

555-500-500 Issue 1, May 1986

# **AT&T SYSTEM 25** ADMINISTRATION MANUAL



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## FCC NOTIFICATION AND REPAIR INFORMATION

Dear Customer,

This telephone equipment is registered with the Federal Communications Commision (FCC) in accordance with Part 68 of it's Rules. In compliance with the Rules, be advised of the following:

## **1. MEANS OF CONNECTION**

Connection of this telephone equipment to the nation-wide telecommunications network shall be through a standard network interface jack USOC RJ21X. Connection to private line network channels requires jack USOC RJ2GX for tie lines or jack USOC RJ21X for off-premises station lines. These can be ordered from your Telephone Company.

## **2. NOTIFICATION TO THE TELEPHONE COMPANY**

If the system is to be connected to off-premises stations, you must notify the telephone company of the OPS class of service, OL13C, and the service order code, 9.0F.

Upon the request of the telephone company, you shall inform them of the following:

- The Public Switched Network "lines" (that is, your phone number) and the Private "lines" to which you will connect the telephone equipment.
- The telephone equipment's "registration number" and "ringer equivalence number" (REN) from the label on the equipment.
- For Private Line Connections, provide the facility interface code; TL31M for tie lines. You must also specify the service order code, 9.0F.
- The quantities and USOC numbers of the jacks required.
- For each jack, provide the sequence in which lines are to be connected; the type lines and the facility interface code and the ringer equivalence number by position when applicable.

This telephone equipment should not be used on coin telephone lines. Connection to party line service is subject to state tariffs.

## **3. REPAIR INSTRUCTIONS**

If you experience trouble with this telephone equipment, contact the AT&T Business Customer Service Center on 1-800-242-2121. The Telephone Company may ask that you disconnect this equipment from the network until the problem has been corrected or until you are sure that this equipment is not malfunctioning.

## **4. RIGHTS OF THE TELEPHONE COMPANY**

If your telephone equipment causes harm to the telephone network, the Telephone Company may discontinue your service temporarily. If possible, they will notify you in advance. But if advance notice isn't practical, you will be notified as soon as possible. You will be informed of your right to file a complaint with the FCC.

Your Telephone Company may make changes in it's facilities, equipment, operations or procedures that could affect the proper functioning of your equipment. If they do, you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service.

## **5. HEARING AID COMPATIBILITY**

The voice terminals described in this manual are compatible with inductively coupled hearing aids as prescribed by FCC.

FCC REGISTRATION INFORMATION			
Registration Number AS593M-71565-MF-E			
Ringer Equivalence	0.5A		
Network Interface	RJ21X or RJ2GX		

PRIVATE LINE SERVICE		
Service Order Code	9.0F	
Facility Interface Code		
● Tie Lines	TL31M	
• Off-Premises Stations	0L13C	

#### 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.

## **1. INTRODUCTION**

This manual provides the information needed 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.

During the planning process, the customer's requirements were identified by the AT&T Account Team and the customer. Those requirements were then converted into orderable system hardware when the Account Team configured the system. During implementation planning, features were assigned for the system and for individual terminals using the forms in the AT&T System 25 Implementation Manual, 555-500-650.

The implementation forms as explained in the *Implementation Manual* provide the information necessary to enter the initial translations that customize the system.

Before the initial translations are entered:

- The implementation forms must be completed.
- These forms should be collected and filed in the Administration Records Binder. (This is the binder that 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 these changes be recorded in the Administration Records Binder. If this is not done, future system administration activity will become increasingly difficult.

#### 1.1 SYSTEM ADMINISTRATION AND THE ADMINISTRATOR'S ROLE

System Administration involves initializing the system and administering any subsequent terminal and system changes. The AT&T systems technician who installs the system is responsible for initializing it. Subsequent changes that do not require equipment additions or rearrangements may be performed by the customer's System Administrator or the Systems Technician, at the customer's option. This manual is designed to support both the Systems Technician and the System Administrator in performing these tasks.

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 on a day-to-day basis as required.
- Maintaining system security.
- Notifying company management (and AT&T) about problems, alarms, and service complaints associated with the system.

If you have questions about system hardware or feature operation, you should refer to the AT&T System 25 Reference Manual (555-500-200) for complete information.

## **1.2 HOW TO USE THIS MANUAL**

Before you use the SAT to administer your system, you should have received hands-on training. You should also read and understand Section 2, Using Your System Administration Terminal, and Section 3, Using the Digital Tape Unit to Save and Restore, of this manual.

Section 5, Command Descriptions, provides detailed step-by -step instructions for adding trunks and stations or for changing system and station features and options. You should carefully review the first page of Section 5 (including the information about default trunk/station numbering) 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 make button assignments.

If you are initializing a system, follow the instructions in Section 4. Section 4 will direct you to the procedures in Section 5 in a specific sequence; it is important that you perform the steps in the indicated order.

Section 6 provides quick reference information. The tables in this section are intended to help those thoroughly familiar with system administration locate specific information without having to refer to the full text in Section 5. However, unless you are an experienced system administrator, you should follow the procedures in Section 5.

## **1.3 BEFORE YOU GO ON**

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.

#### 1.4 REQUIREMENTS FOR THE SYSTEM ADMINISTRATION TERMINAL

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.

#### 1.4.A 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 numerics, and some other ASCII symbols (see Section 1.4.B below)
- Carriage return and line feed characters are required to position the cursor at the start of a new line
- Full duplex operation.

1.4.B 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" digit character
? –	Causes additional information to be displayed
BACKSPACE -	Corrects errors in typing
RETURN –	Completes entry of numeric information

#### **1.4.C 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.

#### 1.4.D 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 downright 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 AT&T System Administration Terminal User's Manual (555-500-720).

## **2. USING YOUR SYSTEM ADMINISTRATION TERMINAL**

#### 2.1 LOGGING IN AND LEAVING AN ADMINISTRATION SESSION

#### 2.1.A System Security

For obvious 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 Information Systems Account Team.

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

#### 2.1.B Entering Your Password

After you turn on the System Administration Terminal (SAT), you see the following prompt:

#### Enter Password- >

(If you do not see this prompt, enter <RETURN >.)

Enter your password followed by <RETURN>.

#### 2.1.C Invalid Password Entry

If an invalid password is entered, you see an error message followed by the password prompt. The sequence is:

That is not the password! Enter Password->

#### 2.1.D Successful Log-in

When you have entered the correct password, the terminal displays the MAIN MENU from which you can select administration functions.

#### 2.1.E 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.

#### 2.2 THE SYSTEM 25 ADMINISTRATION MAIN MENU

When you have logged in to the administration terminal, you see the MAIN MENU displayed. This menu allows you to enter one of several command areas.

Once you have selected an item from the MAIN MENU, you enter the command level consisting of Action items and Data items. Some commands (e.g., PORT, DGC, and PDC) require an additional target parameter. These commands will be discussed in detail in Section 2.3.A.

The MAIN MENU display is as follows (you may find minor variations on your display):

#### MAIN MENU

1)	PORT	7)	TOLL	ALLOWED	LIST
2)	PDC	8)	SEARC	СН	
3)	DUPLICATE	9)	SAVE/	RESTORE	
4)	SYSTEM	10)	RS232		
5)	FPDC	11)	ARS		
6)	DGC	12)	reserve	d	

Make one selection from menu- >

#### 2.2.A MAIN MENU Selections

The MAIN MENU items can be described briefly as follows:

1) PORT

Allows you to administer Station, Trunk, Data port, or Special port parameters by physical port number. That physical location is described by a set of digits in the format **CSSPP**, where **C** represents the one-digit cabinet number, **SS** represents the two-digit slot number, and **PP** represents the two-digit number for the port. For example, a PORT value of 10704 describes port 4 (04) in cabinet number 1, slot number 7 (07).

Allows you to administer Station parameters by Personal Dial Code (PDC) number. PDCs are similar to extension numbers; the valid range for PDCs is 1 through 9999.

3) DUPLICATE

(This feature is not yet implemented.)

4) SYSTEM

Allows you to administer system wide parameters.

5) FPDC

Allows you to administer Floating PDC numbers.

6) DGC

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

7) TOLL ALLOWED LIST

Allows you to administer Toll Calls Allowed Lists.

<sup>2)</sup> PDC

#### 8) SEARCH

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

#### 9) SAVE/RESTORE

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

#### 10) RS232

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

11) ARS

Allows you to administer Automatic Route Selection.

12) reserved

(Reserved for future expansion.)

#### 2.2.B Selecting a MAIN MENU Item

To select an item from the MAIN MENU, type the number of the desired item followed by a RETURN character.

If you type a RETURN character by itself or if you type a number outside the range from 1 through 12, you see the following message:

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

#### **2.2.C Correcting Typing Errors**

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

When you type a backspace character, your terminal responds by generating a new display line. This line contains all the characters you had typed except for the last character. For each backspace character generated, you will see a new line with one fewer input characters. For example, if at some prompt you typed four characters and discovered that you needed only the first two, you would 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.

#### 2.2.D Strange Output

If you should accidentally hit the <ESCAPE> key on your SAT, the SAT may display highly abbreviated responses. This indicates that the SAT is operating in a mode used for personal computer based administration. The best thing to do at this point is to turn off the SAT for five seconds, turn it back on, and log in again. Be sure to check the last items you were administering before proceeding.

#### 2.3 COMMAND FORMATS

The basic format of a system administration command consists of two items: an ACTION number, and a DATA value.

The following example shows the format of a completed command line for the PORT command (MAIN MENU selection 1):

#### Port=10101 Action=1 Data=201

#### 2.3.A Syntax

**ACTION:** An ACTION number provides you with a window through which to view system administration functions. 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 ACTION number. To change the current value of an administration parameter, you change the DATA value.

**TARGET:** Some commands also require a third information number, a *target*. The target is a Personal Dialing Code (PDC), a PORT number, a Direct Group Calling (DGC) number, a Toll Calls Allowed List number, or an RS232 Channel number associated with certain ACTION numbers and DATA values. 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 above) is displayed.

This is the basic command format used in System 25 administration. Before beginning the section on entering or changing numbers, you should understand error messages and warnings generated by the system.

You will find examples of each of these prompts or commands in Section 2.3.C, "Basic Command Functions."

#### 2.3.B Error Messages, Print Messages, and Warning Messages

During an administration session, there are occasions when you may enter inappropriate information at a prompt. While System 25 cannot catch all errors, it does have the ability to filter a great many.

System 25 has three means of responding to incorrect input: 1) an error message, 2) a print message, and 3) a warning.

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]

Error messages can occur at any of three prompt levels: 1) a TARGET prompt, 2) an ACTION prompt, or 3) a DATA prompt.

Consider a specific example. Most voice terminals can be removed from the system through the PORT selection on the MAIN MENU. However, the Attendant Console can be deleted only through the SYSTEM selection on the MAIN MENU. Assume that someone attempts to remove the Attendant Console from the system through the PORT selection.

Prompts and inputs are represented in bold lettering. Comments on the process are contained in square brackets.

#### MAIN MENU

1) PORT	7) TOLL ALLOWED LIST
2) PDC	8) SEARCH
3) DUPLICATE	9) SAVE/RESTORE
4) SYSTEM	10) RS232
5) FPDC	11) ARS
6) DGC	12) reserved

Make one selection from menu- >1 <RETURN> [Selects PORT option]

**Port=10801 <RETURN>** [Port at which the Attendant Console resides — the target]

Action=1 <RETURN> [Identifies station type and model]

Port=10801 Action=1 Data=307 [Tells you that a 34-Button Deluxe Voice Terminal is attached to this port]

Enter "**D**" to get the DATA prompt.

**Data=0** <**RETURN**> [Tells the system that you want to remove this station]

#### **Error 1059**

inappropriate request [First level error message followed by new prompt]
Data =

? [You request additional help on this error message]

#### Error 1059 Must remove CAP from SYSTEM - menu (4) [Second level error message followed by new prompt]

**Data** = [System continues prompting 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 message

#### P16: END OF LIST

when you reach the end of that list.

**WARNING MESSAGES:** A warning message provides 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.

For example, 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 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."

2.3.C Basic Command Functions

You were introduced to the basic command formats in Section 2.3.A. This section shows you how to enter or change: an ACTION number, a DATA value, a PORT, or a PDC value. Please observe that you do not have to press the  $\langle \text{RETURN} \rangle$  key when you enter non-numeric characters with these commands. Also note that you you enter the letter **M** (upper or lower case) in response to any prompt, you will be returned to the MAIN MENU.

1. Changing an Action Number. The basic command format shows the current value of the parameter associated with its ACTION number and the target (if any) that you indicated for that command,

If you wish 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 the RETURN character.

Here is an example of the A command:

You see:

SYSTEM: Action=1 Data=10801

You enter A6 < RETURN > and see

> Action=6
SYSTEM: Action=6 Data=30
>

The ACTION numbers for all command areas are described in more detail in the COMMAND DESCRIPTIONS section of this manual. You should also see Section 2.3.D, ACTION GROUPS, for commands that require more than one ACTION for their completion.

 Changing a Data Value. To change the DATA value associated with an ACTION, type D or d on the keyboard. When you see the Data= prompt, you enter the valid data value followed by the RETURN character.

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

You see:

SYSTEM: Action=7 Data=3 >

To change, you enter D5<RETURN> and see

> Data=5 SYSTEM: Action=7 Data=5 >

3. Changing a Port or Personal Dialing Code (PDC) Value. When you select item 1 from the MAIN MENU, you administer ports by specifying their physical location.

If you select item 2 from the MAIN MENU, you can administer only station ports. However, this time you specify the PDC of the station you want to administer. The action/data items for this menu item are the same as those for the PORT menu selection. (See Sections 5.4 through 5.6.) (Consult the COMMAND DESCRIPTIONS section of this manual [Sections 5.2 through 5.6] for a description of the ACTION numbers for this menu item.)

A PORT value is a number that represents a station, trunk, data port, or special feature port. A port is described by its physical location in the System 25 hardware.

That physical location is indicated by a set of digits in the format **CSSPP**, where **C** represents the one-digit cabinet number, **SS** represents the two-digit slot number, and **PP** represents the two-digit number for the port.

For example, a PORT value of 10704 describes port 4 (04) in cabinet number 1, slot number 7 (07).

To change the PORT associated with an ACTION you type the  $\mathbf{T}$  or  $\mathbf{t}$  (Target select) character on the keyboard. (Remember, you do not have to enter a RETURN character with these non-numeric characters.)

When you see the **Port=** prompt, you enter the value of the PORT (i.e., the digits identifying the **CSSPP** discussed above) followed by <RETURN>.

Here is an example of the T (Target select) command with PORT (MAIN MENU item 1):

You see:

```
Port=10101 Action=1 Data=201
```

You enter T20608 < RETURN> and see:

> Port=20608 Action= Stations can be modified by selecting the PDC menu item. Now, instead of specifying the physical location of the port, as you did in the preceding example, you specify its PDC value.

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 T8765<RETURN> and see:

> PDC=8765 Action=

#### 2.3.D 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.)

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, you are advanced automatically to the next ACTION'; this process will continue 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 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 will be advanced automatically to the next ACTION after you change the DATA value.

You may change ACTION numbers with the A command as before.

It is important for you to note that 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 before the last DATA for that group is entered, all changes for that group are abandoned.

Here is an example of administering an ACTION GROUP:

You see:

Port=10101 Action=1 Data=0

You enter D201 <RETURN> and see:

> Data=201 Port=10101 Action=1 Data=201 > Port=10101 Action=2 Data=0 > Data= You enter 6789 <RETURN> and see:

> Data=6789 Port=10101 Action=2 Data=6789 >

#### 2.3.E Lists, Searches, and Port Removal

Several MAIN MENU selection 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 to show each member of the list. Selecting this ACTION will produce the first member of the list. To see the next member in the list, type a C or a c to continue. For example, if you selected MAIN MENU item 5 (FPDC) and wanted to display active FPDCs:

You see:

> Action =

You enter 1<RETURN> and see:

>Action= 1
c to continue list, anything else to abort
>
PDC: 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=99999 >

You enter C and see:

P16: END OF LIST FPDC: Action=1 Data=0 You may also "abort" the list by using one of the other commands discussed above (i.e., T, A, D, or M).

The SEARCH area of the menu is similar to the lists described above. However, most types of search require at least two steps. Within SEARCH, "Action=1 Data=[data value]" identifies the type of search you want; "Action=2 Data=[data value]" narrows the range of that search. A few search areas require yet a third step, "Action=3 Data=[data value]." When the type of search and the required qualifiers are specified, you begin the actual search by typing C or c, "commence search."

When (under PORT or PDC on the MAIN MENU) you try to remove a port from the system, there are several kinds of associations that you may wish 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 that 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 wish to remove, you will see the warning message, W18: NO MORE BLOCKS. The message is displayed to prevent you from accidentally removing a port from the system.

#### 2.3.F Default Station Numbers (PDCs) and Dial Codes

Each time it is COLD STARTED, System 25 assigns PDCs/DDCs and trunk numbers by default to all ports on circuit packs that are in the system.

The default trunk numbers assigned are 0001 through 0104. The default station dial codes are: 200 through 238 and 300 through 355 (multiline voice terminals), 400 through 599 (single-line voice terminals), 600 through 704 (data terminals). The default system dial codes are: 100, 101, and 102 (for loop start, ground start, and tie trunks, respectively); 800 through 807 (attendant call park), 810 for night service, and 820 (pooled modem).

If these defaults conflict with PDCs/DDCs or trunk numbers that you wish to use for other purposes, see Section 4.1 and the first page of Section 5.

## **3. USING THE DIGITAL TAPE UNIT TO SAVE AND RESTORE**

If you do not have a digital tape unit, you should skip this section.

NOTE: This section assumes that your digital tape unit is correctly connected and that the power is on. See the AT&T Installation and Test Manual (555-500-100) for further information. It also assumes that you will use a high quality audio cassette tape. It is important that you make two (2) backup tapes and that you verify each of those tapes at any point at which you save translations.

BE SURE THAT THE TAPE DECK IS PLUGGED INTO CONNECTOR "3" OF THE CABLE. For Action=1, the PLAY and RECORD buttons must first be depressed. For Action=2 and Action=3, the PLAY button must be depressed. CAUTION: Action=3 will interrupt phone service for about five minutes.

#### 3.1 INSERT CASSETTE AND REWIND TAPE

- 1. Press the STOP/EJECT button on the tape unit. The plastic cover over the cassette well will pop up.
- 2. Insert the cassette into the cassette well (Side A up) so that the exposed tape faces the the tape unit's buttons. Press the cassette downward until it snaps into place.
- **3.** Close the plastic cover.
- 4. Press the REWIND key, and wait for the tape unit to completely rewind tape. [You should do this before beginning any save, verify, or restore operation so that you know you are at the beginning of the tape.]

NOTE: 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.

#### 3.2 SAVE YOUR TRANSLATIONS

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 five minutes to perform a SAVE operation, which is substantially less than the time required to reenter all translations from paper forms.

To SAVE:

- 1. Insert cassette and rewind the tape.
- 2. Press the two buttons RECORD and PLAY simultaneously. [The tape unit will not yet begin to operate.]
- 3. Log in to your System Administration Terminal (SAT) if you have not already done so.
- 4. Enter 9 at the main menu prompt. (SAVE/RESTORE)
- 5. Enter 1<RETURN> at "Action=" prompt. You will then see the line:

#### Save/Restore Action=1 Data=

6. Enter D. Enter 1 <RETURN> at "Data= " prompt.

You see the message:

## W24: YOU ARE ABOUT TO START A TAPE SAVE c for continue, any other key for abort

7. Enter C,

The entire line should now read: 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.

If the save is successful, the SAT displays: SAVE COMPLETED SUCCESSFULLY

- 8. Press the STOP/EJECT button on the tape unit.
- 9. Rewind the tape.
- 10. Run the VERIFY operation on this tape (see next procedure).

If the save is not successful, the SAT will display: SAVE FAILED

The procedure for troubleshooting is as follows:

- 11. Rewind the tape and perform the SAVE procedure again.
- 12. If this save is not successful, follow your local instructions
- 13. If this save is successful, follow steps 8 through 10 above.

#### **3.3 VERIFY THE ACCURACY OF THE SAVED TRANSLATIONS**

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.

To VERIFY:

- 1. Insert cassette and rewind the tape (as required).
- 2. Press the PLAY button on the tape unit.
- 3. Log in to your SAT.
- 4. Enter 9 at the main menu prompt. (SAVE/RESTORE)
- 5. Enter 2<RETURN> at "Action-=" prompt. You see the line:

Save/Restore: Action=2 Data=

6. Enter D. Enter 1<RETURN> at "Data=" prompt.

You see the message:

## W25: YOU ARE ABOUT TO START A TAPE VERIFY c for continue, any other key to abort

7. Enter C.

The entire line should now read: Save/Restore: Action=2 Data=1

The tape unit automatically starts the VERIFY procedure at this point.

When the verification is complete, the tape unit stops.

If the verification is successful, the SAT displays: VERIFY COMPLETED SUCCESSFULLY

- 8. Rewind the tape.
- 9. Label the tape with the date and time. Store the tape in a safe place.

If the verification is successful, the SAT displays: VERIFY FAILED

The procedure for troubleshooting is as follows:

- 10. Rewind the tape and perform the verification procedure again. If the verification fails a second time, perform the SAVE and VERIFY procedures again.
- 11. If this verification is not successful, follow your local instructions
- 12. If this verification is successful, follow steps 8 and 9 above.

#### 3.4 RESTORE THE SYSTEM TRANSLATIONS FROM A BACKUP TAPE

This section describes how to restore the translations you saved earlier.

NOTE: When you RESTORE, you lose System 25 service for the period (about five minutes) required to complete the restoration.

To **RESTORE**:

- 1. Insert cassette and rewind the tape (as required).
- 2. Press the PLAY button on the tape unit.
- **3.** Log in to your SAT.
- 4. Enter 9 at the main menu prompt. (SAVE/RESTORE)
- 5. Enter 3<RETURN> at "Action=" prompt. You see the line

#### Save/Restore: Action=3 Data=

6. Enter **D.** Enter **1<RETURN>** at "Data=" prompt.

You see the message:

## W26: YOU ARE ABOUT TO START A TAPE RESTORE c for continue, any other key for abort

7. Enter C.

The entire line should now read: Save/Restore: Action=3 Data=1

8. The tape unit automatically starts the RESTORE procedure at this point.

When the restoration is complete, the tape unit stops.

If the restoration is successful, the SAT displays: INITIATED WARM START

Following this procedure, the system then automatically "warm starts" to initialize the system's ports with the options read into the system via the tape restoration.

- 9. Rewind the tape.
- **10.** Store the tape in a safe place.

If the restoration is not successful, the SAT displays: RESTORE FAILED

The procedure for troubleshooting is as follows:

- 11. 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.
- 12. If this restoration is not successful, DO NOT use your backup system translation tape. (Your data tape unit may be malfunctioning. If that is the case, it could destroy the backup tape as well.) Follow your local instructions.
- **13.** If the restoration is successful using the test tape, perform the RESTORE procedure using your backup system translation tape.

## 4. INITIALIZING THE SYSTEM

This section outlines the procedure for administering initial system translations (that is, for *initializing*) AT&T System 25.

To initialize the system, the desired configuration must be known. The System 25 implementation forms contain all the information necessary to initialize the system, and 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 all port assignments be written on the forms as the ports are translated. *Failure to do this will make future changes and additions very difficult.* 

In initializing the system, the steps outlined below be **should be followed in the sequence indicated.** Difficulties may arise if this sequence is not followed.

## 4.1 DEFAULT TRANSLATIONS

Each time it is COLD STARTED, System 25 assigns station PDCs/DDCs and trunk numbers by default to all circuit packs that are in the system. As you attempt to assign dial codes to stations and trunks following the steps outlined in the next section, 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 offending default code to one that is consistent with the desired dial plan.

The default trunk numbers assigned by the system are 0001 through 0104. Stations are assigned the following default dial codes: 200 through 238 and 300 through 355 (multiline voice terminals), 400 through 599 (single-line voice terminals), 600 through 704 (data terminals), 800 through 807 (attendant call park), 810 (night service), and 820 (pooled modem). Trunks are assigned the following default dial codes: 100 (loop start), 101 (ground start), and 102 (tie).

It is also important to *untranslate* any unassigned trunk ports on System 25. 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. The system will busy out such ports after they have been tried once unsuccessfully. The circuit pack will display a red alarm LED and the Attendant Console alarm (green) will turn on. Then you will have to clear the alarm and untranslated the port.

#### 4.2 INITIALIZATION SEQUENCE

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). A Cold Start (which takes about 3 minutes) causes the system to check all slots for valid circuit pack (CP) types and assigns default translations to all ports (except auxiliary trunk ports).

During a Cold Start, the SAT will list all circuit packs in the system, by cabinet, and indicate any valid types/versions detected. 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. No red LEDs should be on.

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

When you initialize a System 25, following the steps listed in this section, 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.

- 1. From the information provided on the System Options Form, enter system toll restriction options, call coverage options, pooled modem options, and other system options following the procedures in Section 5.1.
- 2. From the information on the Toll Calls Allowed Lists form, enter these lists following the procedure in Section 5.1.
- **3.** From the Floating Personal Dial Code Directory, enter all Floating PDCs following the procedure in Section 5.1.
- 4. From the System Speed Dialing Directory, enter System Speed Dialing Numbers following the procedure in Section 5.1.
- 5. From the information provided on the Trunk forms, assign all trunk ports and assign each trunk's Class-Of-Service, following the procedures in Section 5.2. Be sure to record port assignments on the Trunk forms.
- 6. From the information provided on the Auxiliary Equipment Options form, assign and set up any special feature ports following the procedures in Section 5.3. Again, be sure to record port assignments.
- 7. From the information provided on the Voice and Data Station Records form, assign all station ports (except for attendant consoles), following the procedures in Section 5.4. Do NOT enter Class-Of-Service parameters yet. Be sure to record each station's port assignment on the individual Voice Terminal or Data Terminal forms as you assign them.
- **8.** From information on the Attendant Options and Attendant Console forms, assign ports and enter Class-Of-Service, attendant features and button features for the Attendant Console(s) following the procedures in Section 5.5 and 5.6.
- **9.** From the Terminal Forms, enter Class-Of-Service information for all voice and data stations (and button assignments for multiline voice terminals) following the procedures in Sections 5.4 and 5.6.
- 10. From information on the Direct Group Calling Directory form, enter DGC groups following the procedure in Section 5.7.
- 11. From the information provided on the Automatic Route Selection forms, enter ARS options and patterns following the procedure in Section 5.8.
- 12. Follow the procedures in Section 3 for saving the system translations and verifying their accuracy.

**The system is now initialized:** Be sure to test to ensure that the system is properly initialized following the procedures in System 25's *Installation and Test Manual* (555-500-100).

## **5. COMMAND DESCRIPTIONS**

This section provides instructions for accomplishing specific administrative tasks. You should NOT attempt to perform these tasks until you have read the first two sections of this manual.

If you are Initializing this system, be sure to follow the procedures outlined in Section 4. Failure to follow these instructions may result in serious operating difficulties!

Recommended (or default) values are provided for many administration parameters. Some of these are marked with an "@" symbol because it is strongly recommended that values marked with this symbol be chosen/defaulted. Selecting non-standard values for these parameters without fully understanding the implications of such choices may lead to unsatisfactory results.

NOTE: A number of action/data pairs are parts of action groups. That is, if you enter an action/data pair, you MUST complete the remaining action/data pairs in the group. If you do not complete the required sequence, the data originally in the system will remain. For example, if you wish to assign a voice terminal or change a voice terminal, you must first assign the voice station type. Then, you MUST assign that voice terminal a PDC. If you do not assign a PDC, the new voice terminal will not be assigned. When you complete each action/data pair in sequence, System 25 will automatically prompt you for the next action/data pair. In this manual, Action/data pairs of this kind are indicated with a special mark, "§." The last item in such a group is not so marked because no more items are required after the last.

Each time it is COLD STARTED, System 25 assigns PDCs/DDCs and trunk numbers by default to all ports on circuit packs that are in the system. The default trunk numbers assigned are 0001 through 0104. The default station dial codes are: 200 through 238 and 300 through 355 (multiline voice terminals), 400 through 599 (single-line voice terminals), 600 through 704 (data terminals). The default system dial codes are: 100, 101, and 102 (for loop start, ground start, and tie trunks, respectively); 800 through 807 (attendant call park), 810 for night service, and 820 (modem request code— pooled modem). If these defaults conflict with PDCs/DDCs or trunk numbers that you wish to use for other purposes, you must reassign the default code. To reassign a station dial code, follow the procedure in Section 5.4.C. To reassign a trunk number, follow the procedure "Assigning a Trunk Number" in Section 5.2.A.

A few action/data pairs have been intentionally omitted from Section 5. [The items are: MAIN MENU item 1, Actions=31 through 39; MAIN MENU item 9, Actions=10 and 20.] These commands, for maintenance and special system configurations, are for use by qualified Systems Technicians only. (These action/data pairs are included in the reference section at the end of this manual; explanations of their functions can be found in the *AT&T System* 25 *Maintenance Manual* [555-500-105]).

REMINDER: The basic administration commands are: **m=MAIN MENU; t=target; a=action; d=data; c=continue.** These commands can be entered at any time to access prompts and change the current menu, target, action, or data. You do NOT press <RETURN> after typing these.

#### 5.1 SYSTEM OPTIONS

This section describes how to set system-wide options.

#### 5.1.A Toll Restriction Options

From Prompt: You Enter:

MAIN MENU 4

Specify your area code. Data will be your area code.

From Prompt:	You Enter:
Action=	30
Data=	Your area code

Do you want to allow toll restricted stations to make toll calls within your area code? (1=YES/0=NO).

From Prompt:	You Enter:	Default Data:
Action-=	31	
Data=	1/0	1

Is the 1 prefix required to dial *outside* your area code? (1=YES/0=NO).

From Prompt:	You Enter:	Default Data:
Action=	32	
Data=	1/0	1

Is the 1 prefix required to dial	toll calls within your area code?	(1=YES/0=NO).
From Prompt:	You Enter:	Default Data:
Action=	33	
Data=	1/0	0

Do you want to toll restrict calls made over inter-PBX trunks (type 805) that start with one specific Data will be a number between 1 and 9 or 0 for NONE.

From Prompt:	You Enter:	Default Data:
Action=	34	
Data=	1-9, or 0	9

#### 5.1.B Call Coverage Options

From Prompt:	You Enter:
MAIN MENU	4

Do you want to provide call coverage ringing on internal calls? (1=YES/0=NO).

From Prompt:	You Enter:	Default Data:
Action=	40	
Data=	1/0	1

Specify the number of rings before calls are sent to call coverage or call following calls return to their home station. Data will be a number between O and 31.

From Prompt:	You Enter:	Default Data:
Action=	41	
Data=	0-31	2

5.1.C Pooled Modem Optio	ns	
From Prompt:	You Enter:	
MAIN MENU	4	
Specify the Modem Request	Code, See item 8 on Implementation	n Systems Options form.
From Prompt:	You Enter:	Default Data:
Action=	60	
Data=	1-9999	820
Does the receiver respond t	o remote loop? (1-YES/0-NO).	
From Prompt:	You Enter:	Default Data:
Action=	61	
Data=	1/0	1 @
Is there disconnect on loss	of carrier? ( <b>l=YES/0=NO).</b>	
From Prompt:	You Enter:	Default Data:
Action=	62	
Data=	1/0	1@
Are pins CF and CB comm	non? ( <b>l=YES/0=NO</b> ).	
From Prompt:	You Enter:	Default Data:
Action=	63	
Data=	1/0	1@

 $@\ \mbox{Strongly}$  recommended this value be used.

Is there disconnect on received space? (1=YES/0=NO).			
From Prompt:	You Enter:	Default Data:	
Action=	64		
Data=	1 / 0	1@	

Should the system send a space character on disconnect? (1-YES/O-NO).

From Prompt:	You Enter:	Default Data:
Action=	65	
Data=	1/0	1@

5.1.D Other System Options		
From Prompt:	You Enter:	
MAIN MENU	4	
Do you want to set the time of day? Data will be a number in the form HHMM where $HH = hour$ (00 through 23) and $MM = minutes$ (00 through 59).		
From Prompt:	You Enter:	
Action=	50	
Data=	ННММ	

<sup>@</sup> Strongly recommended this value be used.

Do you want to set the date? Data will be a number in the form MMDDYY where MM = month (01 through 12), DD = day (01 through 31), and YY = year (00 through 99).

From Prompt:	You Enter:
Action=	51
Data=	MMDDYY

Should SMDR records to be sent to the SMDR port? (1=YES/0=NO).

From Prompt:	You Enter:	Default Data:
Action=	52	
Data=	1/0	1@

Start billing calls how many seconds after the last digit is dialed? Data will be a number between 10 and 255.

From Prompt:	You Enter:	Default Data:
Action=	53	
Data=	10-255	40 @

Assign the Central Office trunk pool access code (1-9999; 0 for NONE). This code cannot be changed after any trunks have been assigned this facility access code.

From Prompt:	You Enter:	Default Data:
Action=	71	
Data=	CO Trunk Access Code	100, 101, or 102 {depending on trunk type)

<sup>@</sup> Strongly recommended this value be used.

Set the number of DID digits used to match against station PDCs. Data will be a number between 2 and 4 or 0 for NONE.

From Prompt:	You Enter:	Default Data:
Action=	72	
Data=	2-4, or 0	3

Assign the number of account code digits. Data will be a number between 0 and 15.

From Prompt:	You Enter:	Default Data:
Action=	73	
Data=	0 - 1 5	15

#### 5.1.E 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.

From Prompt:	You Enter:
MAIN MENU	7
TOLL ALLW=	1-4 {list to be accessed}

To list members of a TCA group:

NOTE: To continue the listing, enter C after each code number is printed.

From Prompt:	You Enter:
Action=	1
c to continue list >	c

Do you want to add a code number to the list? Data will be a number of the form NNX or NPA-NNX where NNX is a 3-digit CO exchange code, NPA is a 3-digit area code, and NPA-NNX is a combination of these codes (optionally separated by a hyphen). The WILDCARD character, . , may be used in the CO exchange code part (NNX) of these codes. That is, NNX can be entered as NNX, NN., N.., or . . .

From Prompt:	You Enter:
Action=	2
Data=	NNX or NPA-NNX

Do you want to delete a code number from the list? Data will be a number of the form NNX or NPA-NNX where NNX is a 3-digit CO exchange code, NPA is a 3-digit area code, and NPA-NNX is a combination of these codes (optionally separated by a hyphen). The WILDCARD character, . , may be used in the CO exchange code part (NNX) of these codes. That is, NNX can be entered as NNX, NN., N., or . . .

From Prompt:	You Enter:
Action=	3
Data=	NNX r NPA-NNX

#### 5.1.F Floating PDCs (FPDCs)

From Pr	ompt:	You	Enter:
MAIN	MENU		5

To list active FPDCs:

NOTE: To continue the listing, enter C after each FPDC is printed.

From Prompt:	You Enter:
Action-	1
Do you want to add an FPDC? Data will be an FPDC (1-9999).

From Prompt:	You Enter:
Action=	2
Data=	FPDC (to be added)

Do you want to delete an FPDC? Data will be an FPDC.

From Prompt:	You Enter:
Action=	3
Data=	FPDC {to be deleted)

#### 5.1.G System Speed Dialing

System Speed Dialing allows a four-character code, #100 through #189 (assigned in "Action=25" below), to be used in place of up to 28 dialed digits.

The assignment of the digits (in "Action= 26" below) is subject to the following rules.

- The number of digits and pauses must be no greater than 28.
- The \* character can be used. It means a one and one-half second pause.

There is a limited number of digits available in the system for use with speed dialing and repertory dialing numbers. When that limit is reached (on average three speed dialing numbers per voice terminal on a full system), no additional speed dialing or repertory dialing numbers are available. Consequently, it is important that unused speed dialing or repertory dialing numbers be removed (using "Action=26" below) to free those digits for use with active numbers.

From Prompt:	You	Enter:
--------------	-----	--------

MAIN MENU 4

To assign a speed dialing access code, data will be a number between 100 and 189.

From Prompt:	You Enter:
Action=	25§
Data=	100-189

To assign a speed dialing number, data will be a number (digits 0 through 9, or \*).

Action=26

Data=

Number

# 5.2 TRUNKS

This section describes how to assign and remove trunks. It also describes the procedure for assigning class-of-service parameters for various types of trunks. All procedures described below are performed after selecting MAIN MENU item 1 [PORT].

#### 5.2.A Trunk, Assign

The first step is defining the trunk type. That is accomplished by following procedure. Data will be a number, N, a trunk type obtained from the table below.

NOTE: Remember that a number of action/data pairs are parts of action groups. That is, if you enter an action/data pair, you MUST complete the remaining action/data pairs in the group. If you do not complete the required sequence, the data originally in the system will remain. When you complete each action/data pair in sequence, System 25 will automatically prompt you for the next action/data pair. In this manual, Action/data pairs of this kind are indicated with a special mark, "§." The last item in such a group is not so marked because no more items are required after the last.

From Prompt:	You Enter:
MAIN MENU	1

MAIN MENU

Port=

**CSSPP** {physical port

1 §

you wish to assign}

Action=

Data=

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*
DID Delay Dial	903
Auto-in/Auto-out	1001
Auto-in/Dial-out	1002
Immediate Dial-in/Auto-out	1003
Immediate Dial-in/Dial-out	1004
Wink Dial-in/Auto-out	1005
Wink Dial-in/Dial-out	1006*
Delay Dial-in/Auto-out	1007
Delay Dial-in/Dial-out	1008

\*Default Type

#### Assigning a Trunk Number

Data will be a 4-digit trunk number.

From Prompt:	You Enter:	Default Data:
Action=2		
Data=	Trunk No.	0001-0104

#### 5.2.B Trunk, Remove

From Prompt:	You Enter:
MAIN MENU	1
Port= CSS you	PP {physical port wish to remove}
Action=	1
Data=-	0

#### 5.2.C DID Trunks, Assign Class-of-Service

From Prompt:

MAIN MENU

Port=

CSSPP {physical port you wish to assign COS}

1

You Enter:

What is the class-of-service code? Data will be a number [1, 2, 3, or 4] equal to the number of digits the CO sends over this trunk.

From Prompt:	You Enter:	Default Data:
Action=	3	
Data=	1-4 {digits expected}	3

#### 5.2.D All Other Trunks, Assign Class-of-Service

NOTE: This section assumes that your trunks and their trunk numbers have been assigned (see Section "Installing a Trunk").

From Prompt:	You Enter:
MAIN MENU	1
Port=	CSSPP {the physical port}

What is the class-of-service code? Data will be a number between 0 and 15. That number is obtained from the table, "Trunk Class-of-Service," below.

From Prompt:	You Enter:	Default Data:
Action=	3	
Data=	0-15	8

TRUNK CLASS-OF-SERVICE				
COS NIGHT OUTWARD IN SHORT				
CODE	SERVICE	SIGNALING	ONLY	DISCONNECT
0		TT		
1		TT	•	
2		ТТ		•
3		TT	•	
4		DP		
5		DP	•	
6		DP		
7		DP	•	•
8	•	TT		
9	•	TT	•	
10	•	TT		٠
11	•	TT	•	•
12		DP		
13		DP	•	
14	•	DP		•
15	•	DP	•	٠

TT=Touch-Tone DP=Dial-Pulse

Is this trunk in a pooled facility access group? If so, enter the facility access code (FAC). Enter 0 if the trunk is not in any group.

From Prompt:	You Enter:	Default Data:
Action=	4	
Data=	FAC, or 0	100 for Loop Start 101 for Ground Start 102 for TIE trunks

#### Do you want to allow dial access? (l=YES/0=NO).

From Prompt:	You Enter:	Default Data:
Action=	5	
Data=	1 / 0	162

Do you want to assign the trunk to a DGC group? Data will be the DGC group number between 1 and 32 or 0 for NONE.

From Prompt:	You Enter:	Default Data:
Action=	6	
Data=	1-32, or 0	0

Do you want to make this a Directed Night Service trunk? (**l=YES/0=NO**). Note that the trunk COS (Action=3 above) must specify night service.

From Prompt:	You Enter:	Default Data:
Action=	7	
Data=	1/0	1

Do you want to assign a Night Service delay announcement? Data will be a number -1 for first delay announcement (#1); 2 for second delay announcement (#2); 0 for NONE. (See Section 5.3.E to install the announcement equipment.)

From Prompt:	You Enter:	Default Data:
Action=	8	
Data=	1, 2, or 0	0

<sup>@</sup> Strongly recommended this value be used.

Enter type of incoming signaling (tie-trunks only) (1=Touch-Tone/0=Dial-Pulse).

From Prompt:	Yo	u Enter:	Default	Data:
Action=		9		
Data=		1/0	0	

To connect this tie-trunk directly to another PBX (that is, not in the usual way-through the Central Office) see items 37, 38, and 39 in Table 14 in Section 6.

What is the pooled trunk hunting order of this trunk {Read Only}.

NOTE: 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  $\ldots$ ). 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 A, B, C, and D, those trunks would be used in the order D, C, B, and A.

From Prompt:

You Enter:

Action=

10

# 5.3 AUXILIARY EQUIPMENT OPTIONS

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 *Implementation Manual* (555-500-650) and/or *the Reference Manual* (555-500-200) to understand what boards you require to connect this special equipment.

Table 13, summarizing special feature port codes by feature and circuit board, is included in Section 6.

Some of the features administered in this section require steps in addition to the "Action=l" "Data= " sequence for their completion.

1

Each translation sequence in this section begins with:

From Prompt: You Enter:

MAIN MENU

Port= CSSPP {physical port location}

NOTE: Remember that a number of action/data pairs are parts of action groups. That is, if you enter an action/data pair, you MUST complete the remaining action/data pairs in the group. If you do not complete the required sequence, the data originally in the system will remain. When you complete each action/data pair in sequence, System 25 will automatically prompt you for the next action/data pair. In this manual, Action/data pairs of this kind are indicated with a special mark, "§." The last item in such a group is not so marked because no more items are required after the last.

#### 5.3.A External Alerts (Port Type 253)

From Prompt:	You Enter:
Action=	1
Data=	253 §
Assign associated station number:	
Action=2	
Data=	PDC of associated station, or 0 if Night Service Alert

#### 5.3.B Paging (Associated with Auxiliary Trunk Circuit)

From Prompt:	You Enter:	
Action=	1 §	
Data=	1301 (Zone l) 1302 (Zone 2) 1303 (Zone 3)	
Assign PDC for this zone		
Action=2		
Data=	PDC (Zone 1) PDC (Zone 2) PDC (Zone 3) (0 for NONE)	
Assign All-Zone PDC		
Action=	3	
Data=	PDC for All Zone. (0 for NONE.)	
Dial Restrict this zone. (I-YES or (	<b>)=NO</b> ).	
Action=	4	
Data=	1/0	

#### 5.3.C Paging (Associated with CO Trunk Circuit)

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

5.3.D DGC Delay Announcent	
From Prompt:	You Enter:
Action=	1
Data=	255

# 5.3.E Directed Night Service Delay Announcement

From Prompt:	You Enter:
Action=	1 §
Data=	251 (Delay Announcement #1) 252 (Delay Announcement #2)

Assign number of rings before delay announcement:

Action=2

Data=	1-15

#### 5.3.F Music-on-Hold

From Prompt:	You Enter:
Action=	1
Data=	254

# 5.3.G Pooled Modem

NOTE: See Section 5. 1.C for setting pooled modem options.

From Prompt:	You Enter:
Action=	1
Data=	1901

# 5.3.H Additional Tone Detector

From Prompt:	You Enter:
Action=	1
Data=	2101

5.3.1 Dictation		
From Prompt:	You Enter:	
Action=	1 §	
Data=	2201 (if Auxiliary Trunk interface) 201 (if Station Port interface)	
Assign Access Code		
Action=2		
Data=	PDC	

# 5.4 STATIONS

This section describes how to assign voice and data stations, assign or change station dial codes, and remove stations.

It also describes how to assign Class-of-Service parameters to different station types.

NOTE: Remember that a number of action/data pairs are parts of action groups. That is, if you enter an action/data pair, you MUST complete the remaining action/data pairs in the group. If you do not complete the required sequence, the data originally in the system will remain. When you complete each action/data pair in sequence, System 25 will automatically prompt you for the next action/data pair. In this manual, Action/data pairs of this kind are indicated with a special mark, "§." The last item in such a group is not so marked because no more items are required after the last.

#### 5.4.A Station, Assign

u Enter:
1
SSPP
1§

Data=

If the Terminal Type is:	
Single-line Voice Terminal without message waiting indicator	201
Single-line Voice Terminal with message waiting indicator	202
5-Button MERLIN CS Voice Terminal, Z7302H01	302
MERLIN CS Hands-Free-Answer Voice Terminal, Z7309H01	
10-Button MERLIN CS Voice Terminal, Z7303H01	
MERLIN CS Built-in-Speakerphone Voice Terminal, Z7305H03	
34-Button MERLIN CS Voice Terminal, Z7305H01	
34-Button Deluxe MERLIN CS Voice Terminal, Z7305H02	
MET Voice Terminal	401
Data Terminal	1801

NOTE: The only way to change terminal type is to remove and reassign the station.

To complete a station assignment, you must also assign a Personal Dial Code (**PDC**) or Data Dial Code (**DDC**) to this station. Valid range is 1-9999.

Action=2

Data=

PDC {for voice station} DDC {for data station}

5.4.B Station, Remove	
From Prompt:	You Enter:
MAIN MENU	1
Port=	CSSPP
Action=	1
Data=	0

NOTE: When you enter 0 at the "Data=" prompt, you will see the warning "NO MORE BLOCKS." If you really want to remove the station, you will enter C to continue. Any other key will stop the process.

#### 5.4.C Station Dial Code, Reassign

NOTE: There are circumstances that might prevent changing a dial code. For example, the existing station number might be part of a DGC group or call pickup group. See the SEARCH commands in Section 5.8.

From Prompt:	You Enter:
MAIN MENU	2
PDC=	PDC
Action=	2
Data= N	lew Dial Code

5.4.D Single-Line Terminal, Assign Class-of-Service			
From Prompt:	You Enter:	Default Data:	
MAIN MENU	2		
PDC=	PDC	See Section 4.1	

Do you want to restrict dial access to the Central Office trunk pool? (l=YES/0=No).

From Prompt:	You Enter:	Default Data:
Action=	3	
Data=	1/0	0

Do you want to restrict dial access to all other trunk pools? (I=YES/0=NO).

From Prompt:	You Enter:	Default Data:
Action=	4	
Data=	1/0	0

To what Call Coverage "Sender" Group does this station belong? Data will be a group number from 1 through 32 or 0 for NONE.

From Prompt:	You Enter:	Default Data:
Action=	7	
Data=	1-32, or 0	1

Is this an extended station? (**l=YES/0=NO**).

From Prompt:	You Enter:	
Action=	10	
Data=	1/0 {based on physical connection information}	

Is this station in a call pickup group? Data will be the group number [between 1 and 16] or 0 for NONE.

From Prompt:	You Enter:	Default Data:
Action=	11	
Data=	1-16, or 0	0

Should calls to this station hunt to another station if to next? Data will be a PDC or O for NONE.

From Prompt:	You Enter:	Default Data:
Action=	12	
Data=	PDC, or 0	0

Do you want to restrict this station from making any outward calls? (1=YES/0=NO).

From Prompt:	You Enter:	Default Data:
Action=	13	
Data=	1/0	0

Assign toll restriction class as follows. Data will be a number:

<ul> <li>0 - Not Toll Restricted</li> <li>1 - Toll call allowed lists 1-4</li> <li>2 - Toll call allowed lists 2-4</li> <li>3 - Toll call allowed lists 3-4</li> <li>4 - Toll call allowed list 4 (only)</li> </ul>		
From Prompt:	You Enter:	Default Data:
Action=	14	
Data=	1-4 {toll class}	0

Assign ARS Facility Restriction Level (FRL):

LEVEL	ALLOWED FRL POOLS	
0 - 1 - 0,1 2 - 3 -	0 0,1,2 0,1,2,3	
From Prompt:	You Enter:	Default Data:
Action=	15	
Data=	0-3	3

Is the personal speed dialing feature enabled at this station? (l=YES/0=NO).

From Prompt:	You Enter:	Default Data:
Action=	16	
Data=	1/0	1

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

NOTE: To continue the listing, enter C after each trunk number is printed.

From Prompt:	You Enter:
Action-	51

To assign a trunk to this station for Night Service:

From Prompt:	You Enter:
Action=	52
Data=	A four-digit runk number

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

From Prompt:	You Enter:
Action=	53
Data=	A four-digit crunk number

## 5.4.E Data Terminal, Assign Class-of-Service

This section applies to a data terminal connected to a data line card via an ADU, NOT to a data terminal connected via a modem. The Data Dial Code (similar to a voice terminal's PDC) is abbreviated as DDC.

From Prompt:	You Enter:
MAIN MENU	2
PDC=	D D C

Do you want to restrict access to Central Office trunk pool? (l=YES/0=NO).

From Prompt:	You Enter:	Default Data:
Action=	3	
Data=	1/0	0

Do you want to restrict access to all other trunk pools? (1=YES/0=NO).

From Prompt:	You Enter:	Default Data:
Action=	4	
Data=	1/0	0

Should calls to this station hunt to another station if this station is busy. If yes, what is the DDC of the station to hunt to next? (**0** for no hunt.)

From Prompt:	You Enter:	Default Data:
Action=	12	
Data=	DDC {hunted to}, or 0	0

Do you want to restrict this station from making any outward calls? (l=YES/0=NO).

From Prompt:	You Enter:	Default Data:
Action=	13	
Data=	1/0	0

Assign toll restriction class as follows. Data will be a number:

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)		
From Prompt:	You Enter:	Default Data:	
Action=	14		
Data=	0-4	0	

Assign ARS Facility Restriction Level (FRL) ?

LEVEL ALLOWED FRL POOLS 0 0 -1 2 0,1 0,1,2 3 0,1,2,3 From Prompt: You Enter: Default Data: Action= 15 Data= 0-3 3 Do you want to auto-adjust baud rate on call origination? (I=YES/0=NO).\* From Prompt: You Enter: Default Data: Action= 61 Data= 1/0 1

Can this terminal operate at low bits per second (bps)? (l-YES/O-NO).\*

From Prompt:	You Enter:	Default Data:
Action=	62	
Data=	1/0	0

<sup>•</sup> Items 62 through 69 should always be set to indicate all permissible operating speeds and any required parity.

From Prompt:	You Enter:	Default Data:	
Action=	63		
Data=	1/0	1	

#### Can this terminal operate at a baud rate of 300 bps? (I=YES/0=NO).\*

## Can this terminal operate at a baud rate of 1200 bps? (I=YES/0=NO).\*

From Prompt:	You Enter:	Default Data:
Action=	64	
Data=	1/0	1

# Can this terminal operate at a baud rate of 2400 bps? (1=YES/0=NO).\*

From Prompt:	You Enter:	Default Data:
Action=	65	
Data=	1/0	1

Can this terminal operate at a baud rate of 4800 bps? (l=YES/0=NO).\*

From Prompt:	You Enter:	Default Data:
Action=	66	
Data=	1/0	1

<sup>\*</sup> Items 62 through 69 should always be set to indicate all permissible operating speeds and any required parity.

From Prompt:	You Enter:	Default Data:
Action=	67	
Data=	1/0	1

Can this terminal operate at a baud rate of 9600 bps? (l=YES/0=NO).\*

Can this terminal operate at a baud rate of 19200 bps? (l=YES/0=NO).\*

From Prompt:	You Enter:	Default Data:
Action=	68	
Data=	1/0	0

Assign this parity setting to correspond to the terminal's parity setting. Data will be a number that represents one of the following parity settings (**0=zero** in the parity bit, **1=one** in the parity bit, **2=even** parity, **3=odd** parity).

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.

From Prompt:	You Enter:	Default Data:
Action=	69	
Data=	0-3	2

Do you want to allow keyboard dialing? (Also referred to as Command Mode.) (l=YES/0=NO). (Generally, set this to 1 for data terminals and 0 for hosts.)

From Prompt:	You Enter:	Default Data:
Action=	70	
Data=	1/0	1

<sup>•</sup> Items 62 through 69 should always be set to indicate all permissible operating speeds and at any required parity.

From Prompt:You Enter:Default Data:Action=72Data-1/00@

Do you permit mismatch of user's data module and data port baud rate? (I=YES/0=NO).

Do you want characters dialed from the keyboard to be echoed by the data port displayed? (I=YES/0=NO).

From Prompt:	You Enter:	Default Data:
Action=	73	
Data=	1/0	1

What is your disconnect code? (l=two short BREAKS/0=one long BREAK).

From Prompt:	You Enter:	Default Data:
Action=	74	
Data=	1/0	1

Do you want call progress text messages displayed? (l=YES/0=NO).

From Prompt:	You Enter:	Default Data:
Action=	75	
Data=	1/0	1

<sup>@</sup> Strongly recommended this value be used.

Do you want a connection indication message displayed? (l=YES/0=NO).From Prompt:You Enter:Default Data:Action=7777Data=1/01

5.4.F Multiline	Terminal, Assign Class-of-Service
From Prompt:	You Enter:
MAIN MENU	2
PDC=	PDC

Do you want to restrict dial access to the Central Office trunk pool? (I=YES/0=NO).

From Prompt:	You Enter:	Default Data:
Action=	3	
Data=	1/0	0

Do you want to restrict dial access to all other trunk pools? (I=YES/0=NO).

From Prompt:	You Enter:	Default Data:
Action=	4	
Data=	1/0	0

Do you want ringing line preference? (l=YES/0=NO).		
From Prompt:	You Enter:	Default Data:
Action=	5	
Data=	1/0	1@

Do you wish to assign prime line preference? If so, enter the button on which this line appears. Enter 0 for no line preference. (See button numbering table, Section 5.6.)

From Prompt:	You Enter:	Default Data:
Action=	6	
Data=	Preferred button number	7@

To what Call Coverage "Sender" Group does this station belong? [1 through 32; 0 for NONE]

From Prompt:	You Enter:	Default Data:
Action=	7	
Data=	1-32, or 0 {call coverage group}	1

If this station has call coverage, do you want call coverage ring on No Answer? (l=YES/0=No).

From Prompt:	You Enter:	Default Data:
Action=	8	
Data=	1/0	1@

<sup>@</sup> Strongly recommended this value be used.

From Prompt: You Enter: Default Data: Action= 9 Data= 1/0 1@

If this station has call coverage, do you want call coverage ring on Busy? (l=YES/0=NO).

Do you want to restrict this station from making any outward calls? (l=YES/0=NO).

From Prompt:	You Enter:	Default Data:
Action=	13	
Data=	1/0	0

Assign toll restriction class as follows. Data will be a number:

<ul> <li>0 - Not Toll</li> <li>1 - Toll call</li> <li>2 - Toll call</li> <li>3 - Toll call</li> <li>4 - Toll call</li> </ul>	Restricted allowed lists 1-4 allowed lists 2-4 allowed lists 3-4 allowed list 4 (only)	
From Prompt:	You Enter:	Default Data:
Action=	14	
Data=	0-4	0

<sup>@</sup> Strongly recommended this value be used.

Assign ARS Facility Restriction Level (FRL):

LEVEL	ALLOWED FRL POOLS	
0 - 1 - 2 - 3 -	0 0,1 0,1,2 0,1,2,3	
From Prompt:	You Enter:	Default Data:
Action=	15	
Data=	0-3	3

Is the Personal Speed Dialing feature enabled at this station? (l=YES/0=NO).

From Prompt:	You Enter:	Default Data:
Action=	16	
Data=	1/0	0

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

NOTE: To continue the listing, enter **C** after each trunk number is printed.

From Prompt:	You Enter:
Action=	51

To assign a trunk to this station for Night Service: (Any given trunk can be assigned night service coverage at no more than four stations)

From Prompt:	You Enter:
Action=	52
Data=	A four-digit trunk number

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

From Prompt:You Enter:Action=53Data=A four-digit<br/>trunk number

# 5.5 ATTENDANT EQUIPMENT

This section explains how to:

- 1. assign the attendant console(s),
- 2. remove an attendant console,
- 3. assign attendant class-of-service parameters,
- 4. assign attendant console features,
- 5. assign these lector console(s), and
- 6. remove a selector console.

Remember that AT&T System 25 by default assigns a Primary Attendant Console to the first ATL port in the system, That Attendant Console has a default PDC of 200. You may use that PDC, or you may change the PDC by going to the procedure "Assigning or Changing an Attendant Dial Code" immediately below. The Attendant Console can always be reached by dialing 0 as well.

System 25 also assigns a primary Selector (DXS) Console, associated with the Primary Attendant Console, to the second ATL port in the system.

Therefore, if you do not have a DXS Console or an Attendant Console and you want to install voice terminals at either or both of those ports, you have to remove the default assignments before you can reassign these ports.

#### 5.5.A Primary Attendant Console, Install

Normally, you will use the system default port assignment for the Primary Attendant Console. In this case, you may wish to change only the PDC for the Attendant Console. That change can be made following the procedure "Assigning the Attendant Dial Code" below.

The installation of a Primary Attendant Console at a port other than the default port is described below.

NOTE: Before you can install the Primary Attendant Console at a port other than the default port, you MUST remove the default port translation for the Attendant Console. You can find this port by entering its PDC (PDC=200) under MAIN MENU Item 2.

From Prompt:	You Enter:
MAIN MENU	1
Port=	CSSPP {physical port number}
Action=	1§
Data=	307

Assigning or Changing an Attendant Dial Code, a PDC. Action=2

Data=	PDC	
From Prompt:	You Enter:	
MAIN MENU	4	
Action=	1	
Data=	CSSPP {entered above}	

5.5.B Secondary Attendant Console, Install		
From Prompt:	You Enter:	
MAIN MENU	1	
Port=	CSSPP {physical port number]	
Action=	1§	
Data=	307	

Assign Dial Code for the Secondary Attendant Console, a PDC.

Action=2

Data=	PDC
From Prompt:	You Enter:
MAIN MENU	4
Action=	2
Data=	CSSPP entered above}

#### 5.5.C Attendant Console, Remove

NOTE: The procedure for removing the Primary Attendant Console and the Secondary Attendant Console are the same. The only difference occurs at the "Action=" prompt from MAIN MENU item 4. If you wish to remove the Primary Console, enter 1 at the prompt. If you wish to remove the Secondary Console, enter 2 at the prompt.

Prompt:	You Enter:
MAIN MENU	4
Action=	l o r 2 {see NOTE above}
Data=	0

NOTE: When you enter 0 at the "Data=" prompt, you will see the warning "NO MORE BLOCKS." If you really want to remove the Attendant Console, you will enter **C** to continue. Any other key will stop the process.

# 5.5.D Attendant Console, Assign Class-of-Service

This procedure is the same as for multiline voice terminals. See Section 5.4.F.

# 5.5.E Attendant Options

From Prompt:	You Enter:
MAIN MENU	4

Assign the number of rings (1 through 31) before unanswered calls extended by Attendant return to the console.

From Prompt:	You Enter:	Default Data:
Action=	3	
Data=	1-31	5

Do you want DID calls to unassigned DID numbers to ring at the Attendant Console? (1=YES/0=NO).

From Prompt:	You Enter:	Default Data:
Action=	4	
Data=	1/0	1@

Do you want calls to FPDCs that are not logged in anywhere to ring at the Attendant Console? (1=YES/0=NO).

From Prompt:	You Enter:	Default Data:
Action=	5	
Data=	1/0	1@

Assign the number of seconds (1 through 120; 0 for NONE) before a *camped-on* call returns to the Attendant Console.

From Prompt:	You Enter:	Default Data:
Action=	6	
Data=	1-120, or 0	30 @

Assign the number of rings (1 through 31) before unanswered DGC calls are sent to the delay announcement or a button appearance.

From Prompt:	You Enter:	Default Data:
Action=	7	
Data=	1-31	5

<sup>@</sup> Strongly recommended this value be used.

Assign up to eight PDCs that are used to access calls parked by the Attendant. Data will be a pseudo-PDC or 0 for NONE.

NOTE: "Action=11" with a default PDC of "800" is the first of eight possible PDCs used to access a call parked by the attendant. You would assign the additional PDCs by using the numbers 12 through 18 at the "Action=" prompt. The corresponding default PDCs for the "Data=" prompt are 800 through 807.

From Prompt:	You Enter:	Default Data:
Action=	11 through 18	
Data=	pseudo-PDCs, or 0	800-807

#### 5.5.F Direct Extension Selector (DXS) Console(s), Install

Normally, you will have the system default assignment for the Primary DXS Console. The default port assignment is the second port on the first ATL card. See Installing the Primary Attendant Console, Section 5.5.A, for further discussion of the installation defaults.

The installation of a Primary DXS Console at a port other than the default port is described below.

From Prompt:	You Enter:	
MAIN MENU	1	
Port=	CSSPP {physical port location}	
Action=	1	
Data=	1601	

Installing a	DXS	Console	at	the	Secondary	Attendant	Position
0							

From Prompt:	You Enter:
MAIN MENU	1
Port= CS	SSPP {physical port location}
Action=	1
Data=	1602

# 5.5.G Selector (DXS) Console, RemoveFrom Prompt:You Enter:MAIN MENU1Port=CSSPPAction=1Data=0

# 5.6 BUTTON ASSIGNMENTS

This section describes how to assign buttons to: A) multiline sets, B) attendant console(s), and C) selector console(s).

NOTE: Some button assignment features (e.g., Auto Intercom and Station-to-Station Message Waiting) require administration of buttons on more than one voice terminal. Such features become fully operable (and available for testing) only after BOTH voice terminals have been administered.

Assigning buttons for multiline sets and the attendant console(s) is done through MAIN MENU item 2 [PDC]. Minimally, two actions, "Action=100" and "Action=101" sequences will be performed. "Action=100" requires you to select the button to which the feature will be assigned. "Action= 101" will identify the feature to be assigned. In some cases, additional Action/Data information must be entered to complete a button assignment.

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

The default button assignment shown for the Attendant Console is for the *primary* console. The default button assignment for a *secondary* console is similar. The major difference between them is that buttons 17 through 24 and 29 through 35 default to trunks on the *primary* console, but have no default assignments on the *secondary* console.

The button numbering system for terminals is as follows:

SET TYPE	BUTTON NUMBERS	NUMBER OF ASSIGNABLE BUTTONS
5-Button	7 through 11	3
10-Button	7 through 16	8
34-Button	7 through 40	32
Attendant Console	7 through 40	26

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

The Selector Console (DXS) has seven buttons that can be assigned. It also has a nonprogrammable test button located at the right-hand end of the button row. Each of these buttons is a "base" number. For example, if the first programmable DXS Console button is set to "10.. ," the attendant can access the PDCs 1000 through 1099 (i.e., the "base" number plus one of the fixed DXS Console numbers, 00 through 99). If the second programmable DXS Console button is set to "2...," the attendant can access the PDCs 200 through 299. The DXS Console button defaults are: button 1 is assigned "2.." (it can access the range from 200 through 299), button 2 is assigned "3..", and the remaining buttons are assigned in this sequence so that button 7 is assigned "8..".

NOTE: If you have a primary and a secondary DXS Console, the two consoles will always have identical assignments. If you install them both and accept system defaults, both consoles will have the defaults. If you change a button assignment on the primary DXS Console, the corresponding button is reassigned on the secondary DXS Console. If you change a button assignment on the secondary DXS, the corresponding button on the primary DXS Console is reassigned,

BUT	BUTTON NUMBERING MULTILINE SET DEFAULTS				
7- SYS ACCESS	12- FLEX DSS	17- FLEX DSS	29- FLEX DSS		
8- SYS ACCESS	13- ACCT ENTRY	8- FLEX DSS	<b>30- FLEX DSS</b>		
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- REP DIAL	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		

PRIMARY ATTENDANT CONSOLE 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- REP DIAL	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	
SECONDARY ATTENDANT CONSOLE 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- NIGHT	20-0	32-0	
11- REP DIAL	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 D	EFAULTS
2   3	4   5   6   7	8   TEST

<b>BUTTON NUMBERING</b>			
MET SET DEFAULTS			
7- SYS ACCESS			
8- SYS ACCESS			
9- REP DIAL			
10- REP DIAL			
11- REP DIAL			
Message			
Drop			
Conference			
Transfer			
Hold			

### 5.6.A Multiline Terminals and Attendant Consoles

NOTE: Remember that a number of action/data pairs are parts of action groups. That is, if you enter an action/data pair, you MUST complete the remaining action/data pairs in the group. If you do not complete the required sequence, the data originally in the system will remain. When you complete each action/data pair in sequence, System 25 will automatically prompt you for the next action/data pair. In this manual, Action/data pairs of this kind are indicated with a special mark, "§." The last item in such a group is not so marked because no more items are required after the last.

Button Default Tables for Multiline Set, Primary Attendant Console, Secondary Console, and DXS Console appear in the previous subsection. Table 3 in Section 6 summarizes button codes and associated translation items.

From Prompt:	You Enter:
MAIN MENU	2
PDC=	PDC
Action=	100
Data=	N (where N = button number)
Action=	101
Data=	N (where N= button function)

NOTE: In the following sequence, the process begins with the "Action-=101" prompt. The data supplied for that prompt will be the button function. If additional actions are required, they are described.

To assign the System Access (Originate) (SYS ACC-0) (originate) function:

From Prompt:	You Enter:
Action=	101
Data=	1

To assign Direct Facility Access (FACILITY):			
From Prompt: Y	ou Enter:		
Action=	101§		
Data=	2		
Action=102			
Data= acc	Facility cess code		
To assign a Personal Line (PERS LINE):			
From Prompt: Y	ou Enter:		
Action=	101§		
Data=	3		
What is the line's trunk number?			
Action= 102§			
Data= Tru	ink number		
Is this station the "owner" of this line? (I=YES/0=No).			
Action= 103§			
Data=	1/0		
Do you want to enable ring? (1=YES/0=NO strongly recommended.	). While there is no default value for this action, 1 is		
From Prompt:	You Enter:		
Action= 04			
Data=	1/0		

<sup>§</sup> Designates Action Group, see Note on page 5-1.

To assign Exclusion (EXCLUSION):	
From Prompt:	You Enter:
Action=	101
Data=	4

To assign Station-to-Station Messaging (MSG WAIT):			
From Prompt:	You Enter:		
Action=	101§		
Data-	5		
What is the PDC of the other station?			
Action=102§			
Data=	PDC		
What is the button number at the other station?			
Action=103			
Data=	Button number		

To assign Call Coverage Message Waiting (COVER MSG):

From Prompt:	You Enter:
Action=	101
Data=	6

<sup>§</sup> Designates Action Group, see Note on page 5-1.

To assign Manual Signaling (SIGNAL):			
From Prompt:	You Enter:		
Action=	101§		
Data=	7		
What is the signaled station's PDC?			
Action=102			
Data=	PDC		
To assign Automatic Intercom (AUTO IC	COM):		
From Prompt:	You Enter:		
Action=	1018		
Data=	8		
What is the Called Station's PDC?			
Action= 102§	Action= 102§		

Data=

PDC

**Button** 

number

On what button at the called station does this station's Automatic Intercom appear?

Action=103

Data=

<sup>§</sup> Designates Action Group, see Note on page 5-1.

To assign Preindication or One-button Transfer to Data (DATA):		
From Prompt:	You Enter:	
Action=	101	
Data=	9	
What is the DDC of the associated	data station?	
Action=102		
Data=	DDC	
To assign Call Coverage-Group "R	eceiver" button (COVER-C	GRP):
From Prompt:	You Enter:	
Action=	101§	
Data=	10	
Action=102§		
Data=	1-32 {coverage group}	
Should covered calls ring at this button? (l=YES/0=No).		
From Prompt:	You Enter:	Suggested Data:
Action=103		
Data=	1/0	1

<sup>§</sup> Designates Action Group, see Note on page 5-1.

To assign Send All Calls (S	SEND ALL CALLS):	
From Prompt:	You Enter:	
Action=	101§	
Data=	1/0	
Do you want Single Ring	Reminder? (l=YES/0=NO).	
From Prompt:	You Enter:	
Action=102		
Data=	1/0	
To assign Call Coverage-In	ndividual (COVER-IND):	
From Prompt.	You Enter:	

From Prompt:	You Enter:	
Action=	101§	
Data=	12	
What is the Covered Station's PDC?		
Action=102§		
Data=	PDC	
Should covered calls ring at this button? ( <b>l=YES/0=NO</b> ).		
From Prompt:	You Enter:	Suggested Data:
Action=103		
Data=	1/0	1

<sup>§</sup> Designates Action Group, see Note on page 5-1.

To assign Direct Station Selection (Flexible) (FLEX DSS):		
From Prompt:	You Enter:	
Action=	101	
Data=	13	

To assign Direct Station Selection (Not Flexible) (DSS):		
From Prompt:	You Enter:	
Action=	101§	
Data=	14	
What is the Called PDC?		
Action=102		
Data=	PDC	
To assign Account Code Entry (ACCT ENTRY):		
From Prompt:	You Enter:	
Action=	101	
Data=	15	

To assign Repertory Dialing (REP DIAL):		
From Prompt:	You Enter:	
Action=	101	
Data=	20	

§ Designates Action Group, see Note on page 5-1.

To assign Hands Free Answer on Intercom (AUTO ANS):		
From Prompt:	You Enter:	
Action=	101	
Data=	21	

### 5.6.B Attendant Console Specific

Button Default Tables for Multiline Set, Primary Attendant Console, Secondary Console, and DXS Console appear in Section 5.6. Table 3 in Section 6 summarizes button codes and associated translation items. Button assignments for the Attendant Console are the same for as multiline terminals (see previous section). Some buttons may only be assigned to the Attendant Console; these are listed below. Some buttons are identified as "Read Only." This means that they can't be changed.

From Prompt:	You Enter:
MAIN MENU	2
PDC=	PDC
Action=	100
Data=	N (where N= button number)
Action=	101
Data=	N (where N = button function)

NOTE: In the following sequence, the process begins with the "Action<sup>-101</sup>" prompt. The data supplied is the button function. If additional actions are required, they are described.

Alarm (Read Only) (ALARM):		
From Prompt:	You Enter:	
Action=	101	
Data=	16	

To assign Night Service (NIGHT):		
From Prompt:	You Enter:	
Action=	101§	
Data=	17	
Specify the Night Service Access Code		
From Prompt: Action=102	You Enter:	Default Data:
Data=	PDC	810

To assign Position Busy (POS BUSY):

NOTE: This feature can be used only when there are two attendant consoles.

From Prompt:	You Enter:
Action=	101
Data=	18

<sup>§</sup> Designates Action Group, see Note on page 5-1.

To assign Attendant Messag	e waiting (ATT MSG):
From Prompt:	You Enter:
Action=	101
Data=	19
Return on Don't Answer {R	lead Only} (RTN-DA):
From Prompt:	You Enter:
Action=	101
	22
Data=	
Return on Busy {Read Only From Prompt: Action=	22 7} (RTN-BUSY): You Enter: 101
Data= Return on Busy {Read Only From Prompt: Action= Data=	22 y} (RTN-BUSY): You Enter: 101 23
Data= Return on Busy {Read Only From Prompt: Action= Data=	22 7} (RTN-BUSY): You Enter: 101 23
Data= Return on Busy {Read Only From Prompt: Action= Data= Start {Read Only} (START	22 /} (RTN-BUSY): You Enter: 101 23
Data= Return on Busy {Read Only From Prompt: Action= Data= Start {Read Only} (START From Prompt:	22 /} (RTN-BUSY): You Enter: 23 '): You Enter:
Return on Busy {Read Only From Prompt: Action= Data= Start {Read Only} (START From Prompt: Action=	22 /} (RTN-BUSY): You Enter: 101 23 '): You Enter: 101

Cancel {Read Only) (CANCEL):		
From Prompt:	You Enter:	
Action=	101	
Data=	25	
Release (Read Only} (RELEASE):		
From Prompt:	You Enter:	
Action=	101	
Data=	26	

#### 5.6.C Selector (DXS) Console

See the introduction to section 5.6, "Button Assignments," for a description of the button assignments for the Selector (DXS) Console, for the button defaults, and for a brief explanation of the button functions.

NOTE: If you have a primary and a secondary Selector Console, the two consoles will always have identical assignments. If you change a button assignment on either console, the corresponding button is reassigned on the other.

Assignments in this section make extensive use of the WILDCARD character. The WILDCARD character, the period ".," is provided to allow you to enter a character that represents any valid digit (0 through 9). For example, the WILDCARD digit is sometimes used to specify any PDC value between 400 and 499 by entering 4.. <RETURN>. In this example, the two WILDCARD characters placed in the ones and tens position represent the 100 values from 00 through 99. The 4 represents the leading hundreds digit.

This section assumes that you know the Port Number for the selector console(s), since the DXS Consoles do not have PDCs.

The procedure for assigning DXS Console buttons begins with the following step.

Port=	CSSPP
MAIN MENU	1
From Prompt:	You Enter:

-

To assign seven PDC ranges to DXS Console Buttons 1 through 7: Data will be in the form  $N_{...}$ , where N is the digit representing the hundreds group and ". is the WILDCARD character described above. The allowable range is from . . (PDCs from 1 through 99) through **99.** (PDCs from 9900 through 9999).

NOTE: "Action=21" with a default "base" number of **2.** is the first of seven possible DXS Console PDC ranges. You would assign the additional PDC ranges by using the numbers 22 through 27 at the "Action=" prompt. The corresponding default PDC ranges for the "Data=" prompt are **3.** through **8...** 

From Prompt:	You Enter:	Default Data:
Action=	21-27	
Data=	Ν	2 through 8

# 5.7 DIRECT GROUP CALLING (DGC) GROUPS

A maximum of 32 DGC groups can be assigned; therefore, *target* values (i.e., your response to the "DGC=" prompt) will be a number from 1 through 32. Each group has a maximum of 10 members.

If you attempt to add to a DGC group a station already assigned to another DGC group, the system will generate a warning message. If you enter a C ("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 will enter another C. (If you do NOT want to make this change, just enter the command **M** to go back to the MAIN MENU.)

From Prompt:	You Enter:
MAIN MENU	6
DGC=	1-32 {DGC group number}

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 O to an existing group, the group will be removed!

From Prompt:	You Enter:	
Action=	1	
Data=	The DGC access code, or 0	

To list members of a DGC group:	
From Prompt:	You Enter:
Action=	11
c to continue list >	С
To continue the listing, enter C after each group member's PDC or DGC is printed.	

Do yo want to add a member to a DGC group? Maximum is 10 members per group Data will be a PDC or DGC.

From Prompt:	You Enter:	
Action=	12	
Data=	PDC {to be added to the group}	

Do you want to delete a member from a DGC group? Data will be a PDC or DGC.

From Prompt:	You Enter:
Action=	13
Data=	PDC {to be eted from group}

## 5.8 AUTOMATIC ROUTE SELECTION

If no patterns or lists are defined in this section, then ARS calls will be routed over the local CO facility.

From Prompt:	You Enter:	
MAIN MENU	11	

### 5.8.A ARS Access Code, Assign

NOTE: This is the dial code that invokes the ARS feature.

From Prompt:	You Enter:	Default Data
Action=	401	
Data=	Dial Code	9

### 5.8.B Emergency Telephone Numbers, Assign

Up to three (7-digit [a hyphen can also be added]) 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.

From Prompt:	You Enter:
Action=	601, 602, or 603
Data=	ETN

#### 5.8.C ARS Patterns-Assign Subpattern 1A

Actions 100, 101, 102, and 110 through 141 define the routing patterns (1 through 8) for the "A" (prime time) subpatterns. Each subpattern consists of a set of Routes and associated Facility Restriction Levels (FRL) plus DDD overflow authorization with an associated FRL. The following sequence of Action=/Data= pairs can be administered eight times to establish eight subpatterns (1A through 8A).

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 information required for subpatterns "A" and "B" is similar except that start and stop times are associated only with subpattern "As".

To assign a Pattern Number, N, (1 through 8):

From Prompt:	You Enter:
Action=	100
Data=	N{l for subpattem 1A}

To assign a start time for subpattern 1A, enter the time in the form HOUR, MINUTES (HHMM):

Data=	ННММ
Action=	101†
From Prompt:	You Enter:

To assign a stop time for this subpattern, enter the time in the form HOUR, MINUTES (HHMM):

From Prompt:	You Enter:
Action=	102†
Data=	ННММ

To assign Route 1 for Subpattern 1A, enter a Facility Access Code [FAC]:

From Prompt:	You Enter:
Action=	110†
Data=	FAC

 $<sup>\</sup>dagger$  Requires an ACTION=100 for 100 series to be issued first.

To assign Facility Restriction Level (FRL 0 through 3) for Subpattern 1A, Route 1:

From Prompt:	You Enter:
Action=	111†
Data=	FRL

To assign Route 2 for Subpattern 1A, enter a Facility Access Code [FAC]:

From Prompt:	You Enter:
Action=	<b>120</b> †
Data=	FAC

To assign Facility Restriction Level (FRL 0 through 3) for Subpattern 1A, Route 2:

From Prompt:	You Enter:
Action=	121†
Data=	FRL

To assign Route 3 for Subpattern 1A, enter a Facility Access Code [FAC]:

From Prompt:	You Enter:
Action=	<b>130</b> †
Data=	FAC

 $<sup>\</sup>dagger$  Requires an ACTION-100 for 100 series to be entered.

To assign Facility Restriction Level (FRL 0 through 3) for Subpattern 1A, Route 3:

From Prompt:	You Enter:
Action=	131†
Data=	FRL

To allow Subpattern 1A to overflow to DDD (I=YES/=NO)	
From Prompt:	You Enter:
Action=	<b>140</b> †
Data=	1/0

To assign Facility Restriction Level (FRL O through 3) for DDD overflow:

From Prompt:	You Enter:
Action=	141†
Data=	FRL

#### 5.8.D ARS Patterns-Assign Subpattem 1B

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, N, (1 through 8):	
From Prompt:	You Enter:
Action=	200
Data=	N{1 for subpattern 1B}

 $<sup>\</sup>dagger$  Requires an ACTION= 100 for 100 series to be issued first.

To assign Route 1 for Subpattern 1 B, enter a Facility Access Code [FAC]:From Prompt:You Enter:Action=210†Data=FAC

To assign Facility Restriction Level (FRL 0 through 3) for Subpattern 1 B, Route 1:

From Prompt:	You Enter:
Action=	211†
Data=	FRL

To assign Route 2 for Subpattern 1 B, enter a Facility Access Code[FAC]:

From Prompt:	You Enter:
Action=	220†
Data=	FAC

To assign Facility Restriction Level (FRL 0 through 3) for Subpattern 1 B, Route 2:

From Prompt:	You Enter:
Action=	221†
Data=	FRL

 $<sup>\</sup>dagger$  Requires an ACTION= 200 for 200 series actions to be issued first.

To assign Route 3 for Subpattern 1 B, a Facility Access Code [FAC]:

From Prompt:	You Enter:
Action=	230†
Data=	FAC

To assign Facility Restriction Level (FRL 0 through 3) for Subpattern 1 B, Route 3:

From Prompt:	You Enter:
Action=	231†
Data=	FRL

### To allow Subpattern 1B to overflow to DDD (**l=YES/0=NO**)

From Prompt:	You Enter:
Action=	240†
Data=	1/0

To assign Facility Restriction Level (FRL 0 through 3) for DDD overflow:

From Prompt:	You Enter:
Action=	241†
Data=	FRL

 $<sup>\</sup>dagger$  Requires an Action= 200 for 200 series actions to be issued first.

### **5.8.E Remaining ARS Patterns**

Now go back and define ARS patterns 2 through 8 following the above procedures for each subpattern.

#### 5.8.F Area Code Routing Table

All North American Area Codes preassigned to routing pattern 1 by default.

To assign a different routing pattern (other than the default pattern 1) to an area code:

From Prompt:	You Enter:	Default Data:
Action=	<b>300</b> §	
Data=	Area Code	
Action=301		
Data=	Routing Pattern {18}	1

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.

#### 5.8.G Home Area Code Exception List

NOTE: There can be as many as four lists. The maximum number of entries for all lists combined is 64.

Enter Home Area Code Exception List Number (1 through 4).

From Prompt:	You Enter:
Action=	500
Data=	List mber{1-4}

### Enter ARS Routing Pattern associated with this list.

From Prompt:	You Enter:	
Action=	501	
Data=	Pattern Number{1-8}	

Add Central Office Code to list. Data is a three-digit Central Office Code (NNX).

From Prompt:	You Enter:
Action=	512‡
Data=	NNX

Remove Central Office Code from list.	
From Prompt:	You Enter:
Action=	513‡
Data=	NNX

Display Central Office Codes on this list.

From Prompt:	You Enter:
Action=	511‡
c to continue list >	С

Add a (7-digit) Telephone Number to this list.

NOTE: Only eight of these numbers can appear within the four lists. The wildcard character (.) can be used as the last three digits in these numbers (e.g., NN., N.., or ...).

From Prompt:	You Enter:
Action=	522‡
Data=	Telephone Number

 $<sup>\</sup>ddagger$  Requires an ACTION= 500 for 500 series actions to be issued first.

Remove a Telephone Number from list. Data is 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., NN., N.., or . ..).

From Prompt:	You Enter:
Action=	523‡
Data=	Telephone Number

Display telephone numbers on this list. The wildcard character (.) can be used as the last three digits in these numbers (e.g., NN., N.., or ...).

From Prompt:	You Enter:
Action=	521‡
c to continue list >	С

#### 5.8.H Other Area Codes Exception List

Enter a Pattern Number for Other Area Codes Exception Telephone Numbers.

From Prompt:	You Enter:	
Action=	800	
Data=	Pattern Number {1-8}	

<sup>‡</sup> Requires an ACTION= 500 for 500 series actions to be issued first.

Add a number to the Other Area Codes Exception List. Data is the first 8 digits of a 10-digit telephone number. The wildcard character (.) can be used in the last two digit positions.

From Prompt:	You Enter:
Action=	822 ω
Data=	Number

Remove a number from the Other Area Code Exception List. The wildcard character (.) can be used in the last two digit positions.

From Prompt:	You Enter:
Action=	823 ω
Data=	Telephone Number

Display entries in Other Area Codes Exception List.

From Prompt:	You Enter:
Action=	821 ω
c to continue list >	С

 $<sup>\</sup>omega$  Requires an ACTION= 800 to be issued first.

### **5.8.1 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 Route specified i an ARS routing pattern has its own associated digit translation table.

Enter Facility (Route) Code Number. Data is the route (a FAC) for which digit translation is being specified.

From Prompt:	You Enter:
Action=	700
Data=	FAC

Assign "associated" Area Code.

From Prompt:	You Enter:
Action=	<b>701</b> ψ
Data=	Associated Area Code

How many leading digits should be removed for calls to the associated Area Code?

From Prompt:	You Enter:
Action=	702 ψ
Data=	Number of Digits {0-10}

 $<sup>\</sup>psi$  Requires an ACTION-7 (XI to be issued first.

Specify digits (maximum of 5) to be prefixed, after deleting digits as specified by Action 702 above, for calls to the associated Area Code.

From Prompt:	You Enter:
Action=	703 ψ
Data=	Digits to be Prefixed maximum =5}

How many leading digits should be removed for calls not to the associated Area Code?

From Prompt:	You Enter:
Action=	704 ψ
Data=	Number of Digits
	{0-10)

Specify digits to be prefixed (maximum of 5), after deleting digits as specified by Action 704 above, for calls NOT within the associated Area Code.

From Prompt:	You Enter:
Action=	705 ψ
Data=	Digits to be Prefixed maximum =5}

 $<sup>\</sup>psi$  Requires an ACTION= 700 to be issued first.

# 5.9 TAPE SAVE/RESTORE OPERATIONS

This section lists the administration commands for operating your digital tape unit. Complete descriptions of the tape save/restore operations are presented in Section 3.

From Prompt:	You Enter:
MAIN MENU	9

	То	save	your	system	translations	to	tape:
--	----	------	------	--------	--------------	----	-------

From Prompt:	You Enter:
Action=	1
Data=	1

# To verify the accuracy of saved translations:

From Prompt:	You Enter:
Action=	3
Data=	1

To restore (read in) translations previously saved:

From Prompt:	You Enter:
Action=	3
Data=	1

# 5.10 SYSTEM SEARCHES

This section describes how to search for various system information using MAIN MENU item 8.

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.

Once you have defined the range of the search, you get the results of the search by typing c.

Note that stations are identified by their PDC or DDC.

For example, if you wanted to search for the Call Coverage Senders for a particular group, your search session might run:

You Enter: From Prompt: MAIN MENU 8 When search is defined type C to search 1 Action= 1 {call coverage Data= sender search} 2 Action= 5 {identifies Data= search group} C {tells the system 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. Data=0 indicates that you have found all the searched-for items.

From Prompt:	You Enter:	
Action=	1	
Data= Action=	1 2	
Data=	1-32 (call coverage group)	
	C {To initiate the search-here and in remainder of search functions.}	

# 5.10.A Call Coverage Sender Stations

# 5.10.B Stations Covering a Specified Call Coverage Group

From Prompt:	You Enter:	
Action=	1	
Data=	2	
Action=	2	
Data=	1-32 {call coverage group}	

# 5.10.C Call Coverage (Individual) Receiver Stations

From Prompt:	You Enter:
Action	1
Data=	3
Action	2
Data=	PDC of covered station

### 5.10.D Stations Having an Auto-Intercom, Message Waiting, Manual Signaling, or Data Button

This search identifies stations that have buttons pointing to the specified station.

From Prompt:	You Enter:
Action=	1
Data=	4
Action=	2
Data=	PDC of pointed-to station

### 5.10.E Stations That Hunt to a Specified Station

The data supplied is the PDC of a station in a hunt group. The search identifies stations that hunt to that station.

From Prompt:	You Enter:
Action=	1
Data=	5
Action=	2
Data=	PDC of hunted-to station

# 5.10.F DGC Group Number for a Specified Station

This search produces the DGC group number to which the specified station belongs.

From Prompt:	You Enter:
Action=	1
Data=	6
Action=	2
Data=	PDC of station whose DGC group is desired

# 5.10.G Active Stations in a DGC Group

From Prompt:	You Enter:	
Action=	1	
Data=	7	
Action=	2	
Data=	DGC group number	
Action=	3	
Data= 1	{NOT-Made-Busy Members}	

# 5.10.H Stations Having a Personal Line

From Prompt:	You Enter:
Action=	1
Data=	8
Action=	2
Data=	A 4-digit trunk number

## 5.10.1 Pickup Group Member Stations

From Prompt:	You Enter:
Action=	1
Data=	9
Action=	2
Data=	1-16 {pickup group number}

# **5.10.J Allocated PDCs**

From Prompt:	You Enter:
Action=	1
Data=	10

### 5.10.K Assigned PDCs

From Prompt:	You Enter:
Action=	1
Data=	11

# 5.10.L Stations Associated with Directed Night Service

From Prompt:	You Enter:
Action=	1
Data=	12
Action=	2
Data=	A 4-digit trunk number

	0	
From Prompt:	You Enter:	
Action=	1	
Data=	13	
Action=	2	
Data=	PDC of station whose Night Service assignments are being searched for.	

### 5.10.M Directed Night Service Trunks

### **5.10.N 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 "PORT OR BOARD TYPE" (TABLES 22 and 23 in Section 6).

From Prompt:	You Enter:
Action=	1
Data=	15

Initiate the search

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  $\cdot \cdot$  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  $\cdot$  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 22 AND 23 IN SECTION 6.

From Prompt:	You Enter:
Action=	2
Data= (See t	N ables in Section 6)

### **5.10.0 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 on the two tables "PORT OR BOARD TYPE" (TABLES 22 and 23 in Section 6). If you specify "Action=3 Data=1" below, your search will produce any found untranslated physical ports defined at the "Action=2" level.

From Prompt:	You Enter:
Action=	1
Data=	16
Initiate the search	
From Prompt:	You Enter:
Action=	2
Data	{See tables in Section 6}

Limit the search to 'translated" ports or "untranslated" ports. Data will be 0=translated or l=untranslated.

From Prompt:	You Enter:
Action=	3
Data=	0/1

### 5.10.P Translated Board Locations

From Prompt:	You Enter:
Action=	1
Data= Initiate the search	17
Action=	2
Data= {Se	e tables in Section 6}

### **5.10.Q 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 on the two tables "PORT OR BOARD TYPE." If you specify "Action=3 Data=1" below, your search will produce any found untranslated physical ports defined at the "Action=2" level.

From Prompt:	You Enter:
Action=	1
Data=	18
Initiate the search	

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 22 and 23 IN SECTION 6.

From Prompt:

2

Action=

Data=

{see tables in Section 6}

You Enter:
Limit the search to "translated" ports or "untranslated" ports. Data will be 0=translated or 1=untranslated.

From Prompt:	You Enter:
Action=	3
Data=	0/1

### 5.10.R 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.

From Prompt:	You Enter:
Action=	1
Data=	19
Action=	2
Data=	PDC of station th External Alert

#### **5.10.S 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.

You Enter:	
1	
20	
2	
PDC of station with buttons	
3	
Button function code. {See Table 3 in Section 6}	
	You Enter: 1 20 2 PDC of station with buttons 3 Button function code. {See Table 3 in Section 6}

### 5.10.T NPAs Assigned to Specific ARS Pattern

This search lists all NPAs that will select a specified ARS Routing Pattern. These routing patterns were assigned in Section 5.8. F. If the wildcard character "." is entered, all NPA/Routing Pattern associations are provided.

From Prompt:	You Enter:	
Action=	1	
Data=	21	
Action=2	2	
Data-	1-8 or . {patterns whose NPA associations are sought}	
<b>c</b> to list		

#### 5.10.U Permanent System Alarms

From Prompt:	You Enter:
Action=	1
Data= c to list, r to remove	30

### 5.10.V Transient System Alarms

From Prompt:	You Enter:
Action=	1
Data= c to list, r to remove	31

# 5.10.W Most Recent Errors

From Prompt:	You Enter:
Action=	1
Data= c to list	32

### 5.11 RS232 PARAMETERS

From Prompt:	You Enter:	
MAIN MENU	10	
RS232=	Target - Physical connector you wish to reassign or administer	

#### 5.11.A RS232 Connector Function, Reassign

Action/data pairs associated with MAIN MENU item 10 (RS232) are used to administer System 25 peripheral equipment: System Administration Terminal, SMDR output channel, 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 digital tape unit to the default SMDR connector (connector 2), that connector can be made to serve the Tape function via an administration command.

If a connector function (1 through 4) is reassigned, then the function being replaced is automatically disconnected. For example, if the SMDR function is reassigned to the Tape target (connector 3), the Tape function is disconnected.

The data value for Action= 1 represents the function you wish to assign to the Target connector.

From Prompt:	You Enter:	Default Data:
Action=	1	
Data=	O-NONE (disconnect function) 1-Admin. (Target 1 or 4 only) 2-SMDR (Target 2 or 3 only) 3-Tape (Target 2 or 3 only) 4-Reserved	See footnote* for default function.

\* The default for each Target connector is as follows:

TARGET
1
2
3
4

DEFAULT CAPABILITY Administration SMDR Save/Restore Tape Reserved DEFAULT BAUD RATE 1200, 300 (auto-baud) 1200 9600, 1200 (auto-baud)

### 5.11.B RETURN Delay, Change

NOTE: Unless you are already administering the Target connector for which you wish to change the RETURN delay, you must first select a Target connector (by entering  $\mathbf{t}$  or  $\mathbf{T}$  and then entering the appropriate number at the "RS232=" prompt).

From Prompt:	You Enter:	Default Data:
Action=	2	
Data=	0-2	0

### 5.11.C Baud Rate, Change

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).

Action= Data=	3 300, 1200, 4800, or 9600	See feetnete*	
Action=	3		
From Prompt:	You Enter:	Default Data:	

# 6. COMMAND REFERENCE SECTION

The tables in this section are intended to help those thoroughly familiar with system administration locate specific information without having to refer to the full text in Section 5. However, unless you are an experienced System Administrator, you should follow the procedures in Section 5.

Default values, if applicable, are indicated in **bold print** in the tables below.

REMINDER: The basic administration commands are: **m=MAIN MENU; t=target; a=action; d=data; c=continue.** These commands can be entered at any time to change the current menu, target, action, or data. You do NOT press <RETURN> after typing these.

MAIN MENU Item 1, PORT, allows you to administer station, trunk, data port, or special port parameters by physical port number. That physical location is described by a set of digits in the format **CSSPP**, where **C** represents the one-digit cabinet number, **SS** represents the two-digit slot number, and **PP** represents the two-digit number for the port. For example, a PORT value of 10704 describes port 4 (04) in cabinet number 1, slot number 7 (07).

# **TABLE 1.** Port Administration, Voice Terminals (Menu=1)

In response to "Port=", enter port number in the form CSSPP.

ACTION	DESCRIPTION	DATA
1	Enter terminal type code	[See Table 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 "sender" group	[1-32, 0 for NONE]
8	Assign call coverage ring on no answer	[1=Y/0=N]
9	Assign call coverage ring on	[1=Y/0=N]
	busy	
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	[1=Y/0=N]
	outward calls	
14	Assign toll restriction class	[1-4; 0 for NONE]
15	Assign ARS Facility Restriction	[0-3; 3]
	Level	
16	Enable personal speed dialing	[ l=Y/0=N]
51	Display the number of any trunks	
	assigned to this station for	
	night service	
52	Assign a trunk to this station	[4-digit trunk number]
	tor night service	
53	Delete a trunk from this station's	[4-digit trunk number]
	night service list	

Default values appear in bold type.

**TABLE 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,	303			
Z7309H01				
10-Button MERLIN CS Voice Terminal, Z7303H01				
MERLIN CS Built-in-Speakerphone Voice Terminal,				
Z7305H03				
34-Button MERLIN CS Voice Terminal, Z7305H01				
34-Button Deluxe MERLIN CS Voice Terminal,				
Z7305H02				
MET Voice Terminal	401			

#### **TABLE 3.** Feature Button Translation (Menu= 1 )

In response to "Port=", enter port number in the form CSSPP.

"Action= 100" is required before action(s) 101-104 listed in this table are administered.

ACTION 101	BUTTON TYPE	ACTION 102	ACTION 103
1	SYS ACCESS-ORG		
2	POOLED FACILITY	Facility Access Code	
3	PERS LINE	Trunk Number.	Owner? (note 4)
4	EXCLUSION		
5	MSG WAIT	Signaled PDC	Signaled Button No.
6	COVER MSG		
7	MANUAL SIGNAL	Signaled PDC	
8	AUTO ICOM	Called PDC	Called Button No.
9	DATA	Associated DDC	
10	COVER-GRP	Group Number	Ringer Enable? (Yes)
11	SEND ALL CALLS	Single Ring Reminder?	
12	COVER-IND	Covered PDC	Ringer Enable? (Yes)
13	FLEX DSS		
14	DSS	Called PDC	
15	ACCT ENTRY		
16	ALARM	notes 1 & 2	
17	NIGHT	Night Access Code	note 2
18	POS BUSY	note 2	
19	ATT MSG	note 2	
20	REP DIAL		
21	AUTO ANS	note 3	
22	RTN-DA	notes 1 & 2	
23	RTN-BUSY	notes 1 & 2	
24	START	notes 1 & 2	
25	CANCEL	notes 1 & 2	
26	RELEASE	notes 1 & 2	

#### 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) Attendant Console ONLY

3) HFAI and BIS sets ONLY

4) This feature also requires an ACTION 104 entry: Ringer Enable?

	-		
7- SYS ACCESS	12- FLEX DSS	17- FLEX DSS	29- FLEX DSS
8- SYS ACCESS	13- ACCT ENTRY	8- FLEX DSS	<b>30- FLEX DSS</b>
9- REP DIAL	14- SEND ALL CALL	19- FLEX DSS	31- FLEX DSS
10- REP DIAL	15- FLEX DSS	20- FLEX DSS	32- FLEX DSS
11- REP DIAL	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	<b>37- FLEX DSS</b>
		26- FLEX DSS	38- FLEX DSS
		27- FLEX DDS	<b>39- FLEX DSS</b>
		28- FLEX DDS	40- FLEX DDS

TABLE 4.	Multiline	Set	Button	Defaults
	1.1.0.1.0.1.1.1.0	~~~	20000	20100100

TABLE 5. Primary Attendant Console Button 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- REP DIAL	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

D	XS	CON	SOLE	BUT	ΓΟΝ	D	EFA	U	LTS
2	3	4	5	<b>6</b>	7.0	Ι	8	Ι	TEST

7. SYS ACCESS	12. FLEX DSS	17-0	29-0
		17-0	27-0
8- SYS ACCESS	13- ACCT ENTRY	18-0	30-0
9- REP DIAL	14- ATT MSG	19-0	31-0
10- REP DIAL	15- NIGHT	20-0	32-0
11- REP DIAL	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

TABLE 6	. Secondary	Attendent	Console	Defaults

# **TABLE 7.** MET Set Button Defaults

7- SYS ACCESS				
8- SYS ACCESS				
9- REP DIAL				
10- REP DIAL				
11- REP DIAL				
Message				
Drop				
Conference				
Transfer				
Hold				

# TABLE 8. Port Administration, Data Terminals (Menu=1)

### In response to "Port=", enter port number in the form CSSPP.

ACTION	DESCRIPTION	DATA
1	Enter data type code	1801
2	Enter DDC	[1-9999; 600-704]
3	Restrict dial access to CO trunk pool	[l=Y/0=N]
4	Restrict dial access to all other trunk pools	[1=Y/0=N]
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]
61	Auto-adjust baud rate on call origination	[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]
70	Allow keyboard dialing	[1 - V/0 - N]
72	Allow mismatch of user's data module and data port	[1-V/0-N]
12	baud rate	
73	Allow characters dialed from keyboard to be echoed by	[1=Y/0=N]
	the data port	
74	Enter your disconnect code	[1=2 short BREAKS/
		0=1 long BREAK]
75	Allow call progress text messages to be displayed on	[1=Y/0=N]
77	screen. Display connection indication message	[1 - V/0 - N]
77	Display connection indication message	[1=Y/0=N]

Default values appear in bold type.

# **TABLE 9.** Port Administration, Trunks (Menu-l)

In response to "Port=", enter port number in the form CSSPP.

Default values appear in bold type.

ACTION	DESCRIPTION	DATA
1	Enter trunk port type code	[See Table 10]
2	Enter trunk number	[trunk number; 0001-0104]
3	Assign class-of-service code	[(DID–1-4; 3)
		(All other–
		See Table 11; 8)]
4	Assign pooled facility access	[Facility access code;
	code.	
		0 if trunk not in any group]
5	Allow dial access	[1=Y/0=N]
6	Assign the trunk to a DGC	[1-32; 0 for NONE]
	group	
7	Make this a directed night	[1=Y/0=N]
	service trunk	
8	Assign night service delay	[1 for first announcement,
	announcement	
		2 for second announcement,
		0 for NONE]
9	Type of signaling on incoming	[1=Tone/0=Pulse]
	calls (Tie-Trunks only)	
10	Determine pooled trunk hunting	
	order of a specified trunk {Read	
	Only }	

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			
DID Delay Dial			
Auto-in/Auto-out			
Auto-in/Dial-out			
Immediate Dial-in/Auto-out			
Immediate Dial-in/Dial-out	1004		
Wink Dial-in/Auto-out	1005		
Wink Dial-in/Dial-out	1006*		
Delay Dial-in/Auto-out	1007		
Delay Dial-in/Dial-out	1008		

**TABLE 10.** Trunk Type Codes

\*Default Types

**TABLE 11.** Trunk Class-of-Service (For all Trunks except DID)

TRUNK CLASS-OF-SERVICE (FOR ALL TRUNKS EXCEPT DID)						
COS	NIGHT	OUTWARD	OUTWARD IN SHOR			
CODE	SERVICE	SIGNALING	ONLY	DISCONNECT		
0		ТТ				
1		ТТ	•			
2		ТТ		•		
3		ТТ	•	•		
4		DP	•			
5		DP	•			
6		DP		•		
7		DP	•	•		
8	•	ТТ				
9	•	ТТ	•			
10	•	ТТ		•		
11	•	TT	•	•		
12	•	DP				
13	•	DP	•			
14	•	DP		•		
15	•	DP	•	•		

TT=Touch-Tone DP=Dial-Pulse

### **TABLE 12.** Port Administration, Auxiliary Equipment (Menu<sup>-1</sup>)

ACTION	DESCRIPTION	DATA
1	Enter special feature port type code	(see Table 13).
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)
	6	PDC (zone 2)
		PDC (zone 3)
		O for NONE]
3	Assign all-zone PDC	[PDC for all-zone,
		O for NONE]
4	Dial restrict this zone (1=YES/0=NO)	[1/0]
1	Assign DGC delay announcement	[255]
1	Assign directed night service	[251 (delay announcement #l);
	delay announcement	252 (delay announcement #2)]
2	Assign number of rings	[0-15]
	before delay announcement	
1	Assign music-on-hold source	254
1	Assign pooled modem	[1901]
1	Assign additional tone detector	[2101]
1	Assign dictation access	[2201 (if auxiliary
	-	trunk interface);
		201 (if station
		port interface) 1
2	Assign dial dictation PDC	[PDC]
1	Assign selector console (DXS)	[1601 or 1602,]
21-27	Assign selector console buttons.	

# In response to "Port=", enter port number in the form CSSPP.

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						
<b>Dial Dictation</b>	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	

### **TABLE 13.** Special Feature Port Type Codes

This table shows data values associated with Action= 1 on Table 12

<sup>&</sup>lt;sup>†</sup> Only one 702 or 802 type page port may & 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, ACTION's like ALL ZONE paging and 'dial restrict' page zone are only available with 1301-1303 types.

### TABLE 14. Port Options

WARNING: The default values in Tables 14 and 15 must not be changed without the support and guidance of the Tier III staff.

In response to "Port=", enter port number in the form CSSPP.

Default values appear in bold type.

PORTS, Station/Trunk/Special Port Circuit Board Options FOR QUALIFIED SYSTEMS TECHNICIANS ONLY (See Table 15, "Applicable Options")						
ACTION	DESCRIPTION	DATA				
31	Set interdigit timing (in seconds)	[0-255 seconds; 101				
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 O (Type 1 compatible), 1 (Type V), or 2 (Type I).	[0-2]				
38	Set answer supervision delay timing	[0-5 100 msec; 300]				
39	Set receive flash enable	[1=Yes/0=No]				

### **TABLE 15.** Applicable Options

See WARNING for Table 14. Also note that a bullet in a box on this table indicates that the default value for that action (shown in Table 14) is applicable for this circuit board. No bullet indicates that the option is not applicable.

CIRCUIT	BOARD				Α	CTI	O N			
BOARD	ТҮРЕ	31	32	33	34	35*	36	37	38	39
ZTN76	GS Trunk	٠	•	•	•	•				
LZTN77	LS Trunk	•	•	•	•	•				
TN753	DID Trunk	٠	•	•	•	•				
TN760	TIE Trunk	٠	•	•	•			•	•	•
TN763	AUX Trunk			•	•					
TN742	T.T. Station			٠	•	•	٠			
ZTN78	T.T. Station			•	•					
ZTN79	ATL Station	٠								
TN735	MET Station									
ZTN85	Svc. Ckt.	•								
TN748	Tone Det.	•								

### **TABLE 16.** LPDC Administration (Menu=2)

In response to "PDC=", enter PDC of station to be administered.

ACTION	DESCRIPTION	DATA
0	Move this station to a	[CSSPP, (new port
	new port (see Note 1)	assignment) 1
1	Display terminal type	[See Table 2]
2	Assign new PDC	[1-9999]

NOTE 1: Moved-to port must be vacant.

NOTE 2: Enter 0 to delete terminal.

<sup>\*</sup> 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 17.** System Administration (Menu<sup>4</sup>)

# Page 1 of 2

# Default values appear in bold type.

ACTION	DESCRIPTION	DATA
1	Assign Primary Attendant Console port number	[CSSPP] (physical
		port number}
2	Assign Secondary Attendant Console port number	[CSSPP] (physical
		port number}
3	Assign the number of rings before unanswered	[Number of
	calls extended by Attendant return to the console	rings; 51
	(1-31)	
4	Force DID calls to unassigned DID numbers to	[1=Y/0=N]
	ring at Attendant Console	
5	Force calls to FPDCs that are not logged in	[1=Y/0=N]
	anywhere to ring at the Attendant Console	
6	Assign the number of seconds before a camped-on	[Number of seconds; 30]
_	call returns to the Attendant Console (1-120)	
7	Assign the number of rings before unanswered	[Number of
	DGC calls are sent to the delay announcement or	rings; 51
11 10	a button appearance (1-31)	
11-18	Assign the eight PDCs that are used to access	[Pseudo-PDCs;
	calls parked by the Attendant. Data will be a	800-807]
25	pseudo-PDC or 0 for NONE.	[1.40, 1.00]
25	Assign a speed dialing access code	[140-189]
26 20	Assign speed dialing number (*= Pause).	[0-9, *]
30 21	Allow tall matriced station to make tall calls	[Your area code]
31	Allow toll restricted station to make toll calls	[1=Y/0=N]
20	Is the 1 profix required to dial outside your area	[1 X/0 N]
52	and a solution of the solution	[1=Y/0=IN]
22	Louc: Is the 1 prefix required to dial toll calls within	[1 - V/0 - N]
55	your area code?	[1-1/0-1N]
34	Toll restrict calls made over inter-PBX trunks	$\begin{bmatrix} 1 & 0 \\ 0 & for \\ NONE \end{bmatrix}$
54	(type 805) that start with one specific digit	[1-9, 0 101 NONE]
40	Provide call coverage ringing on internal calls	[1 - V/0 - N]
40	Specify the number of rings before calls are sent	[1-1/0-14] [0-31:21
71	to call coverage or call following calls return to	$[0^{-51}, 21]$
	their home station	
50	Set time of day	[HHMM]
51	Set the date	
52	Allow SMDR records to be sent to the SMDR	[1=Y/0=N]
	port	
53	Start billing calls how many seconds after the last	[10-255:40]
	digit is dialed	L · · · / · J

Continued on next page

#### SYSTEM ADMINSTRATION (MENU=4)

### Page 2 of 2

#### Default values appear in bold type.

ACTION	DESCRIPTION	DATA
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]
71	Assign the CO trunk pool access code	[1-9999]
72	Set the number of DID digits used to	[2-4; 0 for NONE; 3]
	match against station PDCs	
73	Assign the number of account code digits	[0-15; 15]

**TABLE 18.** 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]

#### **TABLE 19.** Direct Group Calling (DGC) Administration (Menu=6)

In response to "DGC=", enter the DGC group (1-32) to be administered.

ACTION	DESCRIPTION	DATA
1	Assign a DGC access code (0 to delete	[New DGC access code
	an existing DGC access code)	1-9999]
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]

**TABLE 20.** Toll Calls Allowed (TCA) List Administration (Menu=7)

In response to "TOLL ALLW=", enter the TCA list (1-4) to be administered.

ACTION	DESCRIPTION	DATA
1	List members of a TCA group	
2	Add a number to the list	[NNX or NPA-NNX]
3	Delete a number from the list	[NNX or NPA-NNX]

### **TABLE 21.** Searches: Action Items (Menu=8)

# Page 1 of 2

ACTION	DESCRIPTION	DATA
1	Search for PDCs of call coverage senders	1
2	Call coverage group	[1-32]
1	Search for stations covering a specified group	2
2	Call coverage group	[1-21
1	Search for PDC of call coverage (individual)	3
	receivers	
2	PDC of covered station	[PDC]
1	Search for PDC having an auto-intercom,	4
	message waiting, manual signaling, or data button	
2	PDC of minted-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	6
2	station DDC of station whose DCC group is desired	
2	PDC of station whose DGC group is desired	
1	Search for lists of stations that are currently	/
2	DCC group number	[1 32]
2	1 NOT Made Busy members: 0–Made Busy	[1-32]
5	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 allocated PDCs	10
1	Search for assigned PDCs	11
1	Search for stations associated with directed night	12
	service	
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	[PDC]
	are being searched for	
1	Search for traffic measurement statistics	14
2	Traffic type (1=CCS, 0=Pegs)	[1/0]

Continued on next page

# SEARCHES: ACTION ITEMS (MENU =8)

# Page 2 of 2

ACTION	DESCRIPTION	DATA
1	Search for physical board locations	15
2	Port or board type (see Tables 22 and 23)	[port or board type]
1	Search for physical port locations	16
2	Port or board type (see Tables 22 and 23)	[port or board type]
3	Limit the search to (l=)untranslated or	[1/01
	(0=)translated ports	
1	Search for translated board locations	17
2	Port or board type (see Tables 22 and 23)	[port or board type]
1	Search for translated port locations	18
2	Port or board type (see Table 22 and 23)	[port or board type]
3	Limit the search to (l=)untranslated or	[1/0]
	(0=)translated ports	
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 Table 3)	[Button function code]
1	Search for NPAs assigned to specified ARS	21
	pattern	
2	Pattern number or wildcard character	1-8 or .
1	Search for permanent system alarms	30
1	Search for transient system alarms	31
1	Search for most recent errors	32

CATEGORY:	<b>BOARD DESCRIPTION:</b>	DATA:
Empty		
	Empty Slot	0
Station		
	Single-line Voice Terminal or Special Port MERLIN CS Voice Terminal MET Voice Terminal	2 3 4
Trunk		
	Ground Start or Paging Loop Start or Paging DID TIE	7 8 9 10
Special		
	Touch Tone Receiver External Alerts Paging DGC Delay Announcement Music-on-Hold Selector Consoles Directed Night Service Delay Announcement Pooled Modem Tone Detector Dial Dictation	11 12 13 14 15 16 17 19 21 22
Data		
	Standard Data Port	18

**TABLE 22.** Board Type– Wildcard Representation

CATEGORY	CATEGORY: DESCRIPTION:	
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	202
	Voice Terminal	303
	Voice Terminal	204
	MERI IN CS Built-in-Speakerphone	304
	Voice Terminal	305
	34-Button MERLIN CS	505
	Voice Terminal	306
	34-Button Deluxe MERLIN CS	
	Voice Terminal	307
	MET Voice Terminal	401
	Data Terminal	1801
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
	DID Delay Dial	903
	Auto-in/Auto-out	1001
	Auto-in/Dial-out	1002
	Immediate Dial-in/Auto-out	1003
	Immediate Dial-in/Dial-out	1004
	Wink Dial-in/Auto-out	1005
	WINK Dial-in/Dial-out	1000
	Delay Dial-III/Auto-out	1007
	Donay Diar-in/Diar-Out	1000

# TABLE 23. Port/Board Type-Specific Representation

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Continued on next page

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	190	
	Tone Detector	210	
	Dial Dictation	201 and	
		or 2201	
Data			
	Standard Data Port	1801	

# Port/Board Type-Specific Representation

Page 2 of 2

ACTION	DESCRIPTION	DATA
1	Save to tape*	[1 to run]
2	Verify with tape*	[1 to run]
3	Restore from tape*	[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	[1 to run]

TABLE 24. The Digital Tape Unit and System Restarts (Menu-9)

\* BE SURE THAT THE TAPE DECK IS PLUGGED INTO CONNECTOR "3" OF THE CABLE. For Action=1, the PLAY and RECORD buttons must first be depressed. For Action=2 and Action=3, the PLAY button must be depressed. CAUTION: Action=3 will interrupt phone service for about five minutes.

**TABLE 25.** RS232 Port Administration (Menu-10)

In response to "RS232=", enter the RS232 connector (1-4) to be administered,

Default values appear in bold type.

ACTION	DESCRIPTION	DATA
1	Reassign RS232 connector capability	[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 T for defaults]

<sup>†</sup> The default for each Target connector is as follows:

4

DEFAULT CAPABILITY Administration SMDR Save/Restore Tape Reserved DEFAULT BAUD RATE 1200, 300 (auto-baud) 1200 1200 9600, 1200 (auto-baud)

TABLE 26. Automatic	Route	Selection	Administration	(Menu=11)
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# Page 1 of 2

ACTION	DESCRIPTION	DATA
100	Assign a pattern number	[1-8]
101	Assign a start time for subpattern 1A in the form	[HHMM]
100	HOUR, MINUTES (HHMM)	
102	Assign a stop time for subpattern 1A	[HHMM]
110	Assign Route 1 for subpattern IA (a facility	[FAC]
111	Assign facility restriction level (FRI $(0,3)$ for	IEDI 1
111	subnattern 1A route 1	[I'KL]
120	Assign Route 2 for subpattern 1A (a facility	[FAC]
	access code [FAC]	
121	Assign facility restriction level (FRL 0-3) for	[FRL]
	subpattern 1A, route 2	
130	Assign Route 3 for subpattern 1A (a facility	[FAC]
121	access code [FAC]	
151	subpattern 14 route 3	[FKL]
140	Allow subpattern 1A to overflow to DDD	[1/0]
	(l=YES.0=NO)	[1/0]
141	Assign facility restriction level (0-3) for DDD	[FRL]
	overflow	
200	Assign a pattern number	[1-8]
210	Assign Route 1 for subpattern 1 B (a facility	[FAC]
211	access code [FAC]	
211	subpattern 1 B route 1	[FKL]
220	Assign Route 2 for subpattern 1 B (a facility	[FAC]
	access code [FAC]	[III0]
221	Assign facility restriction level (FRL 0-3) for	[FRL]
	subpattern 1 B, route 2	
230	Assign Route 3 for subpattern 1 B (a facility	[FAC]
001	access code [FAC]	
231	Assign facility restriction level (FRL 0-3) for subnattern 1 P route 2	[FKL]
240	Allow subpattern 1 B to overflow to DDD	[1/0]
<b>4</b> 7V	(1=YES 0=NO)	[1/0]
241	Assign facility restriction level (O-3) for DDD	[FRL]
	overflow	

Continued on next page

# Automatic Route Selection Administration (Menu = 11)

# Page 2 of 2

ACTION	DESCRIPTION	DATA
300	Area Code for which an ARS pattern is being	[Area Code]
	assigned	
301	ARS pattern number associated with this Area	[1-8; 0 for NONE]
	Code	
401	Assign the ARS access code	[Dial Code,g]
402	Assign ARS routing pattern for international calls	[1-8; 0 for NONE]
500	Home Area Code (HAC) exception list number	[1-4]
	(1-4)	
501	ARS routing pattern associated with this HAC	[1-8]
	list	
511	Display CO codes on this HAC list (READ	
	ONLY)	
512	Add CO code to HAC list	[Code Number]
513	Remove CO code from HAC list	[Code Number]
521	Display Home NPA Exception (HNE) telephone	[7-digit number]
	numbers (7-digits)	
522	Add a (7-digit) telephone number to the HNE	[7-digit number]
	list	-
523	Remove a (7-digit) telephone number from the	[7-digit number]
	HNE list	_
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]
701	Assign associated area code	[Associated
		area code]
702	Specify how many digits to strip from the front	[Number of digits]
	when the dialed number is to the associated area	
	code	
703	Specify digits to be prefixed, after deleting digits	[Digits to be prefixed]
	as specified by Action 702 above, for calls to the	
	associated area code	
704	Specify how many digits to strip from the front	[Number of digits]
	when the dialed number is NOT to the associated	
	area code	
705	Specify digits to be prefixed, after deleting digits	[Digits to be prefixed]
	as specified by Action 704 above, for calls NOT	
	to the associated area code	
800	Pattern number for other area codes exception	[1-8]
	telephone numbers	
821	Display entries in other area codes exception list	
822	Add a number to the other area codes exception	[Number]
	list (first 8 or fewer digits of a 10 digit telephone	
	number	
823	Remove a number from the other area code	[Telephone
	exception list	number]