays information for slot number one, as follows:

SLOT CABINET 1 CABINET 2 CABINET 3

01 ZTN85 04

This display tells you there is a ZTN-85 04 in cabinet 2, slot 1. To see information about subsequent slot numbers, type *c.*

CP Display Symbols You may see a *, #, or **$** immediately following a CP identification number. These symbols indicate:

*	Mismatch—this CP does not match the CP translated to be in this slot
#	Unused—this CP is not translated
$	Invalid—this CP is invalid for this system

The symbol and its meaning are repeated at the end of the line in which it appears. If a circuit pack has been translated but is not present, **MISSING** appears where the CP would have been listed.

To display list of port board types, vintages, and locations

1 At **Action = ,** enter *1.*

2 At **Data = ,** enter *50.*

Administering RS232 Parameters

Action/data pairs associated with Main Menu item 10 (RS232) are used to administer System 25 peripheral equipment: System Administration Terminal, SMDR output port, and Digital Tape Unit.

Any or all of these peripherals can be physically connected to System 25 via branches of an octopus cable. Within limits, it is possible to reassign each channel to different physical connectors. For example, if for some reason a system administrator wanted to physically connect the SMDR function to the default digital tape unit connector (connector 3), that connector could be made to serve the SMDR function via an administration command.

If a connector function (1 through 4) is reassigned, then the function being replaced is automatically disconnected.

To administer an RS232 connector

1 From the Main Menu prompt, enter *10*.

2 At **RS232 = ,** enter the target— the physical connector you want to reassign or administer. See footnote*.

* The default for each Target connector is as follows:

TARGET	DEFAULT DATA (=CAPABILITY)	DEFAULT BAUD RATE
1	1 (=Administration)	1200, 300 (auto-baud)
2	2 (=SMDR)	1200
3	3 (=Save/Restore Tape)	1200
4	Reserved	9600, 1200 (auto-baud)

Reassign an RS232 connector function

1 At **Action = ,** enter *1.*

2 At **Data = ,** enter the function you want to assign to the Target connector from the following list:

0 - None (disconnect function)

1 - Admin. (Target 1 or 4 only)

2 - SMDR (Target 2 or 3 only)

3 - Tape (Target 3 only)

4 - Reserved

See footnote* on previous page for default function.

Change length of RETURN Delay

Note Unless you're already administering the Target connector for which you wish to change the RETURN delay, you must first select a Target connector (by entering *t* or *T* and then entering the appropriate number at the "RS232=" prompt).

1 At **Action = ,** enter *2.*

2 At **Data = ,** enter a number from 0 through 2. The default is *0.*

Change Baud Rate

Note Unless you are already administering the Target connector for which you wish to change the Baud Rate, you must first select a Target connector (by entering *t* or *T* and then entering the appropriate number at the "RS232=" prompt).

1 At **Action = ,** enter *3.*

2 At **Data = ,** enter *300, 1200, 4800,* or *9600.*

See footnote* on previous page for the default data.

Command Reference

LIST OF TABLES

Command Reference

The tables in this chapter are intended to help those thoroughly familiar with system administration locate specific information without having to refer to the full text in the administration procedure chapters. Unless you are an experienced System Administrator, however, you should follow the administration procedures.

Default values, if applicable, are indicated in **bold print** in these tables.

Default Dial Code Assignments

Each time it is cold started (full-default), the system assigns default translations to ports as follows:

Port	Default Code
Trunk Numbers (not part of dial plan)	0001-0104
Station Dial Codes:	
Multiline voice terminals	200-238 300-355
Single-line voice terminals	400-399
Data terminals	600-704
System Dial Codes:	
Trunk Access Codes:	
Loop start	100
Ground start	101
Tie trunks	102
Attendant Call Park	800-807
Night Service	810
Modem Request Code (Pooled Modem)	820
ARS	9

TABLE 16-1 PORT/PDC Administration, Voice Terminals (Menu=1/2)

ACTION	DESCRIPTION	DATA
0	Physical port number	CSSPP
1	Enter terminal type code	[See Table 16-2]
2	Enter PDC	[1-9999]
3	Restrict dial access to CO trunk pool	[1=Y / **0=N]**
4	Restrict dial access to all other trunk pools	[1=Y / **0=N]**
5	Assign ringing line preference†	**[1=Y** / 0=N]
6	Assign prime line preference†	[Button Number, **7]**
7	Assign call coverage receiver group‡	**[1** - 32, 0 for none, or 101-132 DGC receiver group, SLAC default is 0 for none]
8	Assign call coverage ring on no answer‡	**[1=Y** / 0=N, SLAC default is 0 for none]
9	Assign call coverage ring on busy‡	**[1=Y** / 0=N, SLAC default is 0 for none]
10	Make this an extended station	[1=Y / **0=N]**
11	Assign a group pickup number	[1-16; **0 for none]**
12	PDC of station to hunt to next	[PDC; **0 for none]**
13	Restrict this station from making outward calls	[1=Y / **0=N]**
14	Assign toll restriction class	[1-4; **0 for none]**
15	Assign ARS Facility Restriction Level	[0-3; **3]**
16	Enable personal speed dialing	[1= Y/0=N]
51	Display the number of any trunks assigned to this station for night service	
52	Assign a trunk to this station for night service	[4-digit trunk number]
53	Delete a trunk from this station's night service list	[4-digit trunk number]
60	For DTAC or SLAC: Display attendant position number (Read-only)	[1=1st Att./ 2=2nd Att.]
90	Assign/remove PDC Display ID	[" 11 characters or less", or "" to remove]

† Read-only feature for SLAC.

‡ Not administrable for SLAC.

TABLE 16-2 Voice Terminal Type Codes

If the Terminal Type is:	Code:
Single-line without message waiting indicator	201
Single-line with message waiting indicator	202
5-Button MERLIN CS Voice Terminal, Z7302H01	302
MERLIN CS Hands-Free-Answer Voice Terminal, Z7309H01	303
10-Button MERLIN CS Voice Terminal, Z7303H01	304
MERLIN CS Built-in-Speakerphone Voice Terminal, Z7305H03	305
34-Button MERLIN CS Voice Terminal, Z7305H01	306
34-Button Deluxe MERLIN CS Voice Terminal, Z7305H02 (non-attendant)	307
MERLIN CS Built-in-Speakerphone Voice Terminal with 16-Character Display, Z7305H04C (non-attendant)	308
Direct Trunk Attendant Console (34-Button Deluxe MERLIN CS Voice Terminal, Z7305H02)	309
Switched Loop Attendant Console (MERLIN CS Built-in-Speakerphone Voice Terminal with 16-Character Display, Z7305H04C)	310
MET Voice Terminal	401

TABLE 16-3 Feature Button Translation (Menu=1/2)

"Action=100" is required before action(s) 101-104 listed in this table are administered.

ACTION 101	NOTES	BUTTON TYPE	ACTION 102	ACTION 103
1	(Note *5)*	*SYS* ACCESS-ORG		
2		POOLED FACILITY	Facility Access Code	
3	(Note 3 & 5)	PERS LINE	Trunk Number	Owner?
4		EXCLUSION		
5		MSG WAIT	Signaled PDC	Signaled Button No.
6	(Note 5)	COVER MSG		
7		MANUAL SIGNAL	Signaled PDC	
8		AUTO ICOM	Called PDC	Called Button No.
9		DATA	Associated DDC	
10	(Note 5)	COVER-GRP	Group Number	Ringer Enable? (Yes)
11	(Note 5)	SEND ALL CALLS	Single Ring Reminder?	
12	(Note 5 & 6)	COVER-IND	Covered PDC	Ringer Enable? (Yes)
13		FLEX DSS		
14		DSS	Called PDC	
15		ACCT ENTRY		
16	(Note 1 & 2)	ALARM		
17	(Note 2)	NIGHT	Night Access Code	
18	(Note 2 & 7)	POS BUSY		
19	(Note 2 & 4)	ATT MSG		
20		REP DIAL		
21		AUTO ANS		
22	(Note 1 & 2B)	RTN-DA		
23	(Note 1 & 2B)	RTN-BUSY		
24	(Note 1 & 2)	START		
25	(Note 1 & 2)	CANCEL		
26	(Note 1 & 2)	RELEASE		
27	(Note 1 & 2A)	LOOP		
28	(Note 1 & 2A)	INSPECT		
29	(Note 1 & 2A)	SOURCE		
30	(Note 1 & 2A)	FORCED RELEASE		

Continued on next page

TABLE 16-3 10 Feature Button Translation (Menu=1/2) (continued)

"Action=100" is required before action(s) 101-104 listed in this table are administered.

ACTION 101	NOTES	BUTTON TYPE	ACTION 102	ACTION 103
31	(Note 1 & 2A)	JOIN		
32	(Note 1 & 2A)	DESTINATION		
33	(Note 1 & 2A)	LOCAL		
34	(Note 1 & 2A)	SCROLL		
35		LAST # DIALED		

NOTES:

A ? mark indicates that a yes/no (1/0) response is required.
If a (No) or (Yes) is present, **this indicates a strongly suggested response.**

1) This code is READ ONLY (can't be changed)

2) Direct Trunk or Switched Loop Attendant Console ONLY

2A) Switched Loop Attendant Console ONLY

2B) Direct Trunk Attendant Console ONLY

3) This feature also requires an ACTION 104 entry: Ringer Enable?

4) If Switched Loop Attendant Console: READ-ONLY

5) If Switched Loop Attendant Console: NOT ADMINISTRABLE

6) Switched Loop Attendant Console cannot be specified as the covered PDC (Action 102) for individual call coverage

7) If single-position Switched Loop Attendant Console: see Action 87 of SYSTEM menu for designating PDC of covering station

TABLE 16-4 Multiline Set Button Defaults

7 - SYS ACCESS†	12 - FLEX DSS	17 - FLEX DSS	29 - FLEX DSS
8 - SYS ACCESS†	13 - ACCT ENTRY	18 - FLEX DSS	30 - FLEX DSS
9 - REP DIAL	14 - SEND ALL CALLS	19 - FLEX DSS	31 - FLEX DSS
10 - REP DIAL	15 - FLEX DSS	20 - FLEX DSS	32 - FLEX DSS
11 - LAST # DIALED	16 - FLEX DSS	21 - FLEX DSS	33 - FLEX DSS
		22 - FLEX DSS	34 - FLEX DSS
		23 - FLEX DSS	35 - FLEX DSS
		24 - FLEX DSS	36 - FLEX DSS
		25 - FLEX DSS	37 - FLEX DSS
		26 - FLEX DSS	38 - FLEX DSS
		27 - FLEX DSS	39 - FLEX DSS
		28 - FLEX DSS	40 - FLEX DSS

TABLE 16-5 Switched Loop Attendant Console Button Defaults (Type 310)

7 - LOOP†	12 - ALARM†	17 - LOCAL†	29 - SCROLL†
8 - LOOP†	13 - POS BUSY	18 - FLEX DSS	30 - FORCED RELEASE†
9 - LOOP†	14 - FLEX DSS	19 - FLEX DSS	31 - LAST # DIALED
10 - LOOP†	15 - SOURCE†	20 - FLEX DSS	32 - FLEX DSS
11 - LOOP†	16 - DESTINATION†	21 - FLEX DSS	33 - FLEX DSS
		22 - FLEX DSS	34 - FLEX DSS
		23 - FLEX DSS	35 - FLEX DSS
		24 - FLEX DSS	36 - FLEX DSS
		25 - FLEX DSS	37 - FLEX DSS
		26 - CANCEL†	38 - JOIN†
		27 - START†	39 - RELEASE†
		28 - ATT MSG†	40 - INSPECT†

† Cannot be changed

TABLE 16-6 Direct Trunk Attendant Console Button Defaults (Cold-Start Defaults)

7 - SYS ACCESS†	12 - FLEX DSS	17 - Trunk 0001	29 - Trunk 0009
8 - SYS ACCESS†	13 - ACCT ENTRY	18 - Trunk 0002	30 - Trunk 0010
9 - REP DIAL	14 - ATT MSG	19 - Trunk 0003	31 - Trunk 0011
10 - REP DIAL	15 - NIGHT	20 - Trunk 0004	32 - Trunk 0012
11 - LAST # DIALED	16 - ALARM†	21 - Trunk 0005	33 - Trunk 0013
		22 - Trunk 0006	34 - Trunk 0014
		23 - Trunk 0007	35 - Trunk 0015
		24 - Trunk 0008	36 - Pool 100
		25 - COVER-GRP	37 - Pool 101
		26 - RTN-DA†	38 - Pool 102
		27 - RTN-BUSY†	39 - CANCEL†
		28 - START†	40 - RELEASE†

† Cannot be changed.

TABLE 16-7 Direct Trunk Attendant Console Defaults (Administration-Installed Defaults)

7 - SYS ACCESS†	12 - FLEX DSS	17-0	29-0
8 - SYS ACCESS†	13 - ACCT ENTRY	18-0	30-0
9 - REP DIAL	14 - ATT MSG	19-0	31-0
10 - REP DIAL	15-0	20-0	32-0
11 - LAST # DIALED	16 - ALARM†	21-0	33-0
		22-0	34-0
		23-0	35-0
		24-0	36-0
		25 - COVER GRP	37-0
		26 - RTN-DA†	38-0
		27 - RTN-BUSY†	39 - CANCEL†
		28 - START†	40 - RELEASE†

DXS CONSOLE BUTTON DEFAULTS							
2..	3..	4..	5..	6..	7..	8..	TEST†

TABLE 16-8 MET Set Button Defaults

7 - SYS ACCESS†
8 - SYS ACCESS†
9 - REP DIAL
10 - REP DIAL
11 - LAST # DIALED
Message†
Drop†
Conference†
Transfer†
Hold†

† Cannot be changed.

TABLE 16-9 PORT/PDC Administration, Data Terminals (Menu=1/2)

ACTION	DESCRIPTION	DATA
0	Physical port number	CSSPP
1	Enter data type code	[See Table 16-10]
2	Enter DDC	[1-9999; **600-704]**
3	Restrict dial access to CO trunk pool†	[1=Y / **0=N]**
4	Restrict dial access to all other trunk pools†	[1=Y / **0=N]**
12	DDC of station to hunt to next	[PDC; **0 for none]**
13	Restrict this station from making outward calls†	[1=Y / **0=N]**
14	Assign toll restriction class†	[1-4; **0 for none]**
15	Assign ARS Facility Restriction Level†	[0-3; **3]**
21	Enter associated voice/data endpoint station‡	[PDC/DDC or **0 for none]**
22	Restrict Third-Party Call Set-Up so user can only establish calls for the associated station (see Action 21)†	**[1=Y** / 0=N]
61	Auto-adjust baud rate on call origination. * (The default is 0 for STARLAN CP.)	**[1=Y** / 0=N]
62	Allow terminal to operate at low bits per second (bps)*	[1=Y / **0=N]**
63	Allow terminal to operate at a baud rate of 300 bps*	**[1=Y** / 0=N]
64	Allow terminal to operate at a baud rate of 1200 bps*	**[1=Y** / 0=N]
65	Allow terminal to operate at a baud rate of 2400 bps*	**[1=Y** / 0=N]
66	Allow terminal to operate at a baud rate of 4800 bps*	**[1=Y** / 0=N]
67	Allow terminal to operate at a baud rate of 9600 bps*	**[1=Y** / 0=N]
68	Allow terminal to operate at a baud rate of 19200 bps*	**[1=Y** / 0=N]
69	Assign this parity setting to correspond with terminal's parity setting*	[0-3; **2]**

Continued on next page

* Read-only for STARLAN CP.

† If data port type code 1802 (STARLAN CP), default values are relevant for the first installed port on the board. Values assigned to this action item on any of the four ports will be copied to *all* four ports on this board.

‡ Not administrable for STARLAN CP.

TABLE 16-9 PORT/PDC Administration, Data Terminals (Menu=1/2) (continued)

ACTION	DESCRIPTION	DATA
70	Allow keyboard dialing/Command Mode*	**[1=Y** / 0=N]
71	Allow user configuration of data port parameters.* (The default is 0 for STARLAN CP)	**[1=Y** / 0=N]
72	Allow mismatch of user's data module and data port baud rate*	[1=Y / **0=N]**
73	Allow characters dialed from keyboard to be echoed by the data port*	**[1=Y** / 0=N]
74	Enter your disconnect code*	**[1=2 short BREAKS/** 0=1 long BREAK]
75	Allow call progress text messages to be displayed on screen. *	**[1=Y** / 0=N]
77	Display connection indication message*	**[1=Y** / 0=N]
90	Assign/remove DDC Display ID	["11 characters or less", or "" to remove]

* Read-only for STARLAN CP.

TABLE 16-10 Data Port Type Codes

IF THE DATA PORT TYPE IS	CODE:
Data Line Card (DLC) functionality for ZTN126 or TN726	1801
STARLAN Interface Circuit Pack (STARLAN CP) in DLC-compatibility mode	1802
Disable this individual port (for any of the above data port types)	0

TABLE 16-11 Port Administration, Trunks (Menu=1)

ACTION	DESCRIPTION	DATA
0	Physical port number	CSSPP
1	Enter trunk port type code	[See Table 16-12]
2	Enter trunk number	[0001-9999; **0001-0104]**
3	Assign class-of-service code	[(DID—1-4; **3)** (All other– See Table 16-13; **8)]**
4	Assign pooled facility access code.	[Facility access code; **(100,101,102)** 0 if trunk not in any group]
5	Allow dial access	**[1=Y** / 0=N]
6	Assign the trunk to a DGC group	[1-32; **0 for none]**
7	Make this a directed night service trunk	**[1=Y** / 0=N]
8	Assign night service delay announcement	[1 for first announcement, 2 for second announcement, **0 for none]**
9	Type of signaling on incoming calls (Tie-Trunks only)	[1=Tone / **0=Pulse]**
10	Determine pooled trunk hunting order of a specified trunk {Read Only}	
11	For Switched Loop Attendant systems ONLY: Priority of trunk to ring in queue†	[0-7; **0=won't ring in queue/** or 1=highest priority, thru 7=lowest priority]
12	For Switched Loop Attendant Systems ONLY: Which attendant should receive calls from this trunk?†	[0-2; **0=either Att.** / 1 = 1st Att. 0NLY/2=2nd Att. ONLY]
90	Assign/remove trunk Display ID‡	["11 characters or less", or "" to remove]

† Not administrable for trunk port type codes 901-902 or 1003-1008

‡ Not administrable for trunk port type codes 901-902.

TABLE 16-12 Trunk Type Codes

If the Trunk Type is:	Code:
Ground Start, CO	701*
Ground Start, WATS, FX	702
Loop Start, CO	801*
Loop Start, WATS, FX	802
PBX/Centrex	805†
DID Immediate Dial	901
DID Wink Start	902*
Auto-in/Auto-out	1001
Auto-in/Immediate Dial-out	1002
Immediate Dial-in/Auto-out	1003
Immediate Dial-in/Immediate Dial-out	1004
Wink Dial-in/Auto-out	1005
Wink Dial-in/Wink Dial-out	1006*
Delay Dial-in/Auto-out	1007
Delay Dial-in/Delay Dial-out	1008

*Default Types

† Required for Centrex

TRUNK CLASS-OF-SERVICE (FOR ALL TRUNKS EXCEPT DID)				
COS CODE	NIGHT SERVICE	OUTWARD SIGNALING	IN ONLY	SHORT DISCONNECT
0		TT		
1		TT	●	
2		TT		●
3		TT	●	●
4		DP		
5		DP	●	
6		DP		●
7		DP	●	●
8	●	TT		
9	●	TT	●	
10	●	TT		●
11	●	TT	●	●
12	●	DP		
13	●	DP	●	
14	●	DP		●
15	●	DP	●	●

TT = Touch-Tone
DP = Dial-Pulse

TABLE 16-14 Port Administration, Auxiliary Equipment (Menu=1)

ACTION	DESCRIPTION	DATA
0	Display physical port number, in the form CSSPP	
1	Enter special feature port type code	(see Table 16-15).
1	Assign external alerts	[253]
2	Assign associated station number	[PDC of associated station; 0 if night service alert]
1	Assign paging Interface (associated with auxiliary trunk circuit)	[1301-1303]
2	Assign PDC for this zone	[PDC (zone 1) PDC (zone 2) PDC (zone 3) 0 for none]
3	Assign all-zone PDC	[PDC for all-zone, 0 for none]
4	Dial restrict this zone (1=YES/0=NO)	[1/0]
1	Assign DGC delay announcement	[255]
1	Assign directed night service delay announcement	[251 (delay announcement #1); 252 (delay announcement #2)]
2	Assign number of rings before delay announcement	[0-15]
1	Assign music-on-hold source	254
2	Assign music-on-hold for Special Hold?	[1=Yes/0=No]
1	Assign pooled modem	[1901]
1	Assign additional tone detector	[2101]
1	Assign dial dictation	[2201 (if auxiliary trunk interface); 201 (if station port interface)]
2	Assign dial dictation PDC	[PDC]
1	Assign selector console (DXS)	[1601 or 1602]
21-27	Assign selector console buttons.	

TABLE 16-15 Special Feature Port Type Codes

This table shows data values associated with Action = 1 on Table 16-14

FEATURE	TN742, ZTN78	TN763	ZTN76	ZTN77	TN748	TN758	ZTN79
Tone Detector					2101		
External Alert	253						
1st Page Zone		1301	702†	802†			
2nd Page Zone		1302	702†	802†			
3rd Page Zone		1303	702†	802†			
nth Page Zone			702†	802†			
DGC Delay Ann.	255						
Dial Dictation	201	2201					
Music-On-Hold	254						
1st N.S. Delay Ann.	251						
2nd N.S. Delay Ann.	252						
1st Selector Consl							1601
2nd Selector Consl							1602
Pooled Modem						1901	

† Only one 702 or 802 type page port may be needed to provide multiple paging zones, dependent on the type of paging hardware connected to the paging port. Mixing of 702, 802 with 1301-1303 types to provide additional zones is allowed, however, ACTIONS like ALL ZONE paging and 'dial restrict' page zone are only available with 1301-1303 types.

TABLE 16-16 Port Options

PORTS, Station/Trunk/Special Port Circuit Board Options FOR QUALIFIED SYSTEMS TECHNICIANS ONLY* (See Table 16-17, "Applicable Options")		
ACTION	**DESCRIPTION**	**DATA**
32	Set CO disconnect time (in 20 msec increments)	[0-2540 msec; **500]**
33	Set end-to-end signaling tone timing (in 20 msec increments)	[0-2540 msec; **60]**
34	Set end-to-end signaling pause timing (in 20 msec increments)	[0-2540 msec; **60]**
35	Set hybrid balance. Data is balance type: 1=Resistor; 0=Resistor/Capacitor. Trunk ports default to 0; station ports default to 1.	[1 / 0]
36	Set gain; 1 (Gain=3dB) or 0 (Gain=0dB)	[1 / **0]**
37	Set E&M signaling type. Data is signaling type 0 (Type 1 compatible), 1 (Type V), or 2 (Type I).	[0 - **2]**
38	Set answer supervision delay timing	[0-5100 msec; **300]**

* WARNING: The default values in Tables 16-16 and 16-17 must not be changed without the support and guidance of Tier III staff.

TABLE 16-17 Applicable Options

See WARNING for Table 16-16. Also note that a bullet in a box on this table indicates that the default value for that action (shown in Table 16-16) is applicable for this circuit board. No bullet indicates that the option is not applicable.

CIRCUIT BOARD	BOARD TYPE	ACTION 32	33	34	35*	36	37	38
ZTN76	GS Trunk	●	●	●	●			
ZTN77	LS Trunk	●	●	●	●			
TN753	DID Trunk	●	●	●	●			
TN760	TIE Trunk	●	●	●			●	●
TN763	AUX Trunk		●	●				
TN742	T.T. Station		●	●	●	●		
ZTN78	T.T. Station		●	●				
ZTN79	ATL Station							
TN735	MET Station							
ZTN85	SVC. Ckt.							
TN748	Tone Det.							

* ACTION 35 (Hybrid Balance) defaults depend on board type. Trunk Ports are defaulted to 0 (Resistor/Capacitor termination) while Station Ports are defaulted to 1 (Resistor termination).

TABLE 16-18 PDC Administration (Menu=2)

ACTION	DESCRIPTION	DATA
0	Move this station to a new port (moved-to port must be vacant)	[CSSPP (new port assignment)]
1	Display terminal type code	[See Table 16-2]
2-53	All other	See note below.
90	Assign/remove PDC Display ID	[”11 characters or less”, or “” to remove]

Note Action/data items administrable under PDC (Menu = 2) are the same as those administrable under Port (Menu = 1). (See Table 16-1.)

TABLE 16-19 System Administration (Menu=4)

ACTION	DESCRIPTION	DATA
3	Assign the number of rings before unanswered calls extended by Attendant return to the console (1-31)	[Number of rings; **5]**
4	Force DID calls to unassigned DID numbers to ring at Attendant Console	**[1=Y** / 0=N]
5	Force calls to FPDCs that are not logged in anywhere to ring at the Attendant Console	**[1=Y** / 0=N]
6	Assign the number of seconds before a camped-on call returns to the Attendant Console (1-120)	[Number of seconds; **30]**
7	Assign the number of rings before unanswered DGC calls are sent to the delay announcement or a button appearance (1-31)	[Number of rings; **5]**
11-18	Assign the eight PDCs that are used to access calls parked by the Attendant. Data will be a pseudo-PDC or 0 for none.	[Pseudo-PDCs; **800-807]**
25	Assign a speed dialing access code	[100-189]
26	Assign speed dialing number	[0-9, *, #]
25	Assign a virtual facility access code	[190-199]
26	Assign a virtual facility number	[0-9, *, #]
27	Allow dial access to this virtual facility	[1=Y / **0=N]**
30	Enter your area code	[Your area code]
31	Allow toll restricted station to make toll calls within your area code	**[1=Y** / 0=N]
32	Is the 1 prefix required to dial outside your area code?	**[1=Y** / 0=N]
33	Is the 1 prefix required to dial toll calls within your area code?	[1=Y / **0=N]**
34	Toll restrict calls made over inter-PBX trunks (type 805) that start with one specific digit	[1 - **9;** 0 for none]
40	Provide call coverage ringing on internal calls	**[1=Y** / 0=N]

Continued on next page

TABLE 16-19 System Administration (Menu=4) (continued)

ACTION	DESCRIPTION	DATA
41	Specify the number of rings before calls are sent to call coverage or call following calls return to their home station	[0-31; **2]**
50	Set time of day	[HHMM]
51	Set the date	[MMDDYY]
52	Allow SMDR records to be sent to the SMDR port	**[1=Y** / 0=N]
53	Start billing calls how many seconds after the last digit is dialed	[10-255; **40]**
60	Specify the modem request code	[1-9999; **820]**
61	Does the receiver respond to remote loop	**[1=Y** / 0=N]
62	Disconnect on loss of carrier	**[1=Y** / 0=N]
63	Are pins CF and CB common	**[1=Y** / 0=N]
64	Disconnect on received space	**[1=Y** / 0=N]
65	Should the system send a space character on disconnect	**[1=Y** / 0=N]
70	Should maintenance busy of GS trunks be blocked?	[1=Y / **0=N]**
71	Assign the CO trunk pool access code	[1-9999]
72	Set the number of DID digits used to match against station PDCs	[2-4; 0 for none; **3]**
73	Assign the number of account code digits	[0-15; **15]**
74	Display/change expert mode prompt (less than 9 printable characters)	**[“Command: “]**
75	Change administration password (less than 8 printable characters, no spaces allowed, display always shows “????????”)	[”8 characters or less”]
81	Switched Loop Attendant system: Audible tone at expiration of hold timer?	[1=Y / **0=N]**

Continued on next page

ACTION	DESCRIPTION	DATA
82	Switched Loop Attendant system: Queue should act as coverage receiver for which call coverage group?	[group number (1-32), **0 for NONE]**
83	Switched Loop Attendant system: Length of hold timer (seconds)	[10-255; **20]**
84	Switched Loop Attendant system: DID access code to receive "0" treatment (PDC format, no leading zeros, can't exist in system number plan prior to this)	[PDC]
85	Switched Loop Attendant system: Enable automatic hold feature?	[1=Y / **0=N]**
86	Switched Loop Attendant system: Should calls return to the common queue after second hold timer expires?	[1=Y / **0=N]**
87	Single-position Switched Loop Attendant system: PDC of station serving as coverage when the attendant is in POS BUSY mode (PDC/station must already exist)	[PDC]
90	Dual-position Switched Loop Attendant system: Which attendant should take on default message center-like characteristics? (see Table 16-21)	**[0=neither,** 1=1st Att., 2=2nd Att.]
91	Switched Loop Attendant system: Enter call type code:	[1-8; see Table 16-20]
92	Switched Loop Attendant system, Must have selected call type via Action 91: Enter call type priority:	[0-7; **4,** 0=calls disallowed/ or 1=highest priority, thru 7=lowest priority]
93	Switched Loop Attendant system, Must have selected call type via Action 91, (If call type codes 2 and 6: NOT ADMINISTRABLE) Which attendant should receive this type call?	[0-2; **see Tables 16-20 & 16-21;** 0=either Att., 1=1st Att., 2=2nd Att.]

TABLE 16-20 Standard Call Type Defaults

FOR SWITCHED LOOP SYSTEMS ONLY

CALL TYPE	CODE	DEFAULT PRIORITY	DEFAULT ATTENDANT
Dial Attendant (0)	1	4	0
Call Following -- Logged into SLAC	2	4	NA
Non logged in FPDC	3	4	0
Unassigned DID	4	4	0
Attendant DID access code	5	4	0
PDC of Attendant	6	4	NA
Coverage	7	4	0
Returning	8	4	0

TABLE 16-21 Message-Center-Like Call-Type Defaults

FOR SWITCHED LOOP SYSTEMS ONLY

CALL TYPE	CODE	DEFAULT PRIORITY	ASSIGNED ATTENDANT
Non logged in FPDC	3	4	(selected with Action 90)
Unassigned DID	4	4	”
Coverage	7	4	”
Returning	8	4	”
Dial Attendant (0)	1	4	(opposite of
Attendant DID Access Code	5	4	Action 90 selection)
Call Following -- Logged into SLAC	2	4	NA
PDC of Attendant	6	4	NA

TABLE 16-22 Floating PDC Administration (Menu=5)

ACTION	DESCRIPTION	DATA
1	List active FPDCs	
2	Add an FPDC	[FPDC to be added]
3	Delete an FPDC	[FPDC to be deleted]
4	Enter existing FPDC to be named	[FPDC]
5	Assign/remove Display ID from FPDC selected with Action 4	["11 characters or less", or "" to remove]

TABLE 16-23 Direct Group Calling (DGC) Administration (Menu=6)

ACTION	DESCRIPTION	DATA
1	Assign a DGC access code (0 to delete an existing DGC access code)	[New DGC access code]
2	Disable DGC queueing?	[1=Y / **0=N]**
11	List members of a DGC group	
12	Add a member to a DGC group	[PDC to be added]
13	Delete a member from a DGC group	[PDC to be deleted]
14	Assign/remove Display ID for the DGC access code specified with Action 1.	["11 characters or less", or "" to remove]

TABLE 16-24 Toll Calls Allowed (TCA) List Administration (Menu=7)

ACTION	DESCRIPTION	DATA
1	List numbers in a TCA list	
2	Add a number to the list	[NXX or NPA-NXX]
3	Delete a number from the list	[NXX or NPA-NXX]

TABLE 16-25 Searches: Action Items (Menu=8)

ACTION	DESCRIPTION	DATA
1	Search for PDCs of call coverage senders	1
2	Call coverage receiver group	[1-32 or 101-132 if DGC coverage group]
1	Search for stations covering a specified group	2
2	Call coverage group	[1-32]
1	Search for PDC of call coverage (individual) receivers	3
2	PDC of covered station	[PDC]
1	Search for PDC having an auto-intercom, message waiting, manual signaling, or data button	4
2	PDC of pointed-to station	[PDC]
1	Search for PDCs that hunt to a specified station	5
2	PDC of hunted-to station	[PDC]
1	Search for DGC group number for a specified station	6
2	PDC of station whose DGC group is desired	[PDC]
1	Search for lists of stations that are currently eligible to receive calls in a given DGC group	7
2	DGC group number	[1-32]
3	1 = NOT-Made-Busy members; 0 = Made-Busy members	[1/0]
1	Search for PDC having a personal trunk	8
2	Trunk number of personal trunk	[trunk number]
1	Search for PDC of pickup group members	9
2	Pickup group number	[1-16]
1	Search for assigned PDCs	11
1	Search for stations associated with directed night service	12
2	Trunk number for directed night service	[trunk number]
1	Search for directed night service trunks	13
2	PDC of station whose night service assignments are being searched for	[PDC]
1	Search for physical board locations	15
2	Port or board type (see Tables 16-26 and 16-27)	[Port or board type]

Continued on next page

TABLE 16-25 Searches: Action Items (Menu=8) (continued)

ACTION	DESCRIPTION	DATA
1	Search for physical port locations	16
2	Port or board type (see Tables 16-26 and 16-27; 0 not applicable)	[port or board type]
3	Limit the search to (1=) untranslated or (0=) translated ports	[1/0]
1	Search for translated board locations	17
2	Port or board type (see Tables 16-26 and 16-27)	[port or board type]
1	Search for translated port locations	18
2	Port or board type (see Table 16-26 and 16-27; 0 not applicable)	[port or board type]
3	Limit the search to (1=) untranslated or (0=) translated ports	[1/0]
1	Search for port location of external alert	19
2	PDC of station with external alert	[PDC]
1	Search for button location on a station	20
2	PDC of station with buttons	[PDC]
3	Button function code (see "Action 101" column of Table 16-3)	
1	Search for Area Codes assigned to specified ARS pattern	21
2	Pattern number or wildcard character	[1-8 or •]
1	Search for the DDC that can dial for a station or data port.	22
2	Enter PDC/DDC being "dialed for:"	[PDC/DDC]
1	Search for permanent system alarms	30
1	Search for transient system alarms	31
1	Search for most recent errors	32
1	"Given number, get Display ID" search (PDC, DDC, FPDC, or DGC access code ONLY)	40
2	Enter existing PDC, DDC, FPDC, or DGC access code:	[PDC / DDC / FPDC / DGC]
1	"Given number, get Display ID" search (trunk LDN ONLY)	41
2	Enter existing trunk LDN:	[trunk LDN]
1	"Given Display ID, get number" search (PDC, DDC, FPDC, or DGC names ONLY)	42
2	Enter existing PDC, DDC, FPDC, or DGC Display ID:	["11 characters or less",]
1	"Given Display ID, get number" search (trunk names ONLY)	43
2	Enter existing trunk name:	["11 characters or less",]
1	Display list of port board types, vintages, and locations	50

TABLE 16-26 Board Type—Wildcard Representation

CATEGORY:	BOARD DESCRIPTION:	DATA:
Empty		
	Empty Slot (Searches 15 & 17 only)	0
Station		
	Single-line Voice Terminal or Special Port MERLIN CS Voice Terminal or Attendant MET Voice Terminal	 2 • • 3 • • 4 • •
Trunk		
	Ground Start or Paging Loop Start or Paging DID TIE	7 • • 8 • • 9 • • 16 • •
Special		
	Touch Tone Receiver Paging Selector Consoles Pooled Modem Tone Detector Dial Dictation	11 • • 13 • • 16 • • 19 • • 21 • • 22 • •
Data		
	Data Ports	18 • •

TABLE 16-27 Port/Board Type—Specific Representation

CATEGORY:	DESCRIPTION:	DATA:
Voice Station		
	Single-line without message waiting	201
	Single-line with message waiting	202
	5-Button MERLIN CS Voice Terminal	302
	MERLIN CS Hands-Free-Answer Voice Terminal	303
	10-Button MERLIN CS Voice Terminal	304
	MERLIN CS Built-in-Speakerphone Voice Terminal	305
	34-Button MERLIN CS Voice Terminal	306
	34-Button Deluxe MERLIN CS Voice Terminal (non-attendant)	307
	MERLIN CS Built-in-Speakerphone with 16-char. display (non-attendant)	308
	Direct Trunk Attendant Console (34-Button Deluxe MERLIN CS Voice Terminal)	309
	Switched Loop Attendant Console	310
	(MERLIN CS Built-in-Speakerphone with 16-char display) MET Voice Terminal	401
Trunk		
	Ground Start, CO	701
	Ground Start, WATS	702
	Loop Start, CO	801
	Loop Start, WATS	802
	PBX/Centrex	805
	DID Immediate Dial	901
	DID Wink Start	902
	Auto-in/Auto-out	1001
	Auto-in/Immediate Dial-out	1002
	Immediate Dial-in/Auto-out	1003
	Immediate Dial-in/Immediate Dial-out	1004
	Wink Dial-in/Auto-out	1005
	Wink Dial-in/Wink Dial-out	1006
	Delay Dial-in/Auto-out	1007
	Delay Dial-in/Delay Dial-out	1008

Continued on next page

TABLE 16-27 Port/Board Type—Specific Representation (continued)

CATEGORY:	DESCRIPTION:	DATA:
Special		
	First Service Circuit	1101
	External Alerts	253
	First Paging Zone	1301
	Second Paging Zone	1302
	Third Paging Zone	1303
	DGC Delay Announcement	255
	Music-on-Hold	254
	First Selector Console	1601
	Second Selector Console	1602
	First Directed Night Service Delay Announcement	251
	Second Directed Night Service Delay Announcement	252
	Pooled Modem	1901
	Tone Detector	2101
	Dial Dictation	201 and/or 2201
Data		
	Standard Data Port	1801
	STARLAN Interface Port (STARLAN CP), DLC-compatible	1802

TABLE 16-28 Save/Restore and System Restarts (Menu=9)

ACTION	DESCRIPTION	DATA
1	Save (Backup) translations	[1 to run]
2	Verify translations	[1 to run]
3	Restore translations	[1 to run]
10	Force a system warm start. FOR QUALIFIED SYSTEMS TECHNICIAN ONLY	[1 to run]
20	Force a system cold start. FOR QUALIFIED SYSTEMS TECHNICIAN ONLY.“ Full Default” cold start will reinstate all default values (true cold start). “Limited Default” cold start will reinstate default values everywhere except for port boards.	[1 for Full Default, 2 for Limited Default]

* For Action=1, you need to press the PLAY and RECORD buttons, For Action=2 and Action=3, you need to press the PLAY button.

CAUTION: Action=3 will interrupt phone service for about five minutes.

TABLE 16-29 RS232 Port Administration (Menu=10)

In response to “RS232=”, enter the RS232 connector (1-4) to be administered.

ACTION	DESCRIPTION	DATA
1	Reassign RS232 connector capability	[See footnote † for
1	Reassign RS232 connector capability	[0 to disconnect port or see footnote † for options and defaults]
2	Change the RETURN delay	[0-2; **0]**
3	Change the baud rate	[300, 1200, 4800, 9600 See footnote † for defaults]

† The default for each Target connector is as follows:

TARGET	DEFAULT DATA (=CAPABILITY)	DEFAULT BAUD RATE
1	1 (=Administration)	1200, 300 (auto-baud)
2	2 (=SMDR)	1200
3	3 (=Save/Restore Tape)	1200
4	Reserved	9600, 1200 (auto-baud)

TABLE 16-30 Automatic Route Selection Administration (Menu=11)

ACTION	DESCRIPTION	DATA
100	Assign a pattern number	[1-8]
101	Assign a start time for subpattern 1A in the form HOUR, MINUTES (HHMM)	[HHMM]
102	Assign a stop time for subpattern 1A	[HHMM]
110	Assign Route 1 for subpattern 1A (a facility access code [FAC] or virtual facility code [VFC])	[FAC or VFC]
111	Assign facility restriction level (FRL 0-3) for subpattern 1A, route 1	[FRL]
120	Assign Route 2 for subpattern 1A (a facility access code [FACJ or virtual facility code [VFC])	[FAC or VFC]
121	Assign facility restriction level (FRL 0-3) for subpattern 1A, route 2	[FRL]
130	Assign Route 3 for subpattern 1A (a facility access code [FAC] or virtual facility code [VFC])	[FAC or VFC]
131	Assign facility restriction level (FRL 0-3) for subpattern 1A, route 3	[FRL]
140	Allow subpattern 1A to overflow to DDD (1=YES, 0=NO)	[1/0]
141	Assign facility restriction level (0-3) for DDD overflow	[FRL]
200	Assign a pattern number	[1-8]
210	Assign Route 1 for subpattern 1B (a facility access code [FAC] or virtual facility code [VFC])	[FAC or VFC]
211	Assign facility restriction level (FRL 0-3) for subpattern 1B, route 1	[FRL]
220	Assign Route 2 for subpattern 1B (a facility access code [FAC] or virtual facility code [VFC])	[FAC or VFC]
221	Assign facility restriction level (FRL 0-3) for subpattern 1B, route 2	[FRL]
230	Assign Route 3 for subpattern 1B (a facility access code [FAC] or virtual facility code [VFC])	[FAC or VFC]
231	Assign facility restriction level (FRL 0-3) for subpattern 1B, route 3	[FRL]
240	Allow subpattern 1B to overflow to DDD [1=YES, 0=NO)	[1/0]
241	Assign facility restriction level (0-3) for DDD overflow	[FRL]
300	Area Code for which an ARS pattern is being assigned	[Area Code]
301	ARS pattern number associated with this Area Code	[1-8; 0 for none; 1]

Continued on next page

TABLE 16-30 Automatic Route Selection Administration (Menu=11) (continued)

ACTION	DESCRIPTION	DATA
401	Assign the ARS access code	[dial code: **9]**
402	Assign ARS pattern number for international calls	[1-8; 0 for none; 0]
500	Home Area Code (HAC) exception list number (1-4)	[1-4]
501	ARS routing pattern associated with this HAC exception list	[1-8]
511	Display CO codes on this HAC exception list (READ ONLY)	
512	Add CO code to HAC exception list	[Code Number]
513	Remove CO code from HAC exception list	[Code Number]
521	Display HAC exception list telephone numbers (7 digits)	[7-digit number]
522	Add a (7-digit) telephone number to the HAC exception list	[7-digit number]
523	Remove a (7-digit) telephone number from the HAC exception list	[7-digit number]
601	Assign a 7-digit emergency telephone number	[7-digit number]
602	Assign a 7-digit emergency telephone number	[7-digit number]
603	Assign a 7-digit emergency telephone number	[7-digit number]
700	Enter facility (route) code number	[FAC or VFC]
701	Assign associated area code	[Associated area code]
702	Specify how many digits to strip from the front when the dialed number is to the associated area code	[Number of digits]
703	Specify digits to be prefixed, after deleting digits as specified by Action 702 above, for calls to the associated area code	[Digits to be prefixed]
704	Specify how many digits to strip from the front when the dialed number is NOT to the associated area code	[Number of digits]
705	Specify digits to be prefixed, after deleting digits as specified by Action 704 above, for calls NOT to the associated area code	[Digits to be prefixed]
800	Pattern number for other area codes exception telephone numbers	[1-8]
821	Display entries in other area codes exception list	
822	Add a number to the other area codes exception list (first 8 or fewer digits of a 10-digit telephone number)	[Number]
823	Remove a number from the other area code exception list	[Telephone number]

Requirements for the SAT

This section defines requirements for the system administration terminal (SAT). Any data terminal with an RS-232C interface that meets the requirements below may be used as the SAT.

Display

System 25 administration requires the following display characteristics:

- Minimum display size of 16 lines by 80 columns
- Ability to display upper case ASCII alphabetic characters, ASCII numeric, and some other ASCII symbols (see *Keyboard* below)
- Carriage return and line feed characters are required to position the cursor at the start of a new line
- Full duplex operation.

Keyboard

System 25 administration requires keyboard input that includes alphanumeric characters and some basic ASCII symbol characters. Your administration terminal should be capable of sending the following ASCII characters:

A-Z or a-z	-	Used to access various commands
0-9	-	Menu selection and command parameters
*, #	-	Non-numeric telephone dial characters
•	-	"Wildcard" character
?	-	Causes additional information to be displayed
BACKSPACE	-	Corrects errors in typing
RETURN	-	Completes entry of numeric information
"	-	Text input (Display Support and Password Administration)

SAT Port Speed Setting

The data transfer rate for terminals or personal computers is set after a carriage return character is entered from the device keyboard. Two data transfer rates are supported–1200 baud and 300 baud. The default rate is 1200 baud.

Switch Settings for the AT&T Model 703 SAT

There are two sets of switch settings to check on the AT&T Model 703 SAT.

The three rocker switches at the upper right of the keyboard are set as follows: A) LOCAL COPY–press down left side of switch, B) ON LINE–press down right side of switch, C) UPPER CASE–press down left side of switch.

Four pencil switches under the paper compartment cover are set as follows: switches 1 and 3 to OFF; switches 2 and 4 to ON.

For more specific instructions, see the user's guide that was packaged with the SAT.

Index

U

V

W