AT&T SYSTEM 25

CALL MANAGEMENT SYSTEM
SYSTEM MANUAL

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Call Management System
System Manual
Prepared by System 25
Document Development Group and the
Technical Publications Group

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Section 1: Introduction

How to Use the CMS Documents

The Call Management System (CMS) is the Automatic Call Distributor (ACD) for System 25. The CMS component of System 25 answers calls and connects them to available agents. When there's more than one agent available for a call, CMS connects the call to the agent who has been idle the longest. If no agent is available, CMS connects the call to a delay message. When the message is finished playing, CMS places the call on hold until an agent becomes available.

It's important that your System 25 is administered to support CMS and that the CMS options and parameters are set to meet your call management needs. The explanations and instructions in each of the following CMS documents can contribute to a fully integrated System 25/CMS system.

CMS PLANNING GUIDE (555-532-650)

The *AT&T System 25 Call Management System Planning Guide* (CMS Planning Guide) is designed to help you, the CMS Supervisor, together with the System 25 Administrator plan a fully integrated System 25/CMS oriented to the way your business operates. The "Original Forms" section of the *AT&T System 25 Call Management System binder* (CMS binder) includes planning forms for recording the decisions you make during planning. A complete set of planning forms will help ensure a trouble-free system installation and administration.

> **NOTE:** If you don't have a completed set of planning forms at this point, the CMS Planning Guide is the place to start.

CMS INSTALLATION AND STARTUP GUIDE (555-532-504)

The *AT&T System 25 Call Management System Installation and Startup Guide* (CMS Installation and Startup Guide) comes packaged with the CMS binder. When you have completed the planning forms described in the CMS Planning Guide, the System 25/CMS installer can use the CMS Installation and Startup Guide to get your CMS up and running. This document leads the System 25/CMS installer through the steps needed to prepare the PC for CMS. These include:

- Installing the AT&T CMS PC Interface Card
- Installing the MS-DOS operating system
- Installing the CMS software
- Administering CMS
- Administering System 25 to support CMS
- Testing CMS

When finished, you will have a fully operational CMS with a primary configuration.

Once you have an operational shift configuration, you should keep the CMS Installation and Startup Guide in the CMS binder for future reference.

CMS SYSTEM MANUAL (555-532-110)

This is the manual you are reading now. It contains information on every aspect of CMS operation and administration, from understanding CMS to troubleshooting. The *AT&T System 25 Call Management System, System Manual* (CMS System Manual) can be used after the initial installation and administration described in the CMS Installation and Startup Guide.

AGENT CARD (555-532-506)

Copies of the card are packaged with this binder. CMS agents can use the card as a handy reference for using the agent voice terminal with CMS. Each CMS Supervisor and agent should have one of these cards.

What's in This Manual

The CMS System Manual is intended for the CMS Supervisor, the person who oversees the setup and operation of CMS, *and* the System 25 Administrator, who is responsible for the administration and operation of System 25. Here you will find an overall description of CMS – all the concepts, procedures, and other information you need to make the most of CMS in your business. This information is organized as follows:

Introduction

This section previews the contents of the manual and explains what the special symbols and typefaces mean.

Understanding CMS

This section includes the following background information about CMS:

– Definitions and descriptions of key terms and features

– Description of how Bon Voyage Travel, a fictitious business, uses CMS

– Description of the responsibilities and interactions of the CMS Supervisor and the System 25 Administrator for CMS operation

– Description of CMS components

– Contingency planning

Your PC and CMS

This section gives you instructions on how to make duplicates of the CMS diskettes and install the CMS software. You'll also learn how to enter and edit data in response to prompts that appear on your AT&T Personal Computer (PC) screen.

Administering CMS

This section tells you how to use your PC to administer CMS. This includes identifying stations, identifying agents, identifying CMS lines, assigning voice announcement units, and building a shift configuration (an arrangement of line groups and agent splits for call management).

This section also describes other administration tasks used to fine tune CMS for your business. These include setting options and exception thresholds to alert you of unusual and undesirable situations. Procedures for making a backup copy of your shift configuration(s) are also described. A menu map illustrates the interrelationships of the screens used for CMS administration.

Supervising CMS

From the information in this section, you will learn how to activate a shift configuration, monitor system status, and dynamically reconfigure the system. Dynamic reconfiguration involves changing the configuration that is currently being used to manage calls, for example, moving an agent from one split to another. Menu maps show you the screens you will be using. This section also describes two modes of CMS operation: Day Service and Night Service.

Handling CMS Calls

This section includes criteria for selecting the right voice terminal for your agents and for the supervisor station. It also includes procedures for using voice terminal features for CMS.

Generating Reports

This sections describes the types of reports available from CMS, and how to select, print, and interpret these reports.

Archiving Data

The information in this section tells you how to archive historical data onto floppy diskettes for storage and analysis.

Troubleshooting

This section helps you identify system problems and correct them.

Glossary

The Glossary defines CMS and System 25 terms.

Index

The index provides page references for screens, terms, and procedures.

Documentation Conventions

Several special symbols and typefaces appear in this manual.

For instance, keys that appear on your keyboard are shown like this:

[F1] (fuction key F1) and

[Shift] + [Print Scrn] (press the [Print Scrn] key while holding down the [Shift] key to print a screen).

The following typefaces are used to distinguish information you type (using the keyboard) from information that appears on your PC screen:

This italic bold typeface represents information that you type on the PC screen.

This bold typeface represents information that CMS or MS-DOS displays, such as a prompt or message.

Section 2: Understanding CMS

Overview

The Call Management System for System 25 is a powerful tool for managing your incoming calls. With CMS, you can handle calls efficiently, distribute the workload equally among your agents, and collect many types of data on call traffic and call handling performance.

"Understanding CMS" includes information that is basic to understanding CMS. It is organized as follows:

Key Terms and Concepts

Explains important CMS terms.

Optional CMS Features

Describes four optional CMS features.

A Typical CMS Application

Describes how Bon Voyage Travel, a fictitious business, uses CMS to manage its incoming call traffic. This example appears throughout this manual and other CMS documents to illustrate CMS concepts.

Managing CMS

Lists the responsibilities and interactions of the CMS Supervisor and the System 25 Administrator for CMS operation.

CMS Components

Describes hardware, software, and trunks that are required or can be used with CMS. Also included are procedures for recording messages on the voice announcement units.

Key Terms and Concepts

The terms listed below appear frequently in this manual and other CMS documents. The paragraphs that follow the list offer explanations of these key concepts:

- Automatic Call Distributor (ACD)
- Trunks (Lines)
- Line groups
- Line sub-groups
- Priority lines
- Agents
- Agent splits
- Shift configurations
- Main and secondary splits
- Intraflow
- Intraflow Threshold
- Answer Delay
- Force Delay
- Logged Out state
- Available state
- After-Call-Work (ACW) state
- Call management
- Day Service
- Night Service

CMS is the **Automatic Call Distributor (ACD)** designed to work with your System 25 communications system. It distributes calls that come in on the System 25 **trunks** that have been assigned to CMS. (Although CMS personnel may know these as **lines,** the System 25 Administrator will refer to them as trunks.)

> **NOTE:** A System 25 may have more than one CMS, but each CMS requires its own PC, hardware, and software.

The System 25 telephone lines assigned to CMS are organized into **line groups.** You usually assign lines to line groups so that all calls coming in on lines assigned to a particular line group are the same type. For instance, the lines for a service department might be assigned to one line group; the lines for a billing inquiries department might be assigned to a second line group, and the lines for a sales department might be assigned to a third line group. You can assign up to 28 telephone lines to CMS, and you can divide the lines among a maximum of four line groups. In order to have CMS generate reports on separate lines or smaller groups of lines within a line group, you can also divide the lines in your line groups into **sub-groups.** Each line group can have its lines divided into a maximum of seven line sub-groups. If you have lines that should be answered before other lines in a line group, you can designate these lines as **priority lines.**

Incoming calls are answered by **agents** who are organized into **agent splits.** A split is a team of agents who handle the same type of call. Each split is assigned to answer calls for one or more line groups. You can have up to six splits handling CMS calls at the same time, and you can assign up to 28 agents to a split. A maximum of 28 agents can be active in CMS at any one time.

A **shift configuration** is an arrangement of agent splits for answering calls. You can store up to six shift configurations in the system's memory, but only one shift configuration can be active at a time.

In a shift configuration, some agent splits are **main splits** and others are **secondary splits.** A main split has primary responsibility for answering calls for a line group. A secondary split acts as a backup to the main split for a line group. Agents in the secondary split answer calls that come in for the line group when all agents in the main split are busy or unavailable. Routing calls to the secondary split is called **intraflow.** The number of seconds a call waits for an agent in the main split before it is eligible to be sent to the secondary split is called the **Intraflow Threshold.**

The **Answer Delay** is the number of seconds CMS lets a call ring before answering it and connecting it to the voice announcement unit if no agent is available to service the call. When you turn on the **Force Delay** option, no calls arriving for a group are transferred to an agent until callers have heard the entire delay message, even if an agent is available. If Force Delay is off, calls are transferred to an agent as soon as one becomes available.

When call management begins for a shift, the agents in the shift are in the **Logged Out state.** CMS neither sends calls to nor keeps statistics on agents who are logged out. The agents must signal CMS when they are ready to receive calls, that is, they must put themselves in the **Available state.** Agents enter the Available state by turning on the light next to the Available button on their voice terminals. CMS will send calls to agents who have indicated to CMS that they are available. When agents need time to complete work on their most recent CMS call (such as processing an order or updating a record), they can leave the Available state and enter the **After-Call-Work (ACW)** state by pressing the ACW button to turn on the light next to it. (The light next to the Available button is automatically extinguished.) CMS does not send calls to agents who are in the ACW state. When agents are neither handling calls nor doing after-call-work, they log themselves out by pressing their Logged Out button, which turns on the light next to it.

CMS automatically changes the agent's state under the following conditions:

- When an agent is moved or added to an active shift configuration, the agent is put in the Logged Out state.
- If an agent does not answer a CMS call within the number of rings specified as the Transfer Return Threshold, the agent is put in the ACW state.
- If you have the Agent Logout ACW exception turned on, an agent who has been in the ACW state longer than the specified time is placed in the Logged Out state.
- When you put CMS in Night Service mode, agents' voice terminals are placed in the Logged Out state.

From the CMS PC, you can move an agent from the Logged Out state to the Available state, or you can log out an agent who is in the Available or ACW state.

Call management is the automatic distribution of calls that come in on CMS lines. CMS provides two modes of call management, **Day Service and Night Service.** When Day Service mode is active, a call that comes into CMS goes through this basic sequence of steps:

1. CMS looks for an available agent in the main split assigned to the line group on which the call came in. (If the Force Delay option is turned on, calls are not transferred to an agent until callers have heard the entire delay message, even if an agent is available.)
2. If agents in the main split are available, CMS routes the call to the agent who has been idle the longest.

   If no agent is available, CMS connects the call to a voice announcement unit for a delay message after waiting the number of seconds specified as the Answer Delay. If an agent becomes available while the delay message is playing, CMS immediately transfers the call to the agent and the caller does not hear the complete delay message.
3. If no agent has become available by the end of the delay message, CMS puts the call on hold in the main split's queue of waiting calls.
4. As soon as an agent in the main split becomes available, CMS transfers the call at the front of the queue to the agent.
5. If no agent in the main split becomes available and the call at the front of the queue has waited a predetermined amount of time (the Intraflow Threshold), the call is sent to an available agent in the secondary split (if intraflow has been turned on for the split and a secondary split has been administered for the call's line group).

When CMS Night Service is active, CMS routes calls to a voice announcement unit, and disconnects the calls after the message is finished.

Optional CMS Features

As you plan your CMS, you may want to consider the following optional features for CMS operation:

- The **Assist** and **Transfer-into-Queue** features help CMS agents in their daily routine.
- The **Service Monitoring** feature allows you to monitor your agents' calls.
- When CMS is not managing calls, you can use the **CMS contingency plan** to distribute calls automatically to agents.

THE ASSIST FEATURE

Feature Description

The Assist feature provides agents with a visual means of signaling you when they need assistance. The System 25 Station-to-Station Message Waiting feature is used to implement this feature.

When help is needed, an agent presses the Assist (MSG WAIT) button on the agent voice terminal. This turns on the light next to the agent's Assist button and also turns on the light next to the paired Assist (MSG WAIT) button on the supervisor voice terminal. A subsequent press of the Assist button from either voice terminal turns off both lights. If the agent has a call in progress, using the Assist button will not disrupt the call.

Button Requirements

This feature requires an administered System 25 MSG WAIT button on the agent's voice terminal and a paired MSG WAIT button on your supervisor voice terminal. The supervisor voice terminal must have a paired MSG WAIT button for *each* agent who has this feature.

Hardware Requirements

None.

CMS Administration Requirements

None.

System 25 Administration Requirements

A MSG WAIT button must be administered on both the agent and supervisor voice terminal.

THE TRANSFER-INTO-QUEUE FEATURE

Feature Description

The Transfer-into-Queue feature is designed to facilitate the handling of calls that come in on a trunk associated with one line group when the caller actually needs to speak to an agent handling calls for another line group.

For example, a retail business has set up its CMS with three line groups: Sales, Service, and Billing. Each line group is serviced by a split of the same name. A caller with a question about an invoice mistakenly calls in on a line in the Sales line group. The agent in the Sales split who answers the call uses this feature to transfer the call to a transfer-queue line in the Billing line group. Transfer-queue lines are priority lines. CMS, therefore, places this call at the front of the Billing line group's queue of waiting calls so that it will be answered by the first available agent in the Billing split.

The CMS Transfer-into-Queue feature can be used by CMS agents and other System 25 users; for example, the System 25 Attendant can use this feature to transfer calls that come in on non-CMS lines to a particular CMS line group for servicing. The agent, or other System 25 user, transfers the call to a "ghost" single-line voice terminal whose associated System 25 port on a Tip Ring Line or Analog Line Circuit Pack is physically connected to a port on a Loop Start Trunk Circuit Pack. Though neither a "real" single-line voice terminal nor a loop start trunk is used with this feature, one real single-line (Tip Ring Line or Analog Line) port and one real Loop Start Trunk port are required for each transfer-queue line. See "Hardware Requirements" for this feature below. A line group can have up to three transfer-queue lines assigned to it.

If a CMS agent answers the original call, both the agent who transfers the call and the agent who services the transferred call get credit for handling a CMS call on CMS reports. CMS statistics count the call as two distinct CMS calls.

Button Requirements

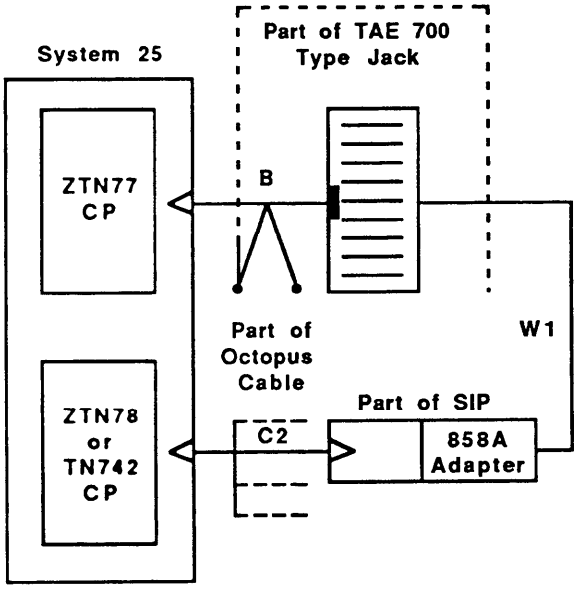
Though no voice terminal buttons are required for this feature, you may want to have a DSS, Flex DSS, or Repertory Dial button on your agents' voice terminals programmed with the PDC of the "ghost" single-line voice terminal associated with the transfer-queue line. This will provide one-touch dialing of that voice terminal's PDC.

Even if there is more than one transfer-queue line assigned to the line group, only one button is required. It can be programmed with the PDC of any one of the single-line voice terminals associated with that group of transfer-queue lines. If the "ghost" single-line voice terminal dialed is busy, the call automatically hunts to the next "ghost" single-line voice terminal in the group.

Hardware Requirements

For each transfer-queue line, a port on a Tip Ring Line (ZTN78) or Analog Line (TN742) Circuit Pack, and a port on a Loop Start Trunk (ZTN77) Circuit Pack are required. Figure 2-1 illustrates the hardware connection for this CMS feature.

FIGURE 2-1 Hardware Connections for the Transfer-into-Queue Feature.



LEGEND:

ZTN77 - C.O. Line Loop Start Trunk Circuit Pack
ZTN78 - Tip Ring Line Circuit Pack
TN742 - Analog Line Circuit Pack
B - 3 to 1 Splitter Connectorized Cable (OR6016)
W1 - 1-Pair Inside Wiring Cable
C2 - Octopus Cable (WP90780)

CMS Administration Requirements

The transfer-queue line must be administered on the Admin Queued Transfer screen. See “Administering Transfer-Queue Lines” in Section 4 for details.

System 25 Administration Requirements

The "ghost” single-line voice terminal port and Loop Start Trunk port must be administered according to the instructions on computer-generated System 25/CMS Single-Line Voice Terminal and Central Office Trunks implementation forms.

SERVICE MONITORING

Feature Description

The CMS Service Monitoring feature provides a means for you to monitor (that is, listen in on) agents’ calls without being detected by the agent or the caller. This feature can be very useful in the training process. You can also use this feature to join a CMS call when an agent requests help with a caller. *Only CMS calls can be monitored with this feature.*

Button Requirements

Your supervisor voice terminal needs an administered Personal Line button with lights for each CMS and transfer-queue line you may want to monitor.

Hardware Requirement
None.

CMS Administration Requirements
None.

System 25 Administration Requirements
Administer Personal Line buttons on your supervisor voice terminal.

CONTINGENCY PLAN

Feature Description
When CMS is not managing calls, either because you are generating reports or administering the system, or in the event of PC problems which prevent CMS from managing calls, you can still distribute calls automatically to agents if you have implemented the CMS contingency plan. This backup plan uses the System 25 Direct Group Calling (DGC) Group Coverage feature to distribute CMS calls to predefined groups of agents. Each of these agent groups is known as a System 25 DGC group. Calls to a DGC group hunt for an idle voice terminal in a circular manner starting with the voice terminal following the last one to ring (whether or not the call was answered at that voice terminal). CMS statistics are not kept for calls handled through the DGC feature. For information on using this feature to manage calls, see "Managing Calls When CMS is Not Running" in Section 9.

Button Requirements
None.

Hardware Requirements
None.

CMS Administration Requirements
None.

System 25 Administration Requirements
For each CMS line group, a "ghost" 34-button voice terminal on a fictitious System 25 ATL Line Circuit Pack must be administered. Each "ghost" voice terminal must have a Personal Line button administered for each CMS and transfer-queue line in that line group. The "ghost" voice terminal must also have DGC Group Coverage. The DGC group covering the "ghost" voice terminal must be administered to include the agent voice terminals which normally handle calls to the line group.

In the section, "Completing System 25/CMS Implementation Forms", in the *CMS Planning Guide,* you will find information for setting up this contingency plan. It is strongly recommended that you complete the necessary System 25/CMS implementation forms for the contingency plan and that you have your System 25 Administrator or System 25/CMS installer complete all necessary administration *before* you start using CMS so this alternate means of call distribution is available if you should need to use it.

IMPORTANT: The administration of fictitious System 25 voice terminal ports causes the following message to be entered as a Permanent System Alarm and also causes the Alarm light on the Attendant console to flash following a Warm Start of System 25:

XXXXX Port Board Missing But Administered

(XXXXX represents the port number of the fictitious port.)

The Attendant Alarm light can be turned off by removing the Permanent System Alarm message through System 25 administration. The System 25 translations for the fictitious port(s) must not be removed or the CMS contingency plan, described above, will not work.

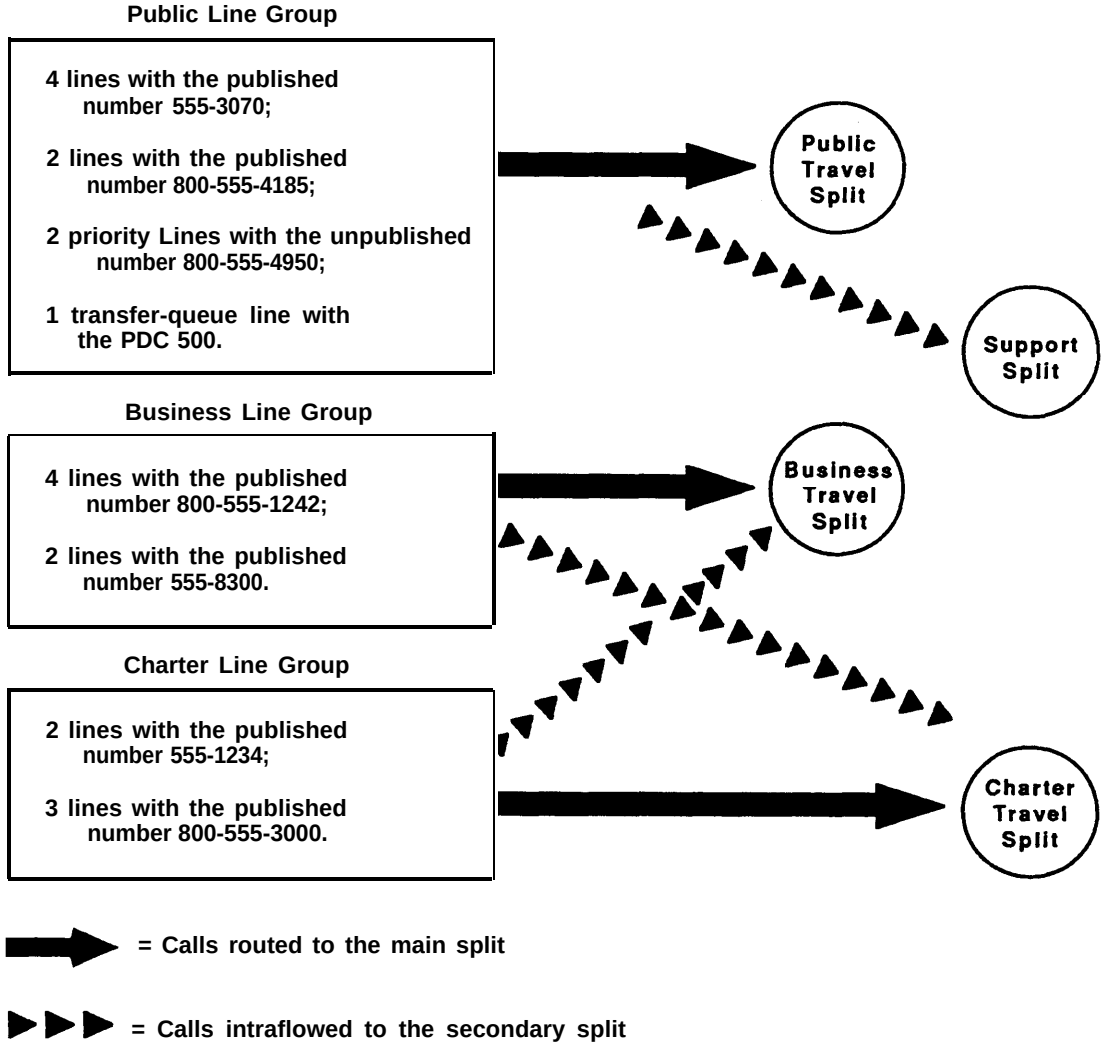
In this part of the manual you'll learn about a fictitious travel agency, Bon Voyage Travel, which uses CMS to manage the revenue producing incoming call traffic for its System 25 communications system. Examples based on Bon Voyage Travel are used in the remaining sections of this manual.

CMS AND BON VOYAGE TRAVEL

At Bon Voyage Travel, agents plan and book trips for several types of customers. Most of the travel agency orders are placed by phone, so CMS plays an important role in the agency's daily business transactions.

In order to handle three different types of customers and to manage the frequent overflow of calls, Bon Voyage Travel's CMS Supervisor has divided the telephone lines customers use into three line groups and organized the travel agents into four splits. Figure 2-2 shows a diagram of Bon Voyage Travel's CMS.

FIGURE 2-2 Bon Voyage Travel's CMS.



- The **Public line group** has nine lines, eight Central Office (CO) trunks and one transfer-queue line. There are four local lines with the published number 555-3070, and two WATS lines with the published number 800-555-4185. The number for the local lines is published in the Yellow Pages and advertised in the local newspapers; the number for the WATS lines is advertised in several national travel magazines. There are also two priority lines with the number 800-555-4950. These lines are reserved for valued repeat customers who may book several trips with Bon Voyage Travel each year. Their unpublished telephone number is given only to these preferred clients. For reporting purposes, the Central Office lines have been divided into three line sub-groups, Public local lines (PL), Public WATS lines (PW), and Public special lines (PS).

  In addition, there is one transfer-queue line assigned to this line group. When calls come in on lines other than the Public line group's lines and need to be placed in the Public line group's queue of waiting calls, agents can transfer the calls to PDC 500, the PDC of the single-line port associated with the transfer-queue line. The transfer-queue line is in line sub-group Q1.

  Calls coming into the Public -line group are from customers who want to book personal vacations. The **Public Travel split** handles calls that come into the Public line group.

  To provide optimal service to customers when there is a high volume of call traffic coming into the Public line group, the **Support split** has been assigned as the Public line group's *secondary* (or backup) split. The number of agents available for CMS calls in this split varies according to the incoming call traffic. The employees who staff the Support split have primary responsibilities such as bookkeeping, advertising, and trip packaging. But, since these people have some experience as travel agents, they are often used to back up the Personal Travel split when call traffic is heavy on the lines in the Public line group.

- The **Business line group** consists of six lines. These lines have been divided into two line sub-groups. One line sub-group, BW, contains four WATS lines with the published number 800-555-1242. The other line sub-group, BL, has two lines for local service with the advertised number 555-8300.

  Calls coming into this line group are from large corporations wishing to book business trips for their employees. The **Business Travel split** serves as this line group's main split.

- The **Charter line group** consists of five lines, divided into two line sub-groups. Two lines, which have the published number 555-1234 listed in the local Yellow Pages, are in the line sub-group CL. Three WATS lines, which have the published number 800-555-3000 listed in national travel magazines, are in the line sub-group CW.

  The **Charter Travel split,** which handles CMS calls coming into the Charter line group, arranges trips for groups and frequently books trips for local and national holiday clubs.

Occasionally, customers who have previously made travel arrangements through a holiday club will call one of the Charter line group's numbers to make personal travel arrangements. In these cases the agent in the Charter split who receives the call uses the Transfer-into-Queue feature to transfer the call to the Public line group's queue of waiting calls. CMS then distributes the call to an agent in the Public Travel split.

Since both the Charter Travel split and the Business Travel split handle group trips, the Business Travel split serves as a secondary split to handle call overflow from the Charter Travel split. Likewise, the Charter Travel split backs up the Business Travel split during peak calling hours.

BON VOYAGE TRAVEL'S OTHER CALL TRAFFIC

All of Bon Voyage Travel's voice terminals and outside telephone lines are part of the agency's System 25 communications system, but some of Bon Voyage Travel's voice terminals and outside lines are *not* assigned to the Call Management System. Agents and nonagents alike use lines not assigned to CMS for all outgoing calls and nonrevenue producing incoming calls.

CMS AND OTHER BUSINESSES

Bon Voyage Travel's line groups and agent splits are typical for a travel agency. Other types of businesses would have other names for their line groups and splits. For example, a wholesale distributor might have line groups and splits for inside sales and customer service (such as order tracking) while a bank may have line groups and splits dedicated to specific types of loans and customer services. The characteristics of *your* business should dictate your decisions as you plan your CMS.

Since System 25 must be administered to support CMS, the CMS Supervisor and the System 25 Administrator work together to ensure successful CMS operation. This section describes the typical CMS interactions and responsibilities of these two people.

RESPONSIBILITIES OF THE CMS SUPERVISOR

The CMS Supervisor has many responsibilities, all of which are described in this manual. Typically, the role of the CMS Supervisor involves:

- Working with the System 25 Administrator to:
  - Identify and record port numbers, PDCs, and trunk numbers for CMS equipment
  - Ensure removal of stations or trunks no longer needed by CMS
  - See that System 25 administration needed to support CMS is performed

  Administering CMS, including the following:

  Administering stations, CMS lines, transfer-queue lines, line groups, and voice announcement units

  - Building an Agent Directory
  - Creating shift configurations of line groups and agent splits
  - Setting options
  - Selecting Exception Thresholds to be monitored
  - Printing System 25 administration instructions

  See Section 4, “Administering CMS. ”
- Monitoring line status, split status, call traffic, and system problems during call management, and making changes to shift configurations as needed, to ensure efficient call handling and maximum agent productivity. See “Monitoring Call Management” and “Dynamic Reconfiguration” in Section 5.
- Helping agents understand how to use their voice terminals for handling CMS calls. See Section 6, “Handling CMS Calls. ”
- Generating reports and using the data in the CMS reports to maintain efficient call management and agent productivity. See Section 7, "Generating Reports," for ongoing data collection; see Section 8, "Archiving Data," for storing historical CMS data.
- Having a contingency plan in place and using it to manage calls when CMS is not running. See “Managing Calls When CMS is Not Running” in Section 9.
- Troubleshooting. See Section 9, “Troubleshooting.”

RESPONSIBILITIES OF THE SYSTEM 25 ADMINISTRATOR

System 25 and CMS must be administered *identically* with respect to trunk numbers, port numbers, PDCs, and feature button assignments required by CMS. The following are typical responsibilities involved in maintaining harmony between the two systems:

- Assigning trunk numbers, ports, and PDCs to CMS equipment and facilities, both when CMS is installed and when more resources are needed.
- Using the System 25 administration instructions printed out by the CMS software, along with hand-completed System 25/CMS implementation forms, to administer System 25 for CMS.
- Backing up System 25 translations to a tape or diskette when CMS is first configured and after changes are made. (Translations are specific information assigned to a voice terminal or System 25 such as port numbers and PDCs.)

CMS Components

This section lists the hardware required for and trunks compatible with CMS.

HARDWARE COMPATABLE WITH CMS

- The following hardware and software are required for CMS:
- AT&T System 25: Release 2
- An AT&T Personal Computer (PC), with the following characteristics:
  - Hard disk (10 MB and 512K RAM minimum)
  - One floppy diskette drive
  - MS-DOS 3.2, Version 2.02 (or higher)
  - Keyboard
  - Monochrome or color monitor
- AT&T Printer Model 473 (or compatible parallel printer)
- AT&T CMS PC Interface Card
- Two System 25-CMS floppy diskettes
- At least two blank floppy diskettes
- Agent voice terminals (any of the following):
  - 5-Button Voice Terminal
  - 10-Button Voice Terminal
  - 10-Button Hands-Free Answer on Intercom (HFAI) Voice Terminal
  - 10-Button Built-in Speakerphone (BIS) Voice Terminal
  - 22-Button BIS Voice Terminal

    34-Button Voice Terminal
  - 34-Button Deluxe Voice Terminal
  - 34-Button BIS Voice Terminal

    34-Button Deluxe BIS Voice Terminal
  - 34-Button BIS Voice Terminal with Display
  - 34-Button Deluxe BIS Voice Terminal with Display
  - Direct Trunk Attendant Console (DTAC), a 34-Button Deluxe or 34-Button Deluxe BIS Voice Terminal
  - Switched Loop Attendant Console (SLAC), a 34-Button Deluxe BIS with Display
- Supervisor voice terminal:
  - One 34-button Deluxe voice terminal is required. A second multiline voice terminal may be needed.
- For more information about selecting a voice terminal for yourself and for the CMS agents, see Section 6, “Handling CMS Calls. ”
- Cables:
  - Two 14-foot 4-pair modular-plug stations cords (D8W-87) for connections to the AT&T CMS PC Interface Card

The following optional hardware can be used with CMS:

- Up to four Model DACON-DA-5SL voice announcement units (strongly recommended). One 14-foot 2-pair modular-plug station cord (D4BU-87) is required for each voice announcement unit.
- Headsets and headset adapters

  NOTE: A headset and headset adapter cannot be used with a 5-button voice terminal or a 10-button HFAI voice terminal.
- A music source compatible with the System 25 Music-on-Hold port (strongly recommended).
- A telephone answering machine capable of answering calls on the first ring for special Night Service applications. See "Caller Message Recording During Night Service" in Section 5.

TRUNKS COMPATIBLE WITH CMS

Either Ground Start or Loop Start trunks maybe used with CMS, but Ground Start trunks are strongly recommended because they lessen the likelihood of abandoned calls being transferred to agents. Ground Start trunks are also recommended if headsets will be used with voice terminals used for CMS.

Central Office (CO), WATS (800 Service), and Foreign Exchange (FX) trunks may be used with CMS. Trunks may be arranged in CO hunt groups. A hunt group is a group of trunks that share a listed telephone number. When a call comes in on the listed number, the CO switch scans the hunt group for an idle trunk and connects the call to the first one it finds.

THE VOICE ANNOUNCEMENT UNIT

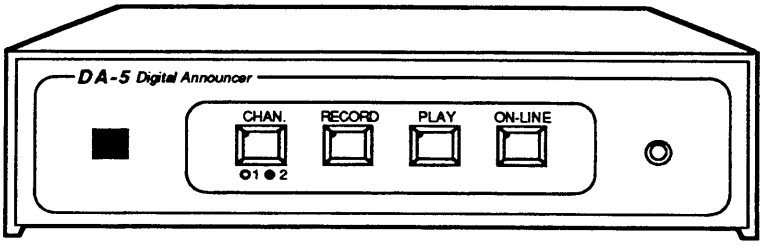
Before recording delay messages on the DACON unit, read the documentation that came with it, and keep the following guidelines in mind:

- You can assign a separate voice announcement unit to each line group, or two or more line groups can share one voice announcement unit.
- The voice announcement unit has two channels to provide two messages, one for Day Service and the other for Night Service. The announcement unit has 64 seconds of message time available that can be divided between your two messages.
- Leave 3 or 4 seconds of silence before the beginning of your message to allow time for CMS to connect the caller to the voice announcement unit. This will ensure that the caller will hear the message from the beginning.
- You must note the length of the Day Service message on the Assign Announcement screen. See “Assigning Announcements” in Section 4 for more information.
- If call traffic is light when CMS is in Night Service mode, you can use a telephone answering machine(s) to answer calls and record callers’ voice messages. Refer to “Caller Message Recording During Night Service” in Section 5 of this manual for additional information.

RECORDING MESSAGES

The following steps describe how to record a message on your DACON voice announcement unit. Figure 2-3 shows you the front of the unit.

FIGURE 2-3 The DACON-DA-5SL Voice Announcement Unit.



NOTE: If you are recording only one message, the message can be up to 64 seconds in length. If you are recording two messages, one message on Channel 1 and one on Channel 2, you must divide the 64 seconds of message time between the two messages.

Prepare a clear, informative message *before* you begin to record. Once you have plugged in the voice announcement unit and turned it on, use the following instructions to record a message on Channel 1.

1. Turn your DACON unit so that the front of the unit is facing you.
2. Insert the handset modular plug into the front panel jack.
3. To record on Channel 1, the red light on the Channel button must be off. If the light is on, press the Channel button once so that the light goes off.
4. Press the Record button and hold it down while you press the Play button.

   (The Channel button light flashes during the first 16 seconds of your recording. The Record button light flashes during the second 16 seconds. The Play button light flashes during the third 16 seconds. The On-Line button light flashes during the fourth 16 seconds.)
5. Speak into the handset to record your message.
6. When you are finished recording your message, press the On-Line button.

To record a message on Channel 2, follow this procedure:

1. The red light on the Channel button must be on. If the light is off, press the Channel button once.

   (The red light on the button goes on.)
2. Repeat steps 4 through 6 above to record the message.

To listen to the recorded announcement on either of the channels:

1. Make sure the handset is plugged into the front panel jack.
2. If you want to listen to a message on Channel 1, make sure that the red light on the Channel button is off.

   If you want to listen to a message on Channel 2, the red light on the Channel button should be on.
3. Press the Play button.
4. Listen to the message through the handset.
5. If you want to rerecord the message, follow the steps in this section for recording announcements.

Section 3: Your PC and CMS

Overview

CMS runs on the AT&T Personal Computer (PC). By working with the CMS menus and screens, you can tailor CMS to suit your business needs. This section of the manual describes how to load the CMS software onto your PC's hard disk and how to enter data into your PC.

The information in this section is organized as follows:

Duplicating the CMS Diskettes

Describes how to make working copies of the CMS diskettes. (A set of blank diskettes has been packaged with the CMS binder.)

Installing the CMS Software

Describes how to copy the CMS software onto the PC's hard disk, and set the time and date on your PC.

Using Your PC with CMS

Describes how to use CMS screens, enter and edit data, and access help screens.

Duplicating the CMS Diskettes

Since it is important to protect your original CMS floppy diskettes from damage or wear, a duplicate (working copy) of each diskette was made when CMS was installed. Keep the originals in a safe place and use them only to make additional working copies.

If you have to make additional working copies, you need the following:

- Your PC
- The original CMS diskettes, labeled “SYSTEM 25 CMS SYSTEM” and “ SYSTEM 25 CMS REPORT AND ADMIN”
- Two blank diskettes

> **NOTE:** If you are reusing diskettes, make sure the diskettes do not have old files on them that you need because they will be overwritten when you copy the CMS diskettes.

In order to make duplicates of the CMS diskettes, MS-DOS (including the “diskcopy” and “diskc omp” commands) must already be on the hard disk. MS-DOS (including these commands) was installed on your PC’s hard disk when CMS was first installed.

DUPLICATING THE CMS DISKETTES

To make duplicate copies of the original CMS diskettes:

1 Turn on the PC.

If the CMS Menu appears, press [F8] (labled "Exit to DOS") to get to the MS-DOS prompt.

2 When the **c>** prompt appears, type:

diskcopy a: a:

and press [Enter]

You see the following messages:

Insert SOURCE diskette in drive A:
Strike any key when ready . . .

NOTE: PC responses may be slightly different from the ones printed here, depending on the version of MS-DOS you are using.

3 Insert the original CMS diskette labeled “SYSTEM 25 CMS SYSTEM, ” into drive A with the label of the diskette facing upwards, and the notch in the side of the diskette on the left. When you hear a click, indicating that the diskette has been fully inserted, press down the latch on drive A until you feel the latch lock.

This diskette is the “source” diskette, the diskette that contains the information being copied.

4 When you are ready, press any key.

The in-use light on disk drive A comes on while the system is reading the source diskette.

> **WARNING**
>
> **Do not remove a diskette from the drive while the in-use light is on; data on the diskette may be damaged or lost.**

When the system has read the diskette, the following messages are displayed:

```
Insert TARGET diskette in drive A:
Strike any key when ready. . .
```

5 When the in-use light on drive A is off, remove the source diskette, insert a blank diskette, and press any key. This diskette is the "target" diskette, the diskette on which the information is being copied.

The in-use light comes on while the system is copying the information onto the target diskette. If the blank diskette is not formatted, the message

```
Formatting While Copying
```

appears on the screen.

NOTE: Depending on the amount of memory on your PC, the system may prompt you to swap diskettes during diskcopy.

When the copying process is finished, you see:

```
Copying complete
Copy another diskette (Y/N)?
```

6 Remove the duplicate diskette, write "SYSTEM 25 CMS SYSTEM WORKING COPY" on a label using a felt tip pen, apply the label to the diskette, and put the diskette in its paper sleeve. Return the original diskette to its paper sleeve.

7 Type **y.** The following message appears:

```
Insert SOURCE diskette in drive A:
Strike any key when ready...
```

8 Insert the original CMS diskette labeled "SYSTEM 25 CMS REPORT AND ADMIN" into drive A. This is the source diskette.

9 Repeat Steps 4 and 5, using the second blank diskette as the "target" diskette.

10 Type ***n*** when prompted to copy another diskette.

11 When the **C>** prompt appears, remove the duplicate diskette, write "SYSTEM 25 CMS REPORT AND ADMIN WORKING COPY" on a label using a felt tip pen, apply the label to the diskette, and store the diskette in its paper sleeve. Return the original diskette to its paper sleeve.

12 Store both the original and working copy CMS diskettes in a safe place.

It is recommended that you store the working copy diskettes separately from the original diskettes.

Installing the CMS Software

Installing the CMS software involves copying the contents of the working copies of the two CMS diskettes onto the PC's hard disk. This was done when CMS was first set up for you. As part of the installation procedure, a CONFIG.SYS and an AUTOEXEC.BAT file were placed on your PC's hard disk. If these files existed prior to CMS installation, the installation procedure edited these files. See "The CONFIG.SYS File" and "The AUTOEXEC.BAT File" later in this section.

You can perform the following software procedures tore-install the CMS software if errors occur that you cannot fix and you need to begin again. When you are finished, the system will have copied the programs required for CMS operations onto the 'PC's hard disk.

COPYING THE CMS SOFTWARE ONTO THE PC'S HARD DISK

To copy the CMS software onto the PC's hard disk:

1. Insert the diskette labeled "SYSTEM 25 CMS SYSTEM WORKING COPY" into drive A.
2. At the **C>** prompt, type **a:\cmsinstall** and then press [Enter].

   The following messages appear in the upper portion of the screen and remain on the screen throughout the installation procedure:

   ****** SYSTEM 25 Call Management System**
   ****** Installation Procedure**

   Additional messages appear in the lower area of the screen.
3. While the installation procedure is in progress, the following message usually appears on your screen:

   ****** Installation Now In Progress. Please Wait...**

   However, there are a couple ways in which the installation procedure could be interrupted:

   — If there are errors on your CMS working copy diskette that prevent the installation program from continuing, the following messages appear on the screen:

   ****** ERROR on Installation Floppy Disk**
   Try installation from Another Floppy

   Discard the diskette, make another working copy using the original CMS diskette, and then begin the CMS software installation procedure again.

   — If there is insufficient storage space on the hard disk for new information, the following messages appear on your screen:

   ****** "Insufficient Disk Space for CMS.**
   An Additional xxxK is Required.
   Delete Old Files and Try Installation Again.

   If you need directions on using the MS-DOS "delete" (del) and "directory" (dir) commands to delete files, see the user's guide that came with the MS-DOS diskette.

4 After the contents of the "SYSTEM 25 CMS SYSTEM WORKING COPY" diskette have been copied onto the hard disk, the following messages are displayed:

****** Please remove the diskette currently in floppy disk drive A.**
****** "Insert the diskette labeled SYSTEM 25 CMS REPORT AND ADMIN into drive A.**
Press 'c' to continue or 'q' to quit.

5 Remove the "SYSTEM 25 CMS SYSTEM WORKING COPY" diskette and place it in its protective cover.

6 Insert the diskette labeled "SYSTEM 25 CMS REPORT AND ADMIN WORKING COPY" into drive A and press **c**.

7 Once the installation program has copied all the CMS programs and files onto the hard disk, the final installation messages appear on your screen:

****** Call Management System Successfully Installed.**
****** Please remove the diskette currently in floppy disk drive A.**
****** Reboot the system by holding down 'CTRL' and 'ALT' while pressing 'DEL.'**

8 Remove the "SYSTEM 25 CMS REPORT AND ADMIN WORKING COPY" from the disk drive, place it in its paper sleeve, and store it in a safe place.

9 Reboot the system by holding down [Ctrl] and [Alt] while pressing [Delete].

After Resident Diagnostics are run, the CMS Menu appears on the screen.

The CONFIG.SYS File

In order for the CMS software to run properly, you must have a CONFIG.SYS file in the root (\) directory of the PC's hard disk. This file must contain the following lines:

```
BUFFERS =20
FILES =20
```

If the CONFIG.SYS file existed prior to CMS software installation, the above two lines were appended to the file when CMS was installed. If no file existed, a CONFIG.SYS file containing these lines was automatically created when CMS was installed.

To view the contents of the CONFIG.SYS file:

1 At the **C>** prompt, type

```
cd \
```

then press [Enter]

2 At the **C>** prompt, type

```
type config.sys
```

then press [Enter].

The contents of the CONFIG.SYS file appear on the screen.

The AUTOEXEC.BAT File

During the CMS installation process, an AUTOEXEC.BAT file containing the three lines below was placed on your PC's hard disk. If the AUTOEXEC.BAT file existed on your PC's hard disk prior to CMS installation, these three lines were added to the end of the file when CMS was installed.

The three lines are:

```
prompt $p$g
cd c: \cms
cms
```

The first line causes the full pathname of the current directory to be displayed as part of the MS-DOS prompt. The second and third lines cause the CMS Menu to displa}' automatically after MS-DOS Resident Diagnostics are run. This happens whenever your PC is turned on or MS-DOS is rebooted.

If you ever edit the AUTOEXEC.BAT file, make sure these lines remain as the last three lines of the file.

To view the contents of the AUTOEXEC.BAT file:

1 At the **C>** prompt, type

***cd ***

then press [Enter].

2 At the **C>** prompt, type

type autoexec.bat

then press [Enter].

The contents of the AUTOEXEC.BAT file appear on the screen.

Setting the Time and Date

Since the date and time are significant parts of your daily CMS statistics, it is important that your PC screen show the correct date and the correct time.

You can check the time and date by looking at the upper right-hand corner of any CMS screen. If the time or date is incorrect, you can easily change it on your PC.

To check or change the date on your PC:

1. Exit to MS-DOS by pressing [F8] (labeled "Exit to DOS") on the CMS Menu.
2. When the ***C>*** prompt appears, type

   date

   and press [Enter].

   The following message appears on your screen:

   Current date is Wed 4-07-1988
   Enter new date (mm-dd-yy):

3. If the date is correct, press [Enter].

   If the date is incorrect, type in the correct date in the form mm-dd-yy (for example, ***04-08-88)*** and press [Enter].

To check or change the time on your PC:

1. When the ***C>*** prompt appears, type

   time

   and press [Enter].

   The following message appears on your screen:

   Current time is 12:01:30.00
   Enter new time:

2. If the time is correct, press [Enter].

   If the time is incorrect, type in the correct hour and minute in the form hh:mm (for example, ***9:03)*** and press [Enter]. (MS-DOS works on the basis of a 24-hour clock, so if you want to enter the time as 2:30 P.M. you must type ***14:30.)***

   MS-DOS keeps track of the seconds and hundredths of seconds. You do not enter these details into your PC.

This section describes the format of CMS screens, the method of entering and editing data, and how to access help screens. If you have questions about MS-DOS, the layout of your keyboard, or other information about your PC, refer to the manuals that accompanied them.

SCREEN FORMATS

The general format of a CMS screen is demonstrated below in the Agent Directory screen.

```
                a                  b                          c   d        e
1   AGENT  DIRECTORY   ANNC CU1 CU2 Don'tPrtScr  LoStorage   DAY CMS1.0 2:38p 04/18
    ____________________________________________________________________________

                                  AGENT  DIRECTORY

          Last Name    First    ID          Last Name    First    ID
          Abell        Mary-Ann MARYA       Marietta     Jane     JANE
          Beckman      Jim      JIM         Masson       William  BILL
          Brown        Allan    ALLAN       Ong          Ien      IEN
          Chu          David    DAVE        Opalach      Joseph   Joe
          Dumbra       Marie    MARIE       Reicheg      Louis    LOU
          Fang         John     John        Rowlinson    Don      Don
          Fenton       Scott    SCOTT       Seiler       Linda    LINDA
2         Garcia       Jose     JOSE        Siegel       Lawrence LARRY
          Gerkensmeier Otto     OTTO        Smith        Bernard  BERNE
          Johnson      Andrew   ANDY        Son          Sarah    SARAH
          Kesselring   Ana      ANA         Stickler     Craig    CRAIG
          Leonard      Michael  MIKE        Vatier       Barbara  BARB
          Lindquist    Hal      HALl        Walsh        Jennifer JENNY
          Lindquist    Hal      HAL2        Well         Harvey   HARV
          Mack         Joel     JOEL        Yang         CJ       CJ

3   2:38 04/18 l *** Split 1 - Agent LINDA - Refused Calls
    ____________________________________________________________________________
4   ADD AGENT: Last Name: Zuckerman    First: Amy      ID: AMY
     F Cancel                                FPrevious F Next            F Enter
5    1 Prompt                                5 Field   6 Field           8 Data
```

Each numbered or lettered term listed below corresponds to a number or letter in the screen above. The following types of information may appear in the indicated area of the screen.

1 The **ID line** contains:

- **a** Screen name
- **b** Status indicators: **ANNC** blinks if there is a voice announcement unit problem. (If you decide not to use any voice announcement units, ANNC appears in the ID line, even though there is no problem.) If there is a problem with the connections to the PC, **CU1** and/or **CU2** blinks. **Don'tPrtSc** appears if the printer is disconnected or is not ready. **NoStorage** or **LoStorage** appears if there is a storage problem on the hard disk. For information on resolving problems, see Section 9, "Troubleshooting."
- **c** Current CMS mode: **CMS** appears when the CMS Menu is displayed. **DAY** or **NIGHT** indicates that calls are being managed using Day Service or Night Service mode, respectively. (See "Selecting Day or Night Service" in Section 5.) **ADMIN** indicates CMS is being used for administration. **REPT** appears when you generate reports.

d CMS Release number (for example, CMS1.0)

e Time and date

2 The **Information area** contains menus or status information.

3 The **Error line** offers four types of messages:

— *Error messages* indicate you made an invalid entry, such as entering a PDC that has already been assigned.

— *Exception messages* indicate that one of the exception thresholds you have set has been reached, and an unusual or undesirable situation may be occurring.

— *System messages* indicate that part of CMS is malfunctioning (for instance, the voice announcement unit is not working).

— *Warning messages* indicate actions that may have unusual results.

If the Audible Alarm option is on (see "Setting Options" in Section 4), the PC beeps when a message appears on the error line. In general, a message remains displayed on the error line until another message overwrites it, you correct the error, or you move to another screen.

4 The **Prompt line** contains requests for your input.

When no prompt appears, the words **F10 - Help** appear to the far right on the prompt line reminding you that [F10] accesses the help screens.

For more information, see "Entering and Editing Data, " in this section.

5 **Function key labels** in this area of the screen tell you the current meaning of the PC's function keys. The function key labels depend on the screen you are viewing (except [F10], which always accesses a Help screen). When you press a function key, usually a new screen or a prompt appears. When a prompt appears, the function key labels change to provide data entry functions.

Entering and editing data is easy. You enter data by pressing function keys and responding to the prompt that appears on the prompt line on your screen. Prompts contain one or more fields (blank spaces) into which you type your responses. Whenever a prompt appears, the function keys are labeled as shown in the screen below.

```
AGENT DIRECTORY                                        ADMIN CMS1.0 2:31p 04/18

                          AGENT DIRECTORY

  Last Name    First      ID     Last Name    First       ID
  Abell        Mary-Ann   MARYA  Manetta      Jane        JANE
  Beckman      Jim        JIM    Masson       William     BILL
  Brown        Allan      ALLAN  Ong          Ien         IEN
  Chu          David      DAVE   Opalach      Joseph      JOE
  Dumbra       Marie      MARIE  Reicheg      Louis       LOU
  Fang         John       JOHN   Rowlinson    Don         DON
  Fenton       Scott      SCOTT  Seiler       Linda       LINDA
  Garcia       Jose       JOSE   Seigel       Lawrence    LARRY
  Gerkensmeir  Otto       OTTO   Smith        Bernard     BERNE
  Johnson      Andrew     ANDY   Son          Sarah       SARAH
  Kesselring   Ana        ANA    Stickler     Craig       CRAIG
  Leonard      Michael    MIKE   Vatier       Barbara     BARB
  Lindquist    Hal        HAL1   Walsh        Jennifer    JENNY
  Lindquist    Hal        HAL2   Woll         Harvey      HARV
  Mack         Joel       JOEL   Yang         CJ          CJ

ADD AGENT:  Last Name:____________ First:_______ ID:_____
F  Cancel                            F Previous     F Next     F Enter
l  Prompt                            5 Field        8 Field    8 Data
```

NOTE: When a prompt contains only one field, the only function keys displayed are [F1] (labeled “Cancel Prompt”) and [F8] (labeled “Enter Data”).

In this manual, instructions for entering data in prompts are usually presented as follows:

[F1] Add Agent

Pressing this function key on the Agent Directory screen allows you to add agents to CMS.

Prompt:

ADD AGENT: Last Name:_____ First:_____ ID:_____

Action:

1 Enter a last name up to 12 letters, numbers, or special characters (such as * or #), with no spaces between them.

2 Enter a first name up to eight letters, numbers, or special characters, with no spaces between them.

3 Enter a unique ID up to five letters and/or numbers.

4 Press [F8] (labeled “Enter Data”).

MOVING THE CURSOR

Many CMS prompts contain several empty fields, as in the following example:

ADD AGENT: Last name: _____ First: _____ ID: _____

When a prompt appears, the cursor is positioned at the beginning of the first field. Use the keys shown below to move the cursor within a prompt:

Press	Or	To move the cursor
[F5] (labeled "Previous Field")	[Shift] + [Tab] (while holding down [Shift], press [Tab])	to the beginning of the previous field (except when the cursor is in the first field).
[F6] (labeled "Next Field")	[Tab]	to the beginning of the next field. If the cursor is in the last field, it will not return to the first field.
[→] (the right arrow key located on the numeric keypad on your keyboard)		one character to the right. (This key does not work in a blank field.)
[Backspace]	[←] (the left arrow key on the numeric keypad)	one character to the left. (This key does not work in a blank field.)

ENTERING DATA

Follow these guidelines when completing the fields in a prompt:

- You can type uppercase or lowercase letters in your entries. In this manual, the sample entries are usually lowercase. On your screen, all entries, except agent names, appear as uppercase, even if you typed lowercase letters. Agent names appear in uppercase and/or lowercase letters, exactly as typed.
- Some field entries can contain numbers or special characters.
- The system does not allow spaces between characters in a field; use underscores (_) in these instances.
- Press [F8] (labeled "Enter Data") or [Enter] when you finish typing your response. This tells the PC to process the data you have entered. The cursor can be in any field when you press [F8] or [Enter]. (The instructions in this manual usually tell you to press [F8] after your last entry in a prompt. You may press either [F8] or [Enter], however.)
- If you skip a required field in a prompt and press [F8] or [Enter], your PC beeps (provided the Audible Alarm option is On), and an error message appears. The Audible Alarm option is administered from the Set Options screen. If you have turned off this option, your PC does not beep.

IMPORTANT: To cancel any prompt, press [F1] (labeled "Cancel Prompt") or **[Delete].** Any data you entered in the prompt fields are ignored, the prompt disappears, and the function key labels change from data entry labels to the labels for the particular CMS screen.

EDITING DATA

To change a character in a field:

- Move the cursor to the incorrect character and simply type another character over it.

To add characters at the end of an entry:

- Press [→] after the last character and type additional characters.

To insert characters in an entry:

- Move the cursor to the first character you want to change and retype the entry from that character onward. You cannot use [Insert] to insert a character between other characters.

To replace a long entry with a shorter one:

- Type over any characters you want to change, then press the space bar after the last character of the new entry. The remaining characters in the previous entry disappear. For example, to change "Joseph" to "Joe", move the cursor to "s", type "e", and press [Space]. The letters "eph" disappear.

VALIDATING DATA

CMS validates the information entered in two ways:

1 The first type of validation occurs as you type each piece of information in a field. If you make an invalid entry (for instance, entering a letter in a numeric field), the PC beeps, the character does not display, and the cursor remains in the same position so you can make another entry.

2 The second type of validation occurs after you press [F8] (labeled "Enter Data"). At this point, CMS begins to validate each field of information from left to right. If there is an invalid entry or you left a required field blank, the PC beeps, and an error message appears above the prompt. The cursor returns to the first error so you can correct the entry.

USING THE HELP SCREENS

You can press [F10] (labeled "Help") on any screen to receive more information about the function keys on that screen. To exit a Help screen and return to your previous place, press the spacebar. If you press a labeled function key to exit a Help screen, you will exit Help and then perform the function of that particular function key.

Section 4: Administering CMS

Administration enables you to tailor CMS for your business. The starting point for administration is the Administration Menu, shown below. You can get to it from the CMS Menu and from several other screens.

```
ADMINISTRATION  MENU                                  ADMIN CMS1.0 9:35a 04/18
____________________________________________________________________________


                    Administration  Menu
              F1 Administer Stations
              F2 Administer Lines, Line Groups and Announcements
              F3 Agent Directory
              F4 Shift Configurations
              F5 Set Options
              F6 Select Exception Thresholds to be Monitored
              F7 Print SYSTEM 25 Administration Instructions
              F8 Exit Administration (Go to CMS MENU)



                 SELECT  ADMINISTRATION  FUNCTION



____________________________________________________________________________
                                                                   F10 - Help
 F Admin F Lines/ F Agent F Config F   Set F Select FS25 Admn F Exit
 lStations 2Line Gps 3Directry 4   List 5 Options 6Exceptns 7Instrctn 8 Admin
```

As the list in the information area of the screen suggests, administration involves a variety of tasks. These tasks are explained briefly in the following list:

- **Administering Stations**

  Identify each agent station by PDC, port number, and type of voice terminal. Identify the PDC and port numbers of the supervisor station(s) and PC jacks.

- **Administering Lines, Line Groups, and Announcements**

  Identify your CMS and transfer-queue lines, and assign them to line groups. You can also administer your voice announcement unit(s).

- **Building the Agent Directory**

  Enter the name and CMS ID of each agent.

  Building or Editing Shift Configurations

  Assign agents to splits, and assign splits to line groups. You can also administer Answer Delay and/or Force Delay for each split.

- **Setting Options**

  Tailor CMS to your business needs by defining your Service Level Limit, Abandoned vs. Incoming Call Threshold, and Transfer Return Threshold. You can also set your PC to beep whenever an unusual or undesirable situation occurs. In addition, you can turn on and off a validation option that causes CMS to perform a check of PC-Port Personal Line button administration when call management is started.

- **Selecting Exception Thresholds to be Monitored**

  Select the agent, split, and line group exceptions that are appropriate for your business.

- **Printing System 25 Administration Instructions**

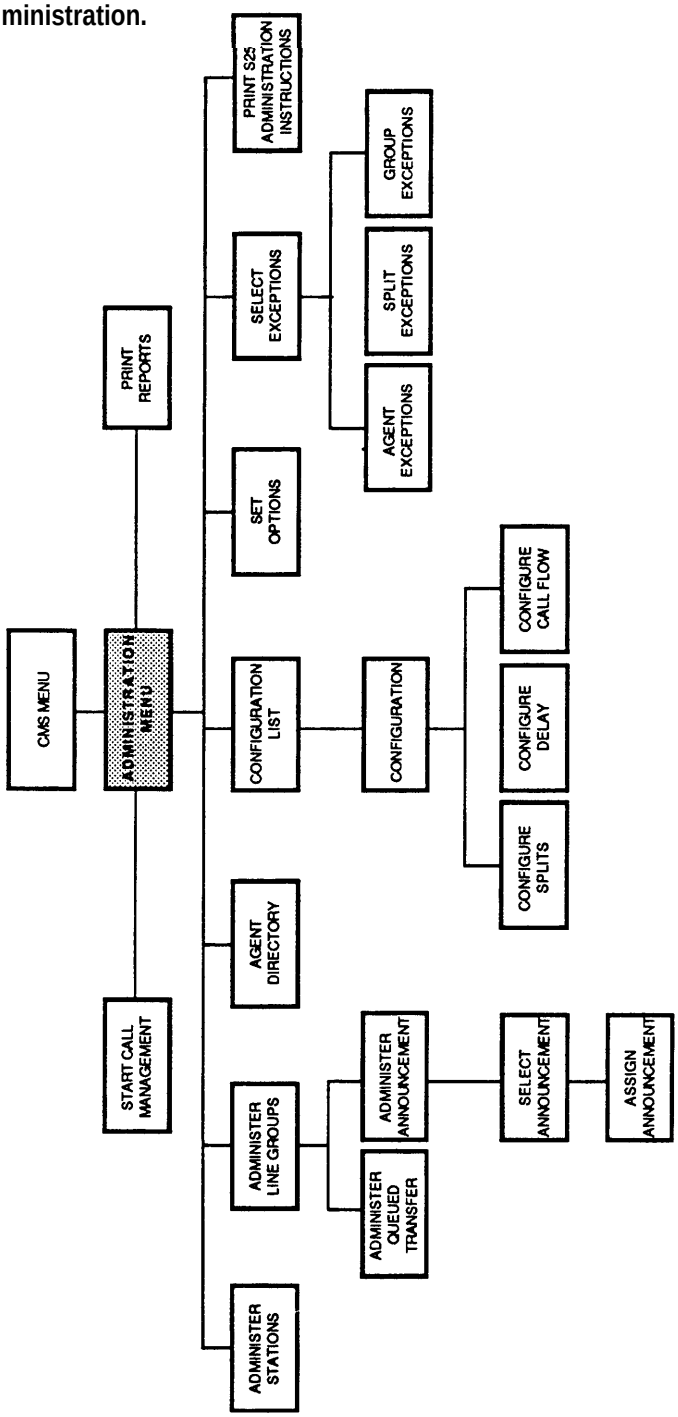
  Print the instructions that the System 25 Administrator will need in order to administer System 25 to support CMS.

- **Backing Up Shift Configurations**

  Make a backup copy of your shift configurations in case you need to restore your system after a problem.

The map of the CMS Administration screens in Figure 4-1 illustrates the interrelationships of the screens used for CMS administration.

FIGURE 4-1 Menu Map for CMS Administration.



These procedures describe turning on the PC and selecting an administration activity from the Administration Menu.

STARTING CMS ADMINISTRATION

To start administering CMS:

1 Make sure the PC's floppy drive is empty; then turn on your PC.

The AUTOEXEC.BAT file, installed on your PC's hard disk during the CMS installation process, causes the CMS Menu to be displayed automatically after MS-DOS Resident Diagnostics are run. (For more information, see "The AUTOEXEC.BAT File" in Section 3.)

NOTE: If the PC is already on and the **C>** prompt appears, do the following to display the CMS menu:

a Type **cd \cms** and press [Enter].

b Type **cms** and press [Enter].

The CMS Menu, shown below, appears.

```
CMS MENU                                        CMS  CMS1.09:19a  04/18

        CALL  MANAGEMENT  SYSTEM  (CMS)
        FOR  THE  AT&T  SYSTEM  25  PBX
                 (c) 1988 by AT&T

                 F1 Start Call Management

                 F4 Administer CMS

                 F5 Print Reports

                 F8 Exit to DOS

                                                        F10 - Help
 F Start                F Admin   F Print                   F Exit
 1 Call Mgt             4 CMS     5 Reports                 8 to DOS
```

2 Press [F4] (labeled “Admin CMS”) to begin administering CMS.

The Administration Menu screen, shown below, appears.

```
ADMINISTRATION  MENU                                  ADMIN CMS1.0 9:35a 04/18
____________________________________________________________________________


                    Administration  Menu
              F1  Administer  Stations
              F2  Administer Lines, Line Groups and Announcements
              F3  Agent  Directory
              F4  Shift  Configurations
              F5  Set options
              F6  Select Exception Thresholds to be Monitored
              F7  Print SYSTEM 25 Administration Instructions
              F8  Exit Administration (Go to CMS MENU)


                 SELECT  ADMINISTRATION  FUNCTION


____________________________________________________________________________
                                                                   F10 - Help
 F Admin F Lines/ F Agent F Config F   Set F Select F S25 Admin F Exit
 1 Stations 2 line Gps 3 Directry 4   List 5 Options 6 Exceptns 7 Instrctn 8 Admin
```

3 Press the function key for the administration activity you want to perform. Turn to the corresponding instructions in this section of the manual.

Administering stations with the CMS PC involves:

- Entering the System 25 PDC, port number, and voice terminal type for each agent station (voice terminal)
- Entering the PDCs and port numbers for up to two supervisor stations
- Entering the PDCs and port numbers for the two PC jacks
- Removing agent stations no longer needed for CMS
- Changing the information associated with an agent station, supervisor station, or PC jack, as needed

IMPORTANT: Port number and PDC assignments are made by the System 25 Administrator. Changes in port number and PDC assignments should not be made without consulting the System 25 Administrator. System 25 and CMS must reflect the same assignments of port numbers, PDCs, and voice terminal type for correct operation of CMS. If you make any additions, deletions, or changes when administering stations that require System 25 administration, CMS prompts you to print System 25 administration instructions when you attempt to exit CMS administration. You must print the System 25 administration instructions and have your System 25 Administrator administer System 25 to reflect these changes. Otherwise, CMS may not function properly. For more information, see “Printing Administration Instructions,” later in this section.

Pressing [F1] (labeled “Admin Stations”) on the Administration Menu selects the Administer Stations screen shown below.

```
ADMINISTER STATIONS                                ADMIN CMS1.0 9:44a 04/19
____________________________________________________________________________

                    AGENT STATIONS

  PDC   Port#   Type       PDC  Port#  TYPE
   401  11101  304        411   11203  304
   402  11102  304        412   11204  304
   403  11103  304        413   11205  304
   404  11104  304        414   11206  304
   405  11105  304        415   11207  304
   406  11106  304        416   11208  308
   407  11107  304        417   11004  304
   408  11108  304        418   11006  304
   409  11201  304        424   10902  307     Other  Connections
   410  11202  304                            USE      PDC  Port #
                                              SUPVR STA: 430   11001
                                                         431   11002

                                              PC Jack CU1: 600 11003
                                              PC Jack CU2: 601 11005

____________________________________________________________________________
                                                                F10 - Help
 F Add     F Remove F Change          F Admin   F Admin            F Admin
 1 Agnt Stn 2 Agnt Stn 3 Agnt Stn     5 Supervsr 6 PC Jacks        8 Menu
```

This section describes the following activities which you can perform from the Administer Stations screen:

- **Adding an Agent Station**

  Add an agent station to CMS.

- **Removing an Agent Station**

  Take an agent station out of CMS use.

- **Changing Agent Station Information**

  Change an agent station's port number or voice terminal type.

- **Administering the Supervisor Station(s)**

  Identify the System 25 PDC and port number of each supervisor station,

- **Administering PC Jacks**

  Identify the PDCs and port numbers for the two PC jacks.

ADMINISTER STATIONS SCREEN

When administering stations, keep the CMS Station Assignments Planning form handy. This form includes information about your agent stations, supervisor stations, and PC jacks.

To administer stations, press the function key for the activity you want to perform:

[F1] **Add Agnt Stn** (Add Agent Station)

Press this function key to display the prompt that allows you to add an agent station to CMS by identifying its System 25 PDC and port number, and its voice terminal type. You must obtain the PDC and port number from the System 25 Administrator.

Prompt: **ADD AGENT STATION: PDC:_____ Port #: _____ Type: _____**

Action:

1 Enter the System 25 PDC (maximum of 4 digits).

2 Enter the System 25 port number (5 digits).

3 Enter the number that corresponds to the type of voice terminal:

302 = 5-Button
303 = 10-Button Hands-Free Answer on Intercom (HFAI)
304 = 10-Button Built-in Speakerphone (MS)
304 = 10-Button
305 = 22-Button BIS (without headset)
305 = 34-Button BIS (without headset)
305 = 34-Button BIS, Deluxe (without headset)
305 = 34-Button BIS with Display (without headset)
305 = 34-Button Deluxe BIS with Display (without headset)
307 = 34-Button
307 = 34-Button Deluxe

308 = 22-Button BIS (with headset)
308 = 34-Button BIS (with headset)
308 = 34-Button BIS, Deluxe (with headset)
308 = 34-Button BIS with Display (with headset)
308 = 34-Button Deluxe BIS with Display (with headset)
309 = 34-Button Direct Trunk Attendant Console (DTAC)
311 = Switched Loop Attendant Console, Deluxe

4 Press [F8] (labeled "Enter Data").

[F2] **Remove Agnt Stn** (Remove Agent Station)

Press this function key to display the prompts that allow you to remove an agent station from CMS.

Prompt: **REMOVE AGENT STATION: PDC: _____**

Action:

1 Enter the PDC of the agent station to be removed.

2 Press [F8] (labeled "Enter Data").

3 When the confirmation prompt appears, type **y** to confirm your request or **n** to cancel it.

4 Press [F8] (labeled "Enter Data").

NOTE: Removing an agent station may cause inaccuracies in the historical data. Therefore, if you have been managing calls with CMS and decide to remove an agent station, print any outstanding historical reports *before* you remove the agent station. (See Section 7, "Generating CMS Reports.") If you archive the data, be sure to copy the old system tables, too. (For more information, see Section 8, "Archiving Data.")

[F3] **Change Agnt Stn** (Change Agent Station Information)

Press this function key to display the prompt that allows you to change an agent station's port number and/or voice terminal type. You cannot change an agent station's PDC with this function key. To change an agent station's PDC, you must first remove the station by pressing [F2] (labeled "Remove Agnt Stn"), and then add the station with the correct PDC by pressing [F1] (labeled "Add Agnt Stn").

Prompt: **CHANGE AGENT STATION INFO: PDC:_____ Port #:_____ Type: _____**

Action:

1 Enter the PDC of an agent station displayed on the screen.

2 Enter the new port number. Leave the field blank if you don't want to change it.

3 Enter the new voice terminal type. Leave the field blank if you don't want to change it.

4 Press [F8] (labeled "Enter Data").

[F5] **Admin Supervsr** (Administer Supervisor Station)

Press this function key to display the prompt that allows you to add a supervisor station to CMS or to change supervisor station information displayed on the screen. You can enter data for either one or two supervisor stations. To change a field, enter information only in the field you want to change.

Prompt:

SUPERVISOR STATION(S): PDC: Port #:_____ 2nd PDC:_____ 2nd Port #:_____

Action:

1 Enter the PDC for the first supervisor station.

2 Enter the System 25 port number for the first supervisor station.

3 Enter the PDC for the second supervisor station.

4 Enter the System 25 port number for the second supervisor station.

5 Press [F8] (labeled "Enter Data").

[F6] **Admin PC Jacks** (Administer PC Jacks)

The AT&T CMS PC Interface Card in the PC has two connections (labeled CU1 and CU2) for wiring to System 25. Use this function key to administer the two CMS PC jacks by identifying their System 25 PDCs and port numbers. You must obtain the PDCs and port numbers from the System 25 Administrator.

Prompt:

PC JACKS: CU1-PDC: CU1-Port#:_____ CU2-PDC: _____ CU2-Port#:_____

Action:

1 Enter the PDC for PC jack CU1.

2 Enter the System 25 port number for PC jack CU1.

3 Enter the PDC for PC jack CU2.

4 Enter the System 25 port number for PC jack CU2.

5 Press [F8] (labeled "Enter Data").

[F8] **Admin Menu** (Administration Menu)

Press this function key to return to the Administration Menu screen.

[F10] **Help**

Press this function key to view a Help screen for the Administer Stations screen.

Your CMS supports up to 28 lines, including both CMS and transfer-queue lines. (Refer to the next section, “Administering Transfer-Queue Lines,” for more information.) You can arrange your lines in up to four line groups. If you want, you can assign all your lines to a single line group.

You can also divide lines into sub-groups (for reporting purposes), and/or assign priority to lines. The priority of a line determines its position in the queue of calls waiting to be transferred to an agent. Calls on priority lines are answered before older calls on non-priority lines. Priority lines are identified by a “+” in the Priority (P) column of the Administer Line Groups screen.

Pressing [F2] (labeled “Lines/Line Gps”) on the Administration Menu screen selects the Administer Line Groups screen, shown below. Use this screen to:

- Identify the CMS lines (Central office trunks) that are part of CMS.
- Assign CMS lines to line groups.
- Change CMS line information (including line priority).
- Assign or change line group IDs.
- Access the screen for administering transfer-queue lines.
- Access the screen for administering voice announcement units.

```
ADMINISTER LINE GROUPS                                ADMIN CMS1.0 2:52p 04/18

                                 LINE GROUPS
       I ------------Line--- ″---------l I ------------Line --, ----------l
 Group SbGrp Port# ID    Tk# Typ P     Group SbGrp Port# ID     Tk # Typ P
 A PUBLC  PL 10401 L3070 3070 G       C CHART  CL 10603 L1234 1234 G
          PL 10402 L3071 3071 G                CL 10604 L1235 1235 G
          PL 10403 L3072 3072 G                CW 10605 W3000 3000 G
          PL 10404 L3073 3073 G                CW 10606 W3001 3001 G
          PW 10405 W4185 4185 G                CW 10607 W3002 3002 G
          PW 10406 W4186 4186 G
          PS 10407 S4950 4950 G + D
          PS 10408 S4951 4951 G +
          Q1 10701 Q500 8000 L +

  B BUSNS  BW 10501 W1242 1242 G
           BW 10502 W1243 1243 G
           BW 10503 W1244 1244 G
           BW 10504 W1245 1245 G
           BL 10601 L8300 8300 G
           BL 10602 L8301 8301 G

                                                                   F10 - Help
 F Add CMS F Remove F Move CMS FChg CMS FAsgn/Chg F Admin F Admin   F Admin
 1 Line   2CMS Line 3 Line    4LineInfo 5Group ID 6Xfr Que 7 Anncs   8 Menu
```

ADMINISTER LINE GROUPS SCREEN

To administer lines and groups:

- Keep your CMS Line Groups Planning Form handy. It includes information about each of your CMS lines and line groups.
- Press the function key for the activity you want to perform.
- Perform the activity according to the instructions on the following pages.

NOTE: When you add, remove, or move a line, or add, remove or change the sub-group of a line, inaccuracies may occur in the historical data, Therefore, if you have been managing calls with CMS and decide to make any of the above changes, print out any outstanding historical reports *before* you make the changes. (See Section 7, "Generating CMS Reports.") If you archive the data, be sure to copy the old system tables, too. (For more information, see Section 8, "Archiving Data.")

If you add or remove a CMS line, or if you change the port number, trunk number, or line type of a CMS line, CMS prompts you to print the System 25 Administration instructions when you attempt to exit CMS Administration. You must print the administration instructions and have your System 25 Administrator administer System 25 to reflect these changes. Otherwise, CMS may not function properly. For more information, see "Printing System 25 Administration Instructions," later in this section.

IMPORTANT: The instructions below *cannot* be used to administer transfer-queue lines. To administer transfer-queue lines, press [F6] (labeled "Admin Xfr Que"), and follow the instructions in the next part of this section, "Administering Transfer-Queue Lines."

[F1] Add CMS Line

Press this function key to display the prompt that allows you to add a CMS line and assign it to a line group. Obtain the port number, trunk number and trunk type from the System 25 Administrator.

Prompt:

ADD LINE: Grp (A-D):__ SubGrp:___ Port # :_____ ID:_____ Trunk #:_____ Type: ____

Action:

1. Enter the letter (A through D) for the line group to which you are assigning the line.
2. If you want to keep track of sub-groups within a line group, such as the WATS lines, enter up to two numbers, letters, or special characters for the sub-group in which the line is to be included. (You can have a maximum of seven sub-groups for each line group.)

   Otherwise, press [F6] (labeled "Next Field") to skip the SubGrp field.
3. Enter the 5-digit System 25 port number.

4 Enter a unique line ID of up to five letters or numbers to help you identify the line. You may want to use the last four digits of the telephone number, an ID which associates the line with a particular line group (such as SERV1 or SALE1), or an ID which indicates the type of line (such as WATS1).

NOTE: A CMS line ID cannot begin with the letter “Q.” Only transfer-queue lines can have ID’s beginning with a “Q.”

5 Enter the 4- digit System 25 trunk number (0001 through 9999).

6 In the Type field, enter G for a Ground Start trunk or **L** for a Loop Start trunk.

7 Press [F8] (labeled "Enter Data").

NOTE: To assign priority to the line, use [F4] (labeled "Chg CMS Line Info").

[F2] Remove CMS Line

Press this function key to display the prompts that allow you to remove a CMS line.

Prompt: **REMOVE CMS LINE: Port #: _____**

Action:

1 Enter the System 25 port number of a line displayed on the screen.

2 Press [F8] (labeled “Enter Data”).

3 When the confirmation prompt appears, type ***y*** to confirm your request or ***n*** to cancel it.

4 Press [F8] (labeled “Enter Data”).

[F3] Move CMS Line

Press this key to display the prompt that allows you to shift a line from one line group to another.

Prompt: **MOVE CMS LINE: Line ID: _____ to Group (A-D): _**

Action:

1 Enter the ID of the line to be moved.

2 Enter the letter (A through D) of the group to which the line is to be moved.

3 Press [F8] (labeled “Enter Data”).

[F4] **Chg CMS LineInfo** (Change CMS Line Information)

Press this function key to display the prompts that allow you to:

- Add, delete, or change a CMS line's sub-group
- Change the System 25 port number of a CMS line
- Change the line ID of a CMS line
- Change the System 25 trunk number of a CMS line
- Change the trunk type of a CMS line
- Turn priority on or off for a CMS line

Prompt: **CHANGE CMS LINE INFORMATION: for Old Line ID:_____**

Action: **1** Enter the line ID of the line to be changed.

2 Press [F8] (labeled "Enter Data").

A second prompt appears:

Prompt:

Line XXXXX: SbGrp:____ Prt#:_____ ID:_____ Trk#:_____ Typ:___ Pri(ON/OFF):_____

(where XXXXX is the Line ID).

Action: Enter information only in the field(s) you want to change. Leave a field blank if you do not want to change it.

1 Enter up to two letters, numbers, or special characters for the sub-group in which the line is to be included, or enter a hyphen (-) if you do not want the line to be in a sub-group.

2 Enter the new 5-digit System 25 port number.

3 Enter the new line ID (up to 5 letters and/or numbers).

4 Enter the new 4-digit System 25 trunk number.

5 Enter the new trunk type, ***G*** for a Ground Start trunk or ***L*** for a Loop Start Trunk.

6 Enter ***on*** to turn priority on for the line, or ***off*** to turn the line priority off.

7 Press [F8] (labeled "Enter Data").

[F5] **Assgn/Chg Group ID** (Assign/Change Group ID)

Press this function key to display the prompt that allows you to assign or change a line group's ID. IDs help you identify the line groups on the status screens and reports. A line group and a split can have the same ID.

Prompt: **ASSIGN/CHANGE GROUP ID: Group (A-D): _ New ID: _____**

Action: **1** Enter a line group letter (A through D).

2 Enter the new line group ID (up to 5 letters or numbers).

3 Press [F8] (labeled "Enter Data").

[F6] **Admin Xfr Que** (Administer Transfer-Queue Lines)

Press this function key to display the screen you use to administer lines for the Transfer-into-Queue feature. See the next heading in this section.

[F7] **Admin Anncs** (Administer Announcements)

Press this function key to display the screen you use to administer voice announcement units. This function is described later in this section.

[F8] **Admin Menu** (Administration Menu)

Press this function key to return to the Administration Menu.

[F10] **Help**

Press this function key to display a Help screen for the Administer Line Groups screen.

Administering Transfer-Queue Lines

Each line group can have up to three transfer-queue lines assigned to it. Each transfer-queue line is automatically assigned as a priority line. The priority status of a transfer-queue line can only be changed from the Line Status screen. (See “Using the Line Status Screen” in Section 5.) Transfer-queue lines allow an agent to transfer a call to another line group’s queue. When the call is received by that line group, it is then treated as a *new* incoming CMS call. It is important to note that transfer-queue lines cannot be used to make outside calls.

A Loop Start trunk port and a single-line station port are associated with each transfer-queue line.

CMS automatically assigns each transfer-queue line a line ID that cannot be changed. This is designated by a “Q” followed by the PDC of the single-line station.

Pressing [F6] (labeled “Admin Xfr Que”) on the Administer Line Groups screen selects the Administer Queued Transfer screen, shown below.

```
ADMIN QUEUED TRANSFER                                  ADMIN CMS1.0 2:54p 04/18

                                   LINE GROUPS
          |------------ Trunk Port --------------|     |-Single-Line Port-|
   Group SubGrp Port# ID    Trk# Type Prior                 Port#
 A PUBLIC  Q1   10701 Q500 8000  L    +                      10801

                                                                   F10 - Help
 F Add Xfr F Remove F Move Xfr F Chg Xfr                             F Admin
 l Que Line 2 Que Line 3 Que Line 4 Que Info                         8 LineGrps
```

On this screen you can:

- Add transfer-queue lines
- Remove transfer-queue lines
- Move transfer-queue lines
- Change transfer-queue line information

ADMINISTER QUEUED TRANSFER SCREEN

To administer transfer-queue lines:

- Keep the Transfer-into-Queue Planning Form handy.
- Press the function key for the activity you want to perform

NOTE: When you add, remove, or move a transfer-queue line, or add, remove, or change the sub-group of a transfer-queue line, inaccuracies may occur in the historical data. Therefore, if you have been managing calls with CMS and decide to make changes to transfer-queue line administration, print any outstanding historical reports before you make the changes. (See Section 7, "Generating CMS Reports.") If you archive the data, be sure to copy the old system tables as well. (For more information, see Section 8, "Archiving Data.")

If you add or remove a transfer-queue line, or if you change the port or trunk number of the associated Loop Start trunk, or the PDC or port numbers of its associated single line station, CMS prompts you to print System 25 administration instructions when you attempt to exit CMS administration. You must print the administration instructions and have your System 25 Administrator administer System 25 to reflect these changes. Otherwise, CMS may not function properly. For more information, see "Printing System 25 Instructions, " later in this section.

[F1] **Add Xfr Que Line** (Add Transfer-Queue Line)

Press this function key to display the prompts that allow you to add a transfer-queue line.

Prompt:

ADD TRUNK PORT FOR XFR QUEUE: Grp (A-D): SubGrp: Port #: Trunk#:

Action:

1. Enter the letter of the line group (A through D) to which the transfer-queue line is to be assigned.
2. Enter up to two letters, numbers, or special characters for the line sub-group in which the transfer-queue line is to be included. Leave this field blank if there is to be no sub-group assignment.
3. Enter the 5-digit System 25 port number of the trunk port associated with the transfer-queue line.
4. Enter the 4-digit System 25 trunk number of the trunk port associated with the transfer-queue line.
5. Press [F8] (labeled "Enter Data").

After the validation check has been passed, a second prompt appears:

Prompt: **ADD SINGLE-LINE PORT: PDC:_____ Port #:_____**

Action:

1. Enter the System 25 PDC of the single-line port associated with the transfer-queue line.
2. Enter the System 25 port number of the single-line port associated with the transfer-queue line.
3. Press [F8] (labeled "Enter Data").

[F2] **Remove Que Line** (Remove Transfer-Queue Line)

Press this function key to display the prompts that allow you to remove a transfer-queue line. The information for both the trunk port and the single-line station port associated with the transfer-queue line is removed when you use this function.

Prompt: **REMOVE TRANSFER QUEUE LINE: Port #:_____**

Action:

1 Enter the port number of the trunk associated with the transfer-queue line.

2 Press [F8] (labeled "Enter Data").

3 When the confirmation prompt appears, type ***y*** to confirm your request, or ***n*** to cancel it.

4 Press [F8] (labeled "Enter Data").

[F3] **Move Xfr Que Line** (Move Transfer-Queue Line)

Press this function key to display the prompt that allows you to move the transfer-queue line to a different line group.

Prompt: **MOVE TRANSFER QUEUE LINE: ID:_____ to Group (A-D):__**

Action:

1 Enter the ID of the transfer-queue line to be moved.

2 Enter the letter of the line group (A through D) to which the line is to be moved.

3 Press [F8] (labeled "Enter Data").

[F4] **Chg Xfr Que Info** (Change Transfer-Queue Line Information)

Press this function key to display the prompt that allows you to:

- Change the sub-group of the transfer-queue line
- Change the System 25 port number of the trunk port associated with the transfer-queue line
- Change the System 25 trunk number of the trunk port associated with the transfer-queue line
- Change the PDC of the single-line port associated with the transfer-queue line
- Change the System 25 port number of the single-line port associated with the transfer-queue line

NOTE: If you need to change the priority status of a transfer-queue line, you must do so from the Line Status screen. See "Using the Line Status Screen" in Section 5.

Prompt:

CHG INFO: ID:_____ SbGrp:___Tk Prt#: _____ T r k # :__ P D C :__ SL Prt#: ___

Action: You must enter the ID; the other fields are optional. Enter information only in the field(s) you want to change. Leave a field blank if you do not want to change it.

1 Enter the line ID of the transfer-queue line.

2 Enter up to two letters, numbers, or special characters for the sub-group in which the line is to be included, or enter a hyphen (-) if you do not want the line to be in a sub-group.

3 Enter the new System 25 port number for the associated trunk port.

4 Enter the new System 25 trunk number for the associated trunk port.

5 Enter the new PDC for the single-line port.

6 Enter the new System 25 port number for the single-line port.

7 Press [F8] (labeled “Enter Data”).

[F8] **Admin LineGrps** (Administer Line Groups)

Press this function key to return to the Administer Line Groups screen.

[F10] **Help**

Press this function key to view a Help screen for the Administer Queued Transfer screen.

Administering Announcements

Your CMS supports up to four voice announcement units for providing delay messages to callers. The voice announcement units are connected to System 25 ports and have PDCs associated with them.

To administer voice announcement units, press [F7] (labeled "Admin Anncs") on the Administer Line Groups screen. The Administer Announcement screen, shown below, appears.

```
ADMINISTER  ANNOUNCEMENT                                ADMIN CMS1.0 2:57p 04/18


                          ADMINISTER  ANNOUNCEMENTS

                            ANNC ID      PORT#        PDC

                      1     PUBLIC       10802         610

                      2     BUSINES      10803         611

                      3     CHARTER      10804         612

                      4


                                                                   F10 - Help
 F Add    F Remove F Change                      F Assign F Admin   F Admin
 l Annc  2 Annc  3 Annc                          6 Anncs 7 lineGrps 8 Menu
```

With this screen you can:

- Add an announcement unit by entering its announcement ID, System 25 port number, and PDC
- Remove an announcement unit
- Change the information (announcement ID, port number, or PDC) pertaining to an announcement unit
- Access the screen used to assign announcements to line groups, specify the message length of each announcement unit, and put an announcement unit in or out of service

You can return to the Administer Line Groups screen or Administration Menu from the Administer Announcement screen by pressing [F7] or [F8] , respectively.

NOTE: The following require System 25 administration:

– Adding a voice announcement unit

– Removing a voice announcement unit

– Changing the PDC or port number of a voice announcement unit

If you make any changes listed in the above Note and attempt to exit CMS administration, you are prompted to print the System 25 administration instructions. Print the instructions and have the System 25 Administrator make the appropriate changes. For more information, see "Printing System 25 Administration Instructions, " later in this section.

ADMINISTER ANNOUNCEMENT SCREEN

To administer announcements, press the function key for the activity you want to perform:

[F1] **Add Annc** (Add Announcement)

Press this function key to display the prompt that allows you to add a voice announcement unit to CMS. Obtain the port number and PDC for the new unit from the System 25 Administrator.

When you add an announcement unit, a warning appears indicating that System 25 administration is necessary.

Prompt: **ADD ANNOUNCEMENT: Anne ID:_____ Port #:_____ PDC:_____**

Action:

1 Enter a unique announcement ID (up to seven letters or numbers) for the voice announcement unit.

Depending on your type of business and number of announcement units, you may want to use an ID describing the type of message on that unit. For instance, the announcement unit with the ID SALES might have a message advertising a seasonal special. The announcement unit with the ID ACCTNO might have a message requesting customers to have their account numbers ready.

2 Enter the System 25 port number.

3 Enter the PDC.

4 Press [F8] (labeled "Enter Data").

[F2] **Remove Annc** (Remove Announcement)

Press this function key to display the prompts that allow you to remove a voice announcement unit from CMS. If you remove a voice announcement unit and no other unit is assigned to handle calls on that line group, the callers to that line group hear ringing until an agent answers.

Prompt: **REMOVE ANNOUNCEMENT: Announcement Number___**

Action:

1 Enter the number of the announcement unit (1 through 4).

2 Press [F8] (labeled "Enter Data").

3 When the confirmation prompt appears, type ***y*** to confirm or ***n*** to cancel your request.

4 Press [F8] (labeled "Enter Data").

[F3] Change Annc (Change Announcement Information)

Press this function key to display the prompt that allows you to update or correct the ID, System 25 port number, or PDC for a voice announcement unit. Unless you are correcting a typing error, changing a port number or PDC also requires System 25 administration.

Prompt:

CHANGE ANNC INFO: Annc #:__ Annc ID:_____ Port #:_____ PDC:_____

Action:

1. Enter the number of the announcement unit you want to change (1 through 4).
2. Enter the new announcement ID or leave the field blank if you don't want to change it.
3. Enter the new System 25 port number or leave the field blank if you don't want to change it.
4. Enter the new System 25 PDC or leave the field blank if you don't want to change it.
5. Press [F8] (labeled "Enter Data").

NOTE: If you enter an announcement number and press [F8] *without* changing the information in any field, the data for that voice announcement unit stay the same.

[F6] **Assign Anncs** (Assign Announcements)

See the following heading "Assigning Announcements."

[F7] **Admin LineGrps** (Administer Line Groups)

Press this function key to return to the Administer Line Groups screen.

[F8] **Admin Menu** (Administration Menu)

Press this function key to return to the Administration Menu.

[F10] **Help**

Press this function key to view a Help screen for the Administer Announcement screen.

Certain information about the daily use of voice announcement units is administered from the Assign Announcement screen. To reach the Assign Announcement screen, you must first select an announcement from the Select Announcement screen. Press [F6] (labeled “Assign Anncs”) on the Administer Announcement screen to reach the Select Announcement screen, shown below.

```
SELECT  ANNOUNCEMENT                                   ADMIN CMS1.0 3:07p 04/18


                          ANNOUNCEMENT  ASSIGNMENTS

                     MAX MSG ANNC LINE GP A LINE GP B LINE GP C LINE GP D
  ANNC#  ANNC  ID  LENGTH  CONDTN  PUBLIC  BUSNS  CHART  -

    1    PUBIC     18 sec REMVD      X

    2    BUSINES   15 sec AVAIL -         X

    3    CHARTER   13 sec AVAIL -                  X

    4


                                                                  F10 - Help
 F Select                                                           F Admin
 l  Annc                                                            8 Anncs
```

SELECT ANNOUNCEMENT SCREEN

To select an announcement from the Select Announcement screen:

1 Press [F1] (labeled “Select Annc”) to select a particular voice announcement unit.

The following prompt appears:

SELECT ANNOUNCEMENT: Announcement Number____

2 Enter the number of the voice announcement unit and press [F8] (labeled “Enter Data”).

A box appears around the data for the voice announcement unit you selected, and the screen title changes to Assign Announcement, and the function keys are relabeled as shown below.

```
ASSIGN  ANNOUNCEMENT                                   ADMIN CMS1.0 3:07p 04/18


                          ANNOUNCEMENT  ASSIGNMENTS

                     MAX  MSG    ANNC   LINE GP A  LINE GP B  LINE GP C  LINE GP D
ANNC#  ANNC  ID  LENGTH  CONDTN  PUBLC  BUSNS  CHART  -

 1   PUBLIC    18 sec REMVD      x

 2   BUSINES   15 sec AVAIL  -         x

 3   CHARTER   13 sec AVAIL  -                  x

 4


                                                                        F10  - Help
F Select F Chg Max FChange FLn Gp A FLn Gp B FLn Gp C FLn Gp D   F Admin
lAnnc 2 Msg Len 3Condtn 4 Asgn/Rmv 5 Asgn/Rmv 6 Asgn/Rmv 7 Asgn/Rmv 8 Anncs
```

ASSIGN ANNOUNCEMENT SCREEN

The activities you can perform from the Assign Announcement screen are:

- Indicating the maximum length of the Day Service message on a voice announcement unit
- Changing the condition (available, broken, or removed) of a voice announcement unit in order to put it in or out of service.
- Assigning a voice announcement unit to one or more line groups

Press the function key for the activity you want to perform. Descriptions of the functions keys begin below.

[F1] **Select Annc** (Select Announcement)

Press this function key to display the prompt that allows you to select a different voice announcement unit.

Prompt: **SELECT ANNOUNCEMENT: Announcement Number: ____**

Action: **1** Enter the number of a voice announcement unit (1 through 4).

2 Press [F8] (labeled “Enter Data”) .

[F2] **Chg Max Msg Len** (Change Maximum Message Length)

The CMS software uses the maximum message length field to determine if each voice announcement unit is hanging up after playing the Day Service delay message. When you first administer an announcement, CMS gives this field an initial setting of 10 seconds.

To determine the maximum message length of your Day Service message, time the period beginning when the voice announcement unit answers the call and ending when the voice announcement unit disconnects from the call.

> **NOTE:** If the maximum message length you enter is less than the actual Day Service delay message, CMS will indicate that the voice announcement unit is broken when it is actually working properly.

Prompt: **Maximum Message Length in Seconds (1-999):____**

Action: **1** Enter the maximum message length in seconds.

2 Press [F8] (labeled "Enter Data").

> **IMPORTANT:** When recording an announcement, leave three to four seconds of silence at the beginning of the message to allow time for CMS to connect the caller to the voice announcement unit. Remember to include this time in the maximum message length.

[F3] **Change Condtn** (Change Announcement Condition)

The ANNC CONDTN column on the Assign Announcement screen contains an entry for each voice announcement unit that has been administered. The entries are BROKN (broken), REMVD (removed), or AVAIL (available). Only CMS can change the entry to BROKN. CMS automatically changes the Announcement Condition field to BROKN if it detects a problem with the associated voice announcement unit.

To remove an announcement unit from service (for instance, to change the message or repair the unit), press the Change Announcement Condition function key to change the Announcement Condition field to REMVD. Calls are not transferred to announcement units that are broken or removed. You also use the Change Announcement Condition function key to indicate an announcement unit is available (AVAIL), that is, back in service and ready to receive calls.

Press [F3] (labeled "Change Condtn") until the condition you want appears.

[F4] **Ln Gp A Asgn/Rmv** (Line Group A Assign/Remove)
[F5] **Ln Gp B Asgn/Rmv** (Line Group B Assign/Remove)
[F6] **Ln Gp C Asgn/Rmv** (Line Group C Assign/Remove)
[F7] **Ln Gp D Asgn/Rmv** (Line Group D Assign/Remove)

Use these function keys to assign a voice announcement unit to one or more line groups. You also use these keys to remove voice announcement units that have been previously assigned to a line group.

An X in the line group column for an announcement unit indicates that the unit is assigned to that line group. A hyphen (-) indicates the unit is not assigned to that line group.

To assign a voice announcement unit to a line group (or remove it from that group) press the appropriate function key. As you press the function key, the mark in the column toggles between “X” and “-”.

[F8] **Admin Anncs** (Administer Announcements)

Press this function key to return to the Administer Announcement screen.

[F10] **Help**

Press this function key to view a Help screen for the Assign Announcement screen.

Creating an Agent Directory

The Agent Directory screen contains a "master list" of CMS agents. It lists all CMS agents alphabetically by last name.

Each CMS agent needs a unique ID of up to 5 characters. You use this ID when you add, remove, or move an agent. Agents are also identified by ID in exception messages. You can assign up to 60 agent IDs. However, only 28 agents can be assigned to a single shift configuration.

Pressing [F3] (labeled “Agent Directry”) from the Administration Menu screen selects the Agent Directory screen, shown below. Use this screen to add agents, remove agents, or edit agent information.

```
AGENT DIRECTORY                                   ADMIN CMS1.0 2:31p 04/18

                              AGENT DIRECTORY

        Last Name   First   ID        Last Name   First   ID
        Abell       Mary-Ann MARYA    Manetta     Jane    JANE
        Beckman     Jim     JIM       Masson      William BILL
        Brown       Allan   ALLAN     Ong         Ien     IEN
        Chu         David   DAVE      Oplach      Joseph  JOE
        Dumbra      Marie   MARIE     Reicheg     Louis   LOU
        Fang        John    JOHN      Rowlinson   Don     DON
        Fenton      Scott   SCOTT     Seiler      Linda   LINDA
        Garcia      Jose    JOSE      Siegl       Lawrence LARRY
        Gerkensmier Otto    OTTO      Smith       Bernard BERNE
        Johnson     Andrew  ANDY      Son         Sarah   SARAH
        Kesslering  Ana     ANA       Stickler    Craig   CRAIG
        Leonard     Michael MIKE      Vaiter      Barbara BARB
        Lindquist   Hal     HAL1      Walsh       Jennifer JENNY
        Lindquist   Hal     HAL2      Woll        Harvey  HARV
        Mack        Joel    JOEL      Yang        CJ      CJ

                                                          F10 - Help
F Add     F Remove F Change          F Next          F Config F Admin
1 Agent   2 Agent  3 Agt Name        5 Page          7 Splits 8 Menu
```

USING THE AGENT DIRECTORY SCREEN

To use the Agent Directory screen, press the function key for the activity you want to perform:

[F1] **Add Agent**

Use this function key to add new agents to the Agent Directory. This activity does not add agents to an active configuration; it merely identifies them in the Agent Directory.

HINT: If any agent is regularly assigned to more than one split, create more than one entry for the agent in the Agent Directory. Enter the agent with a different ID for each split. Then use the appropriate ID when you add the agent to a split. The different IDs permit separate tracking of the agent’s statistics in each split. For example, Hal works in split 1 sometimes and in split 2 other times. Hal’s supervisor added him to the directory once with the ID HAL1 and again as HAL2.

Prompt: **ADD AGENT: Last Name: _____ First: _____ I D : _____**

Action:

1 Enter the agent's last name, up to 12 letters, numbers, or special characters (such as * or #), with no spaces between them. The last name appears in uppercase and/or lowercase letters, exactly as you type it.

2 Enter the agent's first name, up to 8 letters, numbers, or special characters, with no spaces between them. The first name appears in uppercase and/or lowercase letters, exactly as you type it.

3 Enter a unique agent ID, up to 5 letters or numbers. The ID appears on the screen in uppercase letters, even if you enter lowercase ones.

4 Press [F8] (labeled "Enter Data").

[F2] **Remove Agent**

Press this function key to display the prompts that allow you to delete an agent from CMS. To help you avoid removing an agent by accident, CMS prompts you to confirm your request.

> **NOTE:** Removing an agent from the Agent Directory will delete the historical data for that agent. If you have any historical reports that have not yet been printed, print them *before* you remove the agent. Refer to Section 7 for information on generating CMS reports. (If you are archiving the historical data, be sure to copy the system tables as well as the data files. For more information, see Section 8, "Archiving Data.")

Prompt: **REMOVE AGENT: ID: _____**

Action:

1 Enter the ID of the agent to be removed.

2 Press [F8] (labeled "Enter Data").

3 When the confirmation prompt appears, type ***y*** to confirm your request or ***n*** to cancel it.

4 Press [F8] (labeled "Enter Data").

[F3] **Change Agt Name** (Change Agent Name)

Press this function key to display the prompt that allows you to change an agent's last name or first name in the Agent Directory. (You cannot change an agent's ID using this function key. To change an agent's ID, you must first remove the agent and then add the agent with a different ID.)

Prompt:

CHANGE AGENT NAME: ID: _____ Last Name: _____ First: _____

Action:

1. Enter the agent ID as it appears on the screen.
2. Enter the new last name, or leave the field blank if you don't want to change it.
3. Enter the new first name, or leave the field blank if you don't want to change it.
4. Press [F8] (labeled "Enter Data").

[F5] **Next Page/Prev Page** (Next Page/Previous Page)

If the Agent Directory contains more than 30 entries and the first page is displayed, [F5] is labeled "Next Page." Pressing this key allows you to look at the second page of the Agent Directory. When the second page of the Agent Directory is displayed, [F5] is labeled "Prev Page", and pressing it returns you to the first page of the Agent Directory.

[F7] **Config Splits** (Configure Splits)

Press this function key to display the Configure Splits screen. This function key works only if you have already selected a particular configuration to build or edit. If you haven't already selected a configuration, use the Configuration List screen to select a configuration. You can access the Configuration List screen by pressing [F4] (labeled "Config List") from the Administration Menu screen.

[F8] **Admin Menu** (Administration Menu)

Press this function key to return to the Administration Menu screen.

[F10] **Help**

Press this function key to view a Help screen for the Agent Directory screen.

Building or Editing Shift Configurations

A shift configuration is an arrangement of line groups and agent splits for managing calls. Before CMS can begin managing calls, you must build at least one shift configuration. You can build as many as six configurations to handle different calling patterns in your business. For instance, a business may require Day, Evening, and Weekend configurations.

CMS Night Service mode (which is different from System 25 Night Service) can be used when no agents are on duty. During Night Service, CMS connects all incoming calls to a voice announcement unit message and automatically disconnects the calls when the message is over. For more information, see "Selecting Day or Night Service" in Section 5.

In a shift configuration, splits are assigned to line groups as main splits and secondary splits. A main split has primary responsibility for answering calls for a line group (or line groups). A secondary split answers calls to a line group only if all agents in the main split are busy or unavailable, intraflow is turned on, and the Intraflow Threshold has been reached. (For more information on intraflow, see "Administering Call Flow," later in this section.)

In the Day configuration for Bon Voyage Travel, main splits and secondary splits are assigned like this:

Line Group	Main Split	Secondary Split
Public line group	Public Travel split	Support split
Business line group	Business Travel split	Charter Travel split
Charter line group	Charter Travel split	Business Travel split

Administering shift configurations begins with the Configuration List screen shown below. Pressing [F4] (labeled “Config List”) from the Administration Menu screen selects this screen.

```
CONIFIGURATION LIST                                ADMIN CMS1.0 3:18p 04/18
____________________________________________________________________________


                        STORED SHIFT CONFIGURATIONS


                          1 — DAY
                          2 — EVENING
                          3 — WEEKEND
                          4 — UNUSED
                          5 — UNUSED
                          6 — UNUSED




____________________________________________________________________________
                                                              F10 - Help
 F Select F Save   F Rename F Choose                     F Config F Admin
 1 Config 2 Config 3 Config 4 Startup                     7 Screen 8 Menu
```

This section describes the following activities you can perform from the Configuration List screen:

- **Selecting a Shift Configuration**

  Select a new shift configuration to build, or change (edit) an existing one.

- **Saving an Edited Configuration**

  Store the shift configuration that was last edited.

- **Renaming a Shift Configuration**

  Name, rename, or delete a shift configuration.

- **Selecting a Startup Configuration**

  Select one of your shift configurations to be invoked automatically during the call management startup procedure.

- **Returning to Other Screens**

  If you press [F7] (labeled “Config Screen”), you return to the Configuration screen for the cofiguration you last selected. (The name of that configuration is shown in reverse video on the Configuration List screen.) If you press [F8] (labeled “Admin Menu”), you return to the Administration Menu screen.

Building or Editing a Shift Configuration

This section describes how to build a new shift configuration or change (edit) an existing one. Your CMS cannot manage calls while you are using these procedures. (To edit an active shift configuration without stopping call management, follow the instructions in "Dynamic Reconfiguration" in Section 5.)

Building or editing a shift configuration involves these activities:

- Selecting the shift configuration you want to build or edit
- Assigning agents to splits (up to 28 agents to a split, and a maximum of 28 agents to a shift configuration)
- Administering call flow (assigning main and secondary splits to line groups, administering intraflow)
- Programming answer delay (the number of seconds a CMS call rings before being connected to a voice announcement unit if no agents are available to answer the call)
- Programming force delay (an optional feature that causes all callers to hear the entire delay message, even if an agent is available)

If you haven't already done so, plan your shift configuration on a photocopy of a Shift Configuration Planning Form. Make a photocopy of the Shift Configuration Planning Form found behind the "Original Forms" tab in the CMS binder. Refer to the completed form as you administer CMS.

HINT: If you are building a shift configuration similar to an existing one, edit the existing configuration and save the changes in an unused configuration. For instance, if you want to create a shift configuration similar to the shift 1 configuration you have already created, edit the shift 1 configuration and save it in a previously unused configuration number.

BUILDING OR EDITING A SHIFT CONFIGURATION

To build or edit a shift configuration:

1 Press [F1] (labeled "Select Config") on the Configuration List screen.

2 Respond to the prompt

```
SELECT CONFIGURATION: Config # (1-6):___
```

by entering the number of the shift configuration you want to create or change.

3 Press [F8] (labeled "Enter Data").

The Configuration screen appears with the shift configuration you selected. The following example shows how the Configuration screen looks when a configuration that has already been built is selected.

```
CONFIGURATION                                          ADMIN CMS1.0 3:20p 04/18

                AGENT SPLITS                                ANSWER/FORCE  DELAY
            |--Agent--|          |--Agent--|                  Num Answer Force
Split       PDC    ID     Split   PDC    ID      Group Lines  Delay  Delay
1 PUBLIC    401    LINDA  4 SPPT  417    CRAIG   A PUBLC  9    10s    Off
            402    JOEL           418    BARB    B BUSNS  6    0s     On
            403    IEN            424    CJ      C CHART  5    5s     Off
            404    JENNY  5 -                    D -      0    5s     Off
            405    SCOTT  6 -
            406    BILL
2 BUSNS     407    SARAH                                CALL FLOW
            408    JOHN                                          Flow
            409    JIM                        |-Splits-| Intra   Spl Thresh
3 CHART     410    BERNE                    Gp Main Sec Flow    1    50s
            411    DON                      A  1    4   On     2    30s
            412    ALLAN                    B  2    3   Off    3    30s
4 SUPPT     415    ANDY                     C  3    2   Off    4    30s
            416    LOU                      D  -    -   Off    5    30s
                                                               6    30s

Configuration #1 - DAY

                                                                   F10 - Help
F Splits  FAns/Fore  F Call          F Clear          F Config F Admin
1         2 Delay    3 Flow          5 Config         7 List   8 Menu
```

The following Configuration screen illustrates a new configuration that has yet to be built.

```
CONFIGURATION                                          ADMIN CMS1.0  3:24p 04/18

                    AGENT SPLITS                          ANSWER/FORCE DELAY  (c)
            |--Agent--|          |--Agent--|                Num  Answer Force
     Split  PDC  ID      Split   PDC  ID          Group Lines Delay  Delay
  (a) 1 PUBLC                                      A PUBLC  9    5s    Off  (d)
      2 BUSNS  (b)                                 B BUSNS  6    5s    Off
      3 CHART                                      C CHART  5    5s    Off
      4 SUPPT                                      D -      0    5s    Off
      5 -
      6 -

                                        (e)  (f)  CALL FLOW
                                                                  Flow  (g)
                                        |-Splits-|Intra     Spl Thresh
                                        Gp Main Sec Flow       1   30s
                                        A  -    -   Off       2   30s
                                        B  -    -   Off       3   30s
                                        C  -    -   Off       4   30s
                                        D  -    -   Off       5   30s
                                                               6   30s

   Configuration #1 - CONFIG_1

                                                                   F10 - Help
 F Splits  FAns/Forc F  Call          F Clear          F Config  F Admin
 1         2 Delay   3  Flow          5 Config         7  List   8  Menu
```

The items in the following list correspond to the circled letters in the previous screen. They show the initial settings supplied for a new configuration.

a Split numbers 1 through 6 are displayed in the Agent Splits area.

b Split IDs will be displayed if the splits have been previously named. Otherwise, a hyphen (-) will appear in the “Split” column.

c Answer delay is set to 5 seconds.

d Force delay is turned off.

e Main and secondary splits are unassigned (indicated by hyphens).

f Intraflow is turned off.

g Intraflow thresholds are set to 30 seconds.

4 Select the activity you want to perform from the following list and then turn to the appropriate instructions.

— **Administering Splits**

Add, move, or remove agents in the splits in the displayed configuration, as well as change the split ID.

— **Administering Answer Delay and Force Delay**

Administer how you want CMS to answer calls with respect to the voice announcement unit(s).

– **Administering Call Flow**

Assign splits to cover line groups, turn intraflow on or off, or set Intraflow Thresholds for splits.

– **Clearing a Configuration**

Delete the contents of a configuration.

– **Returning to Other Screens**

Return to the Configuration List screen by pressing [F7] (labeled "Config List"), where you can save the configuration you have just built or edited. Return to the Administration Menu by pressing [F8] (labeled "Admin Menu") to select another administration activity.

CONFIGURING SPLITS

The list of agents you created on the Agent Directory screen is your *master list* of agents. Any agent in the Agent Directory can be assigned to a split. The Administer Stations screen contains the master list of PDCs for agent stations. You can assign only PDCs that appear in the Agent Stations section of the Administer Stations screen.

Pressing [F1] (labeled "Splits") from the Configuration screen selects the Configure Splits screen shown below.

```
CONFIGURE SPLITS                                        ADMIN CMS1.0 3:27p 04/18

              AGENT SPLITS                                ANSWER/FORCE DELAY
                                                            Num Answer Force
     |..Agent.. |          |--Agent-- |                Group  Lines   Delay   Delay
Split  PDC  ID     Split    PDC   ID                 A  PUBLIC 9      10S     Off
1 PUBLIC401 LINDA  4 SUPPT  417 CRAIG                 B   BUSNS 6       0S     On
       402 JOEL            418  BARB                 C   CHART 5       5S     Off
       403 IEN             424  CJ                   D     -   0       5S     Off
       404 JENNY  5  -
       405 SCOTT  6  -
       406 BILL
2 BUSNS407 SARAH                                          CALL FLOW
       408 JOHN                                                          Flow
       409 JIM                                     |-Splits- | Intra     Spl  Thresh
3 CHART410 BERNE                                 Gp  Main  Sec  Flow    1     50s
       411 DON                                   A   1     4    On      2     30s
       412 ALLAN                                 B   2     3    Off     3     30s
4 SUPPT415 ANDY                                  C   3     2    Off     4     30s
       516 LOU                                   D   -          Off     5     30s
                                                                          6     30s
  Configuration #1 - DAY

                                                                        F10 - Help
F Add     F Remove  F Move    F Replace F New     F Change F Config F Agent
1 Agent   2 Agent   3 Agent   4 Agent   5 Agent 6 Split ID 7 Screen 8 Directry
```

To configure splits, press the function key for the activity you want to perform:

[F1] **Add Agent**

Press this function key to display the prompt that allows you to assign an agent to a split. The agent must already be listed on the Agent Directory screen and the station must already appear on the Administer Stations screen. A split may have up to 28 agents. A total of 28 agents can be assigned to a shift configuration.

> **HINT:** If you want to add an agent who is not already in the Agent Directory, use [F5] (labeled "New Agent") instead of [F1].

Prompt: **ADD AGENT: ID: _____ PDC: _____ to Split #: _**

Action:

1 Enter the ID of an agent listed in the Agent Directory.

2 Enter the System 25 PDC of an agent station displayed on the Administer Stations screen.

3 Enter the split number (1 through 6).

4 Press [F8] (labeled "Enter Data").

[F2] **Remove Agent**

Press this function key to display the prompts that allow you to remove an agent from a split. (The agent will still be Listed on the Agent Directory screen.)

Prompt: **REMOVE AGENT: ID: _____**

Action:

1 Enter the ID for the agent you want to remove.

2 Press [F8] (labeled "Enter Data").

3 When the confirmation prompt appears, type ***y*** to confirm your request, or ***n*** to cancel it.

4 Press [F8] (labeled "Enter Data").

[F3] **Move Agent**

Press this function key to display the prompt that allows you to move an agent from one split to another and/or from one station to another.

Prompt: **MOVE AGENT: ID: _____ New PDC: _____ New Split #: _**

Action:

1. Enter the ID for the agent you want to move.
2. Enter the agent's new PDC or leave this field blank if you want the agent to stay at the same station.
3. Enter the agent's new split number (1 through 6) or leave this field blank if you want the agent to stay in the same split.
4. Press [F8] (labeled "Enter Data").

[F4] **Replace Agent**

Press this function key to display the prompt that allows you to substitute one agent for another at a particular agent station.

Prompt:

REPLACE AGENT: Remove Agent ID: _____ and Add Agent ID: _____

Action:

1. Enter the ID of the agent to be replaced.
2. Enter the ID of the agent you want to substitute at that station.
3. Press [F8] (labeled "Enter Data").

[F5] **New Agent**

Press this function key to display the prompt that allows you to add an agent who is not already listed on the Agent Directory screen to a split. The agent is simultaneously added to the split and to the Agent Directory.

Prompt:

NEW AGNT: ID: ____ Last name: _____ First: _____ PDC:_____ Split#:___

Action:

1. Enter the agent ID, up to 5 letters or numbers. (IDs must be unique.)
2. Enter the agent's last name, up to 12 letters, numbers, or special characters with no spaces between them.
3. Enter the agent's first name, up to 8 letters, numbers, or special characters with no spaces between them.
4. Enter the System 25 PDC of an agent station displayed on the Administer Stations screen.
5. Enter the split number (1 through 6).
6. Press [F8] (labeled "Enter Data").

[F6] **Change Split ID**

Press this function key to display the prompt that allows you to assign, change, or delete the ID for a split. Split IDs carry through all shift configurations. They make it easier to identify splits on screens and in reports. Each split ID must be unique. However, a split and a line group can have the same ID.

Prompt: **CHANGE SPLIT ID: Split # (l-6):_ New Split ID: _____**

Action: **1** Enter the split number (1 through 6).

2 Enter the new split ID (up to 5 letters or numbers), or enter a hyphen (-) to delete the split ID.

3 Press [F8] (labeled "Enter Data").

[F7] **Config Screen** (Configuration Screen)

Press this function key to return to the Configuration screen.

[F8] **Agent Directory** (Agent Directory)

Press this function key to return to the Agent Directory screen if you need to refer to or change agent information. Press [F7] on the Agent Directory screen to return to the Configure Splits screen.

[F10] **Help**

Press this function key to display a Help screen for the Configure Splits screen.

Pressing [F2] (labeled “Ans/Forc Delay”) from the Configuration screen displays the Configure Delay screen, shown below.

```
CONFIGURE DELAY                                          ADMIN CMS1.0 3:31p 04/18

                    AGENT SPLITS                          ANSWER/FORCE  DELAY
              |-Agent-|          |-Agent-|                   Num Answer Force
     Split  PDC  ID      Split  PDC  ID                Group Lines Delay Delay
   1 PUBLIC 401 LINDA    4 SUPPT 417 CRAIG             A PUBLC  9   10s   Off
            402 JOEL             418 BARB              B BUSNS  6    0s   On
            403 IEN              424 CJ                C CHART  5    5s   Off
            404 JENNY    5 -                           D -      0    5s   Off
            405 SCOTT    6 -
            406 BILL
   2 BUSNS  407 SARAH                                          CALL FLOW
            408 JOHN                                                   Flow
            409 JIM                                     |-Splits-|  Spl Thresh
   3 CHART  410 BERNE                                 Gp Main Sec Flow   1   50s
            411 DON                                    A  1   4  On     2   30s
            412 ALLAN                                  B  2   3  Off    3   30s
   4 SUPPT  415 ANDY                                   C  3   2  Off    4   30s
            416 LOU                                    D  -   -  Off    5   30s
                                                                        6   30s
   Configuration #1 - DAY

ANS/FORCE DELAY:  Grp (A-D):__ Ans Delay (0-99 sec):___ Force Delay (ON/OFF):____
 F Cancel                                F Previous F Next          F Enter
 1 Prompt                                5 Field 6 Field            8 Data
```

From this screen, you can administer two delay options that affect the handling of incoming calls: Answer Delay and Force Delay.

Answer Delay

The Answer Delay is the number of seconds CMS has a call wait before connecting it to a voice announcement unit when no agents are available to service the call. You may want to get some experience with CMS call management before you change the answer delay from its initial setting of 5 seconds.

Think of Answer Delay as a trade-off between the time a customer spends listening to ringing and the time the customer spends on hold. You can set a different Answer Delay value for each line group, depending on the type of lines in the group and the amount of time the caller is likely to wait before an agent is available.

Consider these factors when choosing an Answer Delay value for a line group:

- If you have toll lines (such as 800 lines), you begin paying for a call as soon as the line is answered by CMS. If calls are likely to be on hold before an agent is available, increasing the Answer Delay value decreases the time on hold, and, hence, the cost of the call.
- You can increase the Answer Delay if you know callers will have to wait for an agent. Callers may be less likely to hang up if they wait longer for CMS to answer but spend less time on hold.

Force Delay

The Force Delay option controls the transfer of calls to and from the voice announcement unit. If Force Delay is on, calls that arrive for a line group will not be transferred to an agent until callers have heard the entire message, even if an agent is available. This means that calls may be queued up waiting to hear the delay message even when agents are available. If Force Delay is off, they will be transferred to an agent as soon as one becomes available.

> **IMPORTANT:** You must assign a voice announcement unit to a line group before you can turn on Force Delay for that line group.

CONFIGURE DELAY SCREEN

To administer Answer Delay or Force Delay:

Press [F2] (labeled "Ans/Fore Delay") from the Configuration screen to select this function. The screen title changes to "Configure Delay," a box appears around the Answer/Force Delay area of the screen and the following prompt appears:

Prompt:

ANS/FORCE DELAY: Grp (A-D): __ Ans Delay (0-99 sec): __Force Delay (ON/OFF):___

Action:

1 Enter a line group letter (A through D).

2 Enter the Answer Delay, the number of seconds (0 through 99) you want calls to ring before CMS connects them to an announcement unit if no agent is available to service the call. Leave this field blank if you don't want to change it.

The initial answer delay setting is 5 seconds, the approximate time from the beginning of one ring to the beginning of the next.

3 Type ***on*** to turn Force Delay on, or ***off*** to turn it off. Leave this field blank to keep the current value. The initial setting is off.

4 Press [F8] (labeled "Enter Data").

Administering Call Flow

Administering call flow includes the following tasks:

- Assigning a main split and a secondary split (optional) for each line group
- Turning intraflow on or off for a line group
- Setting an Intraflow Threshold for each split

Intraflow is the process of transferring calls from a main split's queue to an available agent in the secondary split. A **main split** has primary responsibility for answering calls for a line group (or groups). A **secondary split** covers calls to a line group only if all the agents in the main split for that line group are busy or unavailable, the Intraflow Threshold has been reached, and intraflow is on.

The **Intraflow Threshold** is the number of seconds the oldest call in a main split's queue must wait before it can be sent to an available agent (if there is one) in the secondary split. This waiting time begins when the call first rings. However, if calls already in the secondary split's queue have exceeded its Intraflow Threshold, the secondary split will not accept intraflowed calls until these queued calls have been answered. For a detailed description of how and when calls are intraflowed, see "How Intraflow Works" later in this section of the manual.

Consider these points when establishing your Intraflow Threshold(s):

- How long do you want your callers to wait for an agent in the main split if there are agents available in your secondary split? (The waiting time starts as soon as the call begins ringing.) Answering this question helps determine a reasonable Intraflow Threshold for the main split.
- If your secondary split serves as a main split for another line group, you may not want that split to accept intraflowed calls if it is busy with its own calls. The secondary split's Intraflow Threshold determines how long its own calls may wait before the split refuses to accept intraflowed calls. (If a secondary split is not a main split as well, you don't need to set a threshold for that split.)

Pressing [F3] (labeled "Call Flow") on the Configuration screen selects the following Configure Call Flow screen.

```
CONFIGURE CALL FLOW                                   ADMIN CMS1.0 3:32p 04/18

                 AGENT SPLITS                          ANSWER/FORCE DELAY
            |--Agent--|            |--Agent--|                Num Answer  Force
  Split    PDC  ID       Split    PDC  ID          Group Lines Delay  Delay
 1 PUBLC  401 LINDA    4 SUPPT  417 CRAIG       A PUBLC 9    10s    Off
          402 JOEL              418 BARB        B BUSNS 6    0s     On
          403 IEN               424 CJ          C CHART 5    5s     Off
          404 JENNY    5 -                      D -     0    5s     Off
          405 SCOTT    6 -
          406 BILL
 2 BUSNS  407 SARAH                                  CALL FLOW
          408 JOHN                                                Flow
          409 JIM                                |-Splits-| Intra  Spl  Thresh
 3 CHART  410 BERNE                             Gp Main  Sec  Flow   1   50s
          411 DON                               A  1    4    On     2   30s
          412 ALLAN                             B  2    3    Off    3   30s
 4 SUPPT  415 ANDY                              C  3    2    Off    4   30s
          416 LOU                               D  -    -    Off    5   30s
                                                                    6   30s
 Configuration #1 - DAY

                                                                   F10 - Help
 F Assign F Flow F  Set                                   F Config
 1 Splits 2 On/Off 3 Thresh                               7 Screen
```

How Intraflow Works

This example assumes there are main and secondary splits assigned to the line group and no agent is available in the main split. If an agent became available at any step, CMS would immediately transfer the call to that agent. This example also assumes that Force Delay is off.

If a call comes in and no agent is available in the main split, the call is treated as follows:

1 The call continues to ring for the Answer Delay interval you have established.

2 CMS answers the call and connects it to the voice announcement unit for a delay message.

NOTE: If the Answer Delay for a line group is longer than the Intraflow Threshold for the line group's main split, the call may be intraflowed to the secondary split before the delay message is played.

3 The call is put on hold (or connected to Music-on-Hold) and is put into the main split's queue of waiting calls.

4 The call is *intraflowed* (sent) to an agent in the secondary split if all these conditions are met:

- Intraflow is turned on for the call's line group.

– The call is the oldest call eligible for intraflow to the secondary split.

- The amount of time the call has waited (that is, from the time the call started ringing until now) has exceeded the Intraflow Threshold for the main split.

- There is no available agent in the main split.

– There is an available agent in the secondary split.

– The oldest call in the secondary split's queue has not waited longer than the Intraflow Threshold for the secondary split.

5 If there is no agent available in the secondary split, the call stays in the main split's queue. The call will be answered by the first available agent in either the main split or the secondary split (if the secondary split's Intraflow Threshold is not exceeded by another call).

CALL FLOW SCREEN

To administer call flow, press the function key for the activity you want to perform:

HINT: If you are administering call flow for a new shift configuration, perform the activities in this order: assign splits, set thresholds, then change intraflow.

[F1] **Assign Splits**

Press this function key to display the prompt that allows you to assign a main split and, optionally, a secondary split, to a line group. Initially, all splits are unassigned; you choose which split answers calls for each line group.

Prompt:

ASSIGN SPLITS for Call Flow: Line Group (A-D): _ Main Spiit: _ Secondary Split: _

Action:

1 Enter a line group letter (A through D).

2 Enter the number of the main split number (1 through 6) that will answer calls for the line group.

3 Enter a split number to assign to a secondary, or enter a hyphen (-) if you do not want to assign a secondary split or if you want to delete a previously assigned secondary split.

4 Press [F8] (labeled "Enter Data").

[F2] **Flow On/Off** (Turn Intraflow On/Off)

Press this function key to display the prompt that allows you to turn intraflow on or off for a particular line group. Each line group's intraflow status appears in the Intraflow column of the Call Flow area of the screen. The initial intraflow setting for each line group is Off.

Prompt: **CHANGE INTRAFLOW: Line Group (A-D):__**

Action:

1 Enter a line group letter (A through D).

2 Press [F8] (labeled "Enter Data"). The intraflow designation for that line group automatically changes from ***On*** to ***Off*** or vice versa.

[F3] **Set Thresh** (Set Intraflow Threshold)

Press this function key to display the prompt that allows you to set the Intraflow Threshold for a split. This threshold sets the number of seconds the oldest call waits in a main split's queue before becoming eligible for intraflow. You need reasonable thresholds for your main splits. For more information on choosing your thresholds, see "Administering Call Flow" earlier in this section. The initial setting is 30 seconds.

Prompt:

SET CALL FLOW THRESHOLD: Split # (1-6):__ Threshold (0-999 sec):__

Action:

1 Enter a split number (1 through 6).

2 Enter a number of seconds (0 through 999).

3 Press [F8] (labeled "Enter Data").

[F7] **Config Screen** (Configuration Screen)

Press this function key to return to the Configuration screen after you have finished administering call flow.

[F10] **Help**

Press this function key to display a Help screen for the Configure Call Flow screen.

Clearing a Configuration

Pressing [F5] (labeled "Clear Config") on the Configuration screen displays the prompt that allows you to clear the contents of a shift configuration. You might want to do this if you have made several data entry errors and want to begin again instead of making changes. If you clear the contents of the configuration, the values on the Configuration screen return to their initial settings.

Prompt:

CLEAR CONFIG: This deletes contents of config. Clear Config? (Y/N): __

Action:

1. Type ***y*** or ***n.***
2. Press [F8] (labeled "Enter Data"). If you clear the contents of the configuration, the values on the Configuration screen return to their initial settings.

   NOTE: If you accidentally clear a configuration, you can restore the configuration by doing the following immediately after you've cleared it: Press [F7] (labeled "Config List") to select the Configuration List screen. On this screen, press [F1] (labeled "Select Config") to select a configuration. A prompt asks if you want to save your previous editing changes (which include clearing the configuration). Type ***n,*** and press [Enter] to restore the cleared configuration to the state it was in the last time it was saved.

Returning to Other Screens

You can select two other screens from the Configuration screen: the Configuration List screen and the Administration Menu. You may want to go to the Configuration List screen to save your new configuration or an old one you have edited. Pressing [F7] (labeled "Config List") selects the Configuration List screen, from which you can:

- Select a configuration to view, build, or edit
- Save your editing changes (or save a new configuration you've just built)
- Rename a configuration
- Select a startup configuration

You can return to the Administration Menu from the Configuration screen by pressing [F8] (labeled "Admin Menu").

Saving an Edited (Changed) Configuration

When you build a new shift configuration or make changes in an existing one, the word **(edited)** appears on the Configuration List screen to the left of the configuration number. You can store the last edited configuration in a previously unused configuration or store it in place of another configuration.

For example, you could edit configuration 1 (DAY in our example) and replace the original with the updated copy. If, on the other hand, you want to keep the original configuration 1 as well as the edited copy, store the copy in an unused configuration number.

Pressing [F2] (labeled "Save Config") on the Configuration List screen displays the prompts that allow you to save the last selected configuration. The name of the configuration is highlighted. If you edit the selected configuration, the word (edited) appears to the left of the configuration name.

Prompt: **SAVE CONFIGURATION: in Config #:__**

Action:

1 Press [F8] (labeled “Enter Data”) to save the edited configuration under the same configuration name and number as the original (in other words, to replace the original with the updated copy).

or

Enter a configuration number, then press [F8] (labeled “Enter Data”) to save the edited configuration under a different configuration number.

A second prompt appears:

SAVE CONFIGURATION: Replace Contents of Config #X - NAME? (Y/N):__

The number of the configuration (X) you want to replace and its name (NAME) appear in this prompt.

2 Type ***y*** to confirm your request or ***n*** to cancel it; then press [F8] (labeled "Enter Data").

IMPORTANT: If you accidentally cleared a configuration with [F5] (labeled “Clear Config”) on the Configuration List screen, *do not* press [F2] (labeled “Save Config”) on the Configuration List screen. For information on restoring a configuration that has been accidentally cleared, see "Clearing a Configuration" earlier in this section.

Renaming a Shift Configuration

To name or rename a configuration, press [F3] (labeled “Rename Config”) on the Configuration List screen. Configuration names can contain up to 10 letters, numbers, or special characters. Spaces are not allowed, so you may want to use hyphens or underlines instead. Renaming a configuration "UNUSED", will clear the configuration.

Prompt:

RENAME CONFIGURATION: Config # (1-6): _ New Name: _____

Action:

1. Enter the configuration number (1 through 6).
2. Enter the new name (up to 10 letters, numbers, or special characters).

   NOTE: A startup configuration cannot be renamed “UNUSED,” and results in an error message if you attempt to do so.
3. Press [F8] (labeled “Enter Data”).

Selecting a Startup Configuration

You can select one of the six shift configurations to be invoked automatically during the CMS call management startup procedure. Don’t select a startup configuration, however, if you want to choose a configuration each time you begin call management.

Press [F4] (labeled “Choose Startup”) on the Configuration List screen to choose this activity.

Prompt:

CHOOSE STARTUP CONFIGURATION: Config # (1-6 or ‘-’ for none):___

Action:

1. Enter the number of the configuration you want to use as the startup configuration, or enter a hyphen (-) if you don’t want a startup configuration.
2. Press [F8] (labeled “Enter Data”). The word **(Startup)** appears to the right of the configuration you selected.

After you have used CMS for a few days, you should have enough information to set several system options. Initial settings are in effect for the following options until you define new values:

- Service Level Limit
- Abandoned vs. Incoming Call Threshold
- Audible Alarm On/Off
- Transfer Return Threshold
- CMS-Port Personal Line Button Verification

Pressing [F5] (labeled "Set Options") on the Administration Menu screen selects the Set Options screen, shown below.

```
SET OPTIONS                                          ADMIN CMS1.0 3:36p 04/18

                              OPTION SETTINGS

                          Option                      Value

              F1   Service Level Limit                20 sec

              F2 Abandoned vs. Incoming Call Threshold  10 sec

              F3   Audible Alarm (ON/OFF)             ON

              F4   Transfer Return Threshold          5 rings

              F5   CMS-Port Personal Line Button Verify ON

                                                                  F10 - Help
 F Service F Abandon F Alarm   F Return F Verify                    F Admin
 1 Level   2 Thresh 3 On/Off 4 Thresh 5 On/Off                      8 Menu
```

SERVICE LEVEL LIMIT

The service level is a measure of how quickly your customers' calls are answered by agents. The service level is the percentage of calls that were connected to agents within a specified number of seconds (called the Service Level Limit). For instance, during a particular hour your agents may answer 90% of the CMS calls within 20 seconds.

The initial value for the Service Level Limit is 20 seconds. Since the length of time between the beginning of one ring and the beginning of the next is about 5 seconds, a Service Level Limit of 20 seconds equals about 4 rings.

The service level is displayed on the System Status screen and is continually updated while CMS is managing calls. (The service level also appears in the Daily Split Report and in the Cumulative Split Report.) If the service level drops below an acceptable level, it may indicate the need to turn on intraflow or to add more agents to a split.

The Service Level Limit you choose depends on your particular type of business. The Service Level Limit is measured from the time a call first rings at System 25 until the call is answered by an agent. This includes Answer Delay time, time connected to the voice announcement unit (if any), time on hold waiting to be transferred to an agent, and ringing time at an agent station. You need to decide how quickly you want the majority of your calls answered. Note that having Force Delay on impacts your service level.

ABANDONED CALL THRESHOLD

An important function of CMS is tracking the number of abandoned calls, that is, the number of callers who hang up before they've been connected to an agent. Occasionally an abandoned call gets transferred to an agent. When this happens, the agent answers the call and finds no one on the line.

The Abandoned vs. Incoming Call Threshold allows you to set the minimum number of seconds an agent must be connected to a call for it to be considered a serviced call. By setting this threshold, you can distinguish between the abandoned calls that are connected to agents and "real" calls that are handled by the agents. Distinguishing serviced calls from abandoned ones gives a more accurate picture of the service level of your system.

To establish a realistic Abandoned vs. Incoming Call Threshold, you need to know how long agents usually spend talking to callers. If your agents usually spend at least 30 seconds talking to customers, then you can assume that most calls that take less than 15 seconds are probably abandoned calls. However, if your agents often receive calls that take only a few seconds to handle, you will want to set a lower abandoned call threshold, and the chance of errors (that is, mistaking an abandoned call for a "real" call, or vice versa) will increase. The initial value for the Abandoned vs. Incoming Call Threshold is 10 seconds.

> **NOTE:** If your CMS lines are Ground Start trunks, the number of abandoned calls transferred to agents is considerably less than if your CMS lines are Loop Start trunks.

AUDIBLE ALARM ON/OFF

You can have your PC beep every time an exception message, a system message, or an error message appears on the PC screen. (An exception occurs when a service or performance threshold you set has been exceeded. For more information, see "Selecting Exceptions" later in this section.) Turning the alarm on is helpful since it will alert you to potential problems that might occur when you are not looking at the PC screen. Initially, the Audible Alarm option is on.

TRANSFER RETURN THRESHOLD

The Transfer Return Threshold allows you to set the maximum number of times a CMS call will ring at an agent's voice terminal before being returned to CMS for transfer to another agent. You can choose a value of 1 to 9 rings; the initial setting is 5 rings.

There are two instances in which a call is not transferred immediately to another agent when the Transfer Return Threshold is reached:

- If no other agents are available when the Transfer Return Threshold is reached, and the caller has not heard an announcement, the call is connected to an announcement and then placed in the queue of calls awaiting transfer to an agent.

- If no other agents are available when the Transfer Return Threshold is reached and the caller has already heard an announcement, the call continues to ring at the original agent's voice terminal until an agent becomes available. At that time, CMS transfers the call to the available agent.

  NOTE: If the agent does not answer the call before the Transfer Return Threshold is reached, the agent is considered to have "refused" the call, and the agent's station is placed in the ACW state. If the Refused Call agent exception is turned on, then CMS generates an exception message when the Transfer Return Threshold is reached. See "Selecting Agent Exceptions" later in this section.

CMS-PORT PERSONAL LINE BUTTON VERIFY

Accurate System 25 administration is critical to the proper functioning of call management; inaccuracies may result in unanswered calls, dropped calls, or mistransferred calls. If CMS-Port Personal Line verification is on, CMS can verify that the Personal Line appearances of the CMS trunks are correctly administered on PC jack CU1. When the verification procedure begins, the following message appears on the Initialization screen:

PC-Port Verification In Progress-May Last Up To 4 Minutes

Problems detected during the verification procedure appear on the Initialization screen and are listed in the Events Log. Initially, verification of CMS-Port Personal Line button administration is on. You should turn this option on whenever you run CMS for the first time after System 25 changes for CMS have been made.

SETTING OPTIONS

To set options, press the function key for the option you want to change:

[F1] Service Level (Service Level Limit)

The service level is the percentage of calls connected to agents within a specified number of seconds (the Service Level Limit). The initial value is 20 seconds.

Prompt:

SERVICE LEVEL: % Calls Answered within XXX sec. XXX (1-999):___

Action: **1** Enter the number of seconds (1 through 999).

2 Press [F8] (labeled "Enter Data").

[F2] **Abandon Thresh** (Abandoned vs. Incoming Call Threshold)

The Abandoned vs. Incoming Call Threshold is the minimum number of seconds an agent must be connected to a call for the call not to be considered an abandoned call. The initial value is 10 seconds.

Prompt: **ABANDON THRESHOLD: (1-99 seconds):___**

Action: **1** Enter the number of seconds (1 through 99).

2 Press [F8] (labeled "Enter Data").

[F3] **Alarm On/Off** (Audible Alarm On/Off)

You can choose to have your PC beep every time an exception message, system message, or error message appears. The word **ON** in this field means the PC beeps. The word **OFF** means the PC does not beep. Initially, the alarm is **ON.**

Action: ● Press [F3] to change the value that appears in the Audible Alarm field on your screen.

[F4] **Return Thresh** (Transfer Return Threshold)

The Transfer Return Threshold is the maximum number of times a CMS call will ring at an agent's voice terminal before being returned to CMS for transfer to another agent. The initial value for the Transfer Return Threshold is 5 rings.

Prompt: **TRANSFER RETURN: (1-9 rings):__**

Action:

1 Enter the number of times (1 through 9) a CMS call should ring at an agent's voice terminal before being returned to CMS.

2 Press [F8] (labeled "Enter Data").

[F5] **Verify On/Off** (CMS-Port Personal Line Button Verification)

If CMS-Port Personal Line Button Verification is on, CMS will check to see if the Personal Line appearances of CMS trunks are correctly administered on PC jack CU1. This verification occurs when call management is started, and can last up to four minutes. The word **ON** means that verification is enabled. The word **OFF** means the verification procedure is disabled. Initially, verification is **ON.**

Action: ● Press [F5] to change the value that appears in the CMS-Port Personal Line Verify field on your screen.

[F8] **Admin Menu** (Administration Menu)

Press this function key to return to the Administration Menu screen.

[F10] **Help**

Press this function key to display a Help screen for the Set Options screen.

Selecting Exceptions

An exception message indicates that a particular performance threshold has been reached or exceeded and an unusual or undesirable situation may be occurring. Exceptions allow you to customize performance goals for each split or line group. For instance, you may establish a threshold of 3 minutes as an acceptable Talk Time for one split and 4 minutes as an acceptable Talk Time for another split.

You may want to use CMS for a few days before you select your exceptions and set your exception thresholds. In the meantime, all exceptions are set to off.

After you turn on an exception, you receive an exception message on your PC screen whenever the threshold for that exception has been reached or exceeded. The exception message also appears on the CMS Events Log. (For more information see, "Using the Events Log Screen" in Section 5, and "Events Log Report" in Section 7.) The exception message includes the date and time the exception occurred. For instance, you may choose to receive an exception message when an agent has refused a call or when all the lines in a line group have been busy for a certain number of seconds. In addition, if you want your PC to beep when an exception occurs, turn on the Audible Alarm option from the Set Options screen (described earlier in "Setting options ").

Exceptions are an important management tool because they free you to do more productive work. Instead of constantly monitoring system status on your PC, you can administer exceptions to notify you when problems arise.

Most businesses need only two or three exceptions. Using all the exceptions available or setting unrealistic exception thresholds merely gives you unusable or inappropriate data. Consider these points when choosing the exceptions for your business:

- In sales line groups, the exceptions that indicate the length of time all lines are busy and the number of abandoned calls are important. When all lines are busy, potential customers may not be able to get through and may call a competitor. This means lost revenue for your business. Abandoned calls (instances where a caller hangs up before being connected to an agent) signal callers who are tired of waiting for an agent and who might not call back— again, lost revenue.

  The thresholds for these exceptions depend on the dollar value of each call versus the expense of an additional agent:

  – In businesses where each call generates high revenue (or where customer service directly affects sales), the thresholds should be set low. Thus the exception messages can alert the supervisor before too many calls are lost.

  – In businesses where the revenue per call is low, it may not be economical to have enough lines and agents to handle all calls. Exception thresholds could be set high.

- In a service business, agent productivity and cost per call may be important concerns. In this situation, the length of time an agent spends on a call (Talk Time) and in the ACW state may be the most important exceptions to monitor.

Let the characteristics of your business guide your decisions about selecting exceptions and setting thresholds.

Pressing [F6] (labeled “Select Exceptns”) on the Administration Menu screen selects the following Select Exceptions screen.

```
SELECT  EXCEPTIONS                                    ADMIN CMS1.0 3:38p 04/18

                              EXCEPTION  SETTINGS

                                        |--------Split/Line  Group---------|
     Exception                 On/Off  1/A  2/B   3/C   4/D   5   6
     AGENTS
Talk Time > = xxx sec          Off     -    –    -    -    -   –
After Call Work > = xxx min    On      5m   4m   4m   –    –   –
Agent Logout ACW > = xxx min   Off     –    –    -    -    –   -
Refused Call                   On

     SPLITS
# Abandon Calls > = xx         On      4    3    3    –    –   –
# Calls Waiting > = xx         On      2    2    2    -    –   -
Oldest Call Wait > = xxx sec   On      45s  45s  30s  –    –   -
Avg Speed Answer > = xxx sec   Off     –    –    -    –    –   -

     LINE GROUPS
All Lines Busy > = xxx sec     Off     –    –    -    -
Line Hold Time > = xx min      On      8m   7m   8m   –
Line Hold Time <= xx sec       Off     -    –    -    -

                                                                F10 - Help
F Agent    F Split   F Group                                       F Admin
l Exceptns 2 Exceptns 3 Exceptns                                   8 Menu
```

Use this screen to turn exceptions on or off and set exception thresholds for each split or line group. Initially, all exceptions are set to Off and all thresholds are blank.

Exceptions are divided into three types– agent, split, and line group. General instructions for administering exceptions are provided below. After you familiarize yourself with the procedure, turn to the descriptions for the type of exceptions you want to administer:

- Agent exceptions
- Split exceptions
- Line group exceptions

ADMINISTERING EXCEPTIONS

To administer exceptions:

1 Press the function key for the type of exceptions you want to administer-agent, split, or group.

A box appears around the corresponding area of the screen, and the screen title and function key labels change.

2 Press the function key for the exception you want to administer. For example, you could press [F1] (labeled “Talk Time”) on the Agent Exceptions screen.

If you decide not to administer that exception, press [F1] (labeled “Cancel Prompt”) to cancel the prompt.

3 Type **on** in the **ON/OFF** field of the prompt to turn the exception on, or type **off** to turn the exception off.

4 Enter thresholds for splits or line groups.

Keep these points in mind:

– You do not need to enter a threshold for each split or line group. If you don't want to enter a threshold for a particular split or line group, simply leave it blank. This feature allows you to turn on an exception for selected splits or groups.

– To delete a threshold value, type a hyphen (-) in the field you want to delete.

– You may enter thresholds even if you turn off an exception. For example, you may want to turn on the Talk Time exception when call traffic is heavy. During slow periods, however, you might not care how long an agent talks to customers. You may want to turn off the Talk Time exception then, but still keep the thresholds set.

5 Press [F8] (labeled "Enter Data") after you make an entry in the last field.

6 Press a different function key to administer another exception on that screen.

7 Press [F8] (labeled "Select Exceptns") on the Agent Exceptions, Split Exceptions, or Line Group Exceptions screen to return to the Select Exceptions screen when you finish administering exceptions for Agents, Splits, or Line Groups, respectively.

8 Press [F8] (labeled "Admin Menu") to return to the Administration Menu screen.

Agent exceptions allow you to monitor the activity of individual agents. You can use these exceptions to indicate reasonable expectations for call handling, and to help determine where extra training might be necessary. You can set different exception thresholds for each split to tailor the exception for the type of calls each split handles. For instance, some splits may need more ACW time than others.

Pressing [F1] (labeled “Agent Exceptns”) from the Select Exceptions screen selects the Agent Exceptions screen shown below. The box in the screen indicates the four agent exceptions: Talk Time, After Call Work, Agent Logout ACW, and Refused Call.

```
AGENT  EXCEPTIONS                                   ADMIN CMS1.0 3:39p 04/18

                            EXCEPTION  SETTINGS
                                       |--------Split/Line  Group--------|
      Exception              On/Off  1/A  2/B  3/C  4/D  5  6
     AGENTS
Talk Time > = xxx sec          Off    -    -    -    -    -    -
After Call Work > = xxx min    On     5m   4m   4m   -    -    -
Agent Logout ACW >= xxx min    Off    -    -    -    -    -    -
Refused Call                   On

     SPLITS
# Abandon Calls > = xx         On     4    3    3    -    -    -
# Calls Waiting > = xx         On     2    2    2    -    -    -
Oldest Call Wait > = xxx sec   On    45s  45s  45s   -    -    -
Avg Speed Answer > = xxx sec   Off    -    -    -    -    -    -

     LINE  GROUPS
All Lines Busy > = xxx sec     Off    -    -    -    -
Line Hold Time > = xx min      On     8m   7m   8m   -
Line Hold Time < = XX sec      Off    -    -    -    -

                                                                F10 - Help
F Talk  F ACW     F Agent   FRefused                            F Select
1 Time  2         3 Logout  4 Call                             8Exceptns
```

ADMINISTERING AGENT EXCEPTIONS

To administer an agent exception:

1 Press the function key for that exception and refer to the description and instructions that follow this list. The exception message that appears when an exception threshold is reached or exceeded is also listed.

2 Press a function key to administer another agent exception, or press [F8] (labeled “Select Exceptns”) to return to the Select Exceptions screen when you are finished.

[F1] **Talk Time**

Talk Time is the number of seconds an agent is connected to a call. If you turn on this exception, CMS notifies you when an agent's Talk Time meets or exceeds the threshold set for that split.

Prompt:

TALK TIME (seconds): ON/OFF?__ Split 1:__ 2:___ 3:____ 4:___ 5:____ 6:___

Action:

1 Type ***on*** or ***off,*** or leave the field blank if you want to keep the current value.

2 Enter the number of seconds (1 through 999) for the maximum Talk Time for each split. To keep the current value, leave the field blank. To turn off this exception for a particular split, enter a hyphen (-).

3 Press [F8] (labeled "Enter Data") after the last field.

Message: **• • • Split X - Agent XXXXX - Talk Time > = XXX seconds**

[F2] **ACW** (After Call Work)

The ACW state refers to the period of time agents make themselves temporarily unavailable for calls. If you turn on this exception, CMS notifies you when an agent has been in the ACW state longer than the threshold set for that split.

Prompt:

ACW (minutes): ON/OFF?__ Split 1:___ 2:___ 3:___ 4:___ 5:___ 6:___

Action:

1 Type ***on*** or ***off,*** or leave the field blank if you want to keep the current value.

2 Enter a number of minutes (1 through 999) for each split. To keep the current value of a field, leave the field blank. To turn off this exception for a particular split, enter a hyphen (-).

3 Press [F8] (labeled "Enter Data") after the last field.

Message: **• • • Split X - Agent XXXXX - After Call Work > = XXX minutes**

[F3] **Agent Logout** (Agent Logout ACW)gent

If you turn on this exception, CMS automatically logs out an agent who has been in the ACW state as long or longer than the threshold you set. You are notified when the exception threshold is reached and the agent is logged out.

Prompt:

AGENT OUT (minutes): ON/OFF?__ Split 1:___ 2:___ 3:___ 4:___ 5:___ 6:___

Action:

1 Type ***on*** or ***off,*** or leave the field blank if you want to keep the current value.

2 Enter the number of minutes (1 through 999) for each split. To keep the current value, leave the field blank. To turn off this exception for a particular split, enter a hyphen (-).

3 Press [F8] (labeled "Enter Data") after the last field.

Message: **••• Split X - Agent XXXXX - Logged Out - ACW > = XXX minutes**

[F4] **Refused Call**

If you turn on this exception, CMS notifies you whenever an agent refuses a call (i.e., whenever an agent does not answer a CMS call within the number of rings specified in the Transfer Return Threshold on the Set Options screen).

Prompt: **REFUSED CALLS: ON/OFF? ___**

Action:

1 Type ***on*** or ***off.***

2 Press [F8] (labeled "Enter Data").

Message: **••• Split X - Agent XXXXX - Refused Call**

or

••• Split X - Agent XXXXX - Refused XFR Call on Line QXXXX

[F8] **Select Exceptns** (Select Exceptions)

Press this function key to return to the Select Exceptions screen.

[F10] **Help**

Press this function key to display a Help screen for the Agent Exceptions screen.

Selecting Split Exceptions

Split exceptions alert you to unusual or undesirable situations affecting a whole split. For example, you can be notified when the number of calls waiting in a split's queue meets or exceeds a threshold you set. Split exceptions can alert you to a need for more agents or faster call handling.

Pressing [F2] (labeled "Split Exceptns") from the Select Exceptions screen selects the Split Exceptions screen shown below. The box indicates the split exceptions.

```
SPLIT EXCEPTIONS                                   ADMIN CMS1.0 3:40P 04/18

                                EXCEPTION  SETTINGS
                                           |.........Split/Line  Group.........  |
     EXCEPTION                   On/Off   1/A   2/B   3/C   4/D   5     6
     A G E N T S
    Talk Time > = xxx sec        Off      -     -     -       -     -     -
    After Call Work >= xxx min   On       5m    4m    4m      -     -     -
    Agent Logout ACW>= xxx min   Off      -     -     -       -     -     -
    Refused Call                 On

     SPLITS
    # Abandon Calls >= xx        4        3     3     -       -     -
    # Calls Waiting >= xx        2        2     2     -       -     -
    Oldest Call Wait >= xxx sec  45s      45s   30s   -       -     -
    Avg Speed Answer >= xx sec   -        -     -     -       -     -

     LINE GROUPS
    All Lines Busy>= xxx sec     Off      -     -     -     -
    Line Hold Time >= xx min     On       8m    7m    8m    -
    Line Hold Time= xx sec       Off      -     -     -     -

                                                                F10 - Help
FAbandon  F Calls  F Oldest  F  Avg                               F Select
1 Calls   2Waiting 3 Call    4 Speed                              8Exceptns
```

ADMINISTERING SPLIT EXCEPTIONS

To administer a split exception:

1 Press the function key for that exception and refer to the description and instructions that follow this list. The exception message that appears when an exception threshold is met or exceeded is also listed.

2 Press a function key to administer another split exception or press [F8] (labeled "Select Exceptns") to return to the Select Exceptions screen when you are finished.

[F1] **Abandon Calls** (Number of Abandoned Calls)

When a caller hangs up before speaking to an agent, or an agent is connected to a caller for less than the Abandoned vs. Incoming Call Threshold, the call is considered an abandoned call. If you turn on this exception, CMS notifies you whenever the number of abandoned calls in an hour reaches or exceeds the threshold you set for the split.

Prompt:

 # ABANDON CALLS: ON/OFF? _ Split 1:___ 2:___ 3:___ 4:___ 5:___ 6:___

Action:

1 Type ***on*** or ***off,*** or leave the field blank if you want to keep the current value.

2 If you want to enter threshold values, enter the number of seconds (1 through 99) for each split. To keep the current value, leave the field blank. To turn off this exception for a particular split, type a hyphen (-).

3 Press [F8] (labeled “Enter Data”) after the last field.

Message: **• • • Split X - # Abandoned Calls > = XX**

[F2] **Calls Waiting** (Number of Calls Waiting)

The Calls Waiting exception refers to the number of calls not yet connected to agents. If you turn on this exception, CMS notifies you when the number of calls waiting in a split’s queue meets or exceeds the threshold you set for that split. The maximum number of calls that can be waiting for a split is equal to the number of CMS lines and transfer-queue lines assigned to that split.

Prompt:

 # CALLS WAITING: ON/OFF? _ Split 1:___ 2:___ 3:___ 4:___ 5:___ 6:___

Action:

1 Type ***on*** or ***off,*** or leave the field blank if you want to keep the current value.

2 If you want to enter threshold values, enter a number less than or equal to the number of CMS and transfer-queue lines assigned to each split. To keep the current value, leave the field blank. To turn off this exception for a particular split, type a hyphen (-).

3 Press [F8] (labeled "Enter Data") after the last field.

Message: **• • • Split X - # Calls Waiting > = XX**

[F3] **Oldest Call** (Oldest Call Waiting)

The oldest call is the call that has been waiting the longest in a split's queue. If you turn on this exception, CMS notifies you when the number of seconds the oldest call has been waiting meets or exceeds the threshold you set.

Prompt:

OLDEST CALL (sec): ON/OFF?__ Split 1:___ 2:___ 3:___ 4:___ 5:___ 6:___

Action:

1. Type ***on*** or ***off,*** or leave the field blank if you want to keep the current value.
2. If you want to enter threshold values, enter a number of seconds (1 through 999) for each split. To keep the current value, leave the field blank. To turn off this exception for a particular split, type a hyphen (-).
3. Press [F8] (labeled "Enter Data") after the last field.

Message: **••• Split X - Oldest Call Waiting > = XXX seconds**

[F4] **Avg Speed** (Average Answering Speed)

The average answering speed is the average time it takes from the time a call rings until it is connected to an agent in a particular split. This includes the Answer Delay (the amount of time a call rings before CMS answers it and connects it to a voice announcement unit), the time connected to the voice announcement unit, the time on hold waiting to be transferred to an agent, and the time it takes to transfer the call to an agent.

If you turn on this exception, CMS notifies you when the average speed of answer in a split meets or exceeds the threshold you set.

Prompt:

AVG SPEED ANS (sec): ON/OFF?___ Split 1:___ 2:___ 3:___ 4:___ 5:___ 6:___

Action:

1. Type ***on*** or ***off,*** or leave the field blank if you want to keep the current value.
2. If you want to enter threshold values, enter a number of seconds (1 through 999) for each split. To keep the current value, leave the field blank. To turn off this exception for a particular split, type a hyphen (-).
3. Press [F8] (labeled "Enter Data") after the last field.

Message: **••• Split X - Avg Speed of Answer > = XXX seconds**

[F8] **Select Exceptns** (Select Exceptions)

Press this function key to return to the Select Exceptions screen.

[F10] **Help**

Press this function key to view a Help screen for the Split Exceptions screen.

Selecting Line Group Exceptions

Line group exceptions alert you to unusual or undesirable situations affecting lines or line groups. For instance, the All Lines Busy exception notifies you when all lines in a line group or all lines in a sub-group of that line group have been busy more than a specified number of seconds.

Pressing [F3] (labeled “Group Exceptns”) from the Select Exceptions screen selects the Group Exceptions screen, shown below. The box indicates the line group exceptions.

```
GROUP EXCEPTIONS                                   ADMIN CMS1.0 3:42P 04/18

                                EXCEPTION SETTINGS
                                        |.........Split/Line Group........ |
   Exception                    On/Off  1/A  2/B  3/C  4/D  5  6
      AGENTS                    Off      -    -    -    -   -  -
   Talk Time >= xxx sec         On      5m   4m   4m    -   -  -
   After Call Work >= xxx min   Off      -    -    -    -   -  -
   Agent Logout ACW >= xxx min  On
   Refused Call
       SPLITS
   # Abandon Calls >= xx       On       4    3    3    -   -  -
   # Calls Waiting >= xx       On       2    2    2    -   -  -
   Oldest Call Wait >= xxx sec On      45s  45s  30s   -   -  -
   Avg Speed Answer > = xxx sec Off     -    -    -    -   -  -

     ____LINE GROUPS____________________________________________
     |All Lines Busy >= xxx sec Off     -    -    -    -        |
     |Line Hold Time > = xx min On     8m   7m   8m    -        |
     |Line Hold Time <= xx sec Off      -    -    -    -        |
     ___________________________________________________________

                                                        F10 - Help
F Lines   FHoldTime   FHoldTime                         F  Select
1 Busy   2Maximum   3Minimum                            8Exceptns
```

ADMINISTERING LINE GROUP EXCEPTIONS

To administer a line group exception:

1. Press the function key for that exception and refer to the description and instructions that follow this list. The exception message that appears when each exception threshold is exceeded is also listed.
2. Press a function key to administer another line group exception, or press [F8] (labeled “Select Exceptns”) to return to the Select Exceptions screen when you are finished.

[F1] Lines Busy (All Lines Busy)

The All Lines Busy exception refers to the number of seconds all lines in a line group (or all lines in a sub-group of that line group) are busy. If you turn on this exception, CMS notifies you when the threshold you set is met or exceeded.

> **NOTE:** If there are transfer-queue lines in the line group, all the CMS and transfer-queue lines in the group must be busy for the exception message to be displayed. If you want to be notified when all non-transfer-queue lines in a line group are busy, assign all non-transfer-queue lines to a sub-group.

Prompt:

ALL LINES BUSY (seconds): ON/OFF?___ Line Group A:___ B : _ _ _ C:___ D:____

Action:

1. Type ***on*** or ***off,*** or leave the field blank if you want to keep the current value.
2. If you want to enter threshold values, enter a number of seconds (1 through 999) for each line group. To keep the current value, leave the field blank. To turn this exception off for a particular line group, type a hyphen (-).
3. Press [F8] (labeled "Enter Data") after the last field.

Message:

• • • Group X - All Lines Busy > = XXX seconds

or

• • • Sub-Group XX of Group X - All Lines Busy > = XX seconds

[F2] **Hold Time Maximum** (Maximum Line Holding Time)

The line holding time refers to the length of time a line has been in use for a single call. If you turn on the Maximum Line Holding Time exception, CMS notifies you when the length of time a line has been seized meets or exceeds the threshold you set for its line group.

Prompt:

MAXIMUM HOLD-TIME (minutes): ON/OFF?___ Line Group A:___ B:___ C:___ D:___

Action:

1. Type ***on*** or ***off,*** or leave the field blank if you want to keep the current value.
2. If you want to enter threshold values, enter a number of minutes (1 through 99) for each line group. To keep the current value, leave the field blank. To turn off this exception for a particular line group, type a hyphen (-).
3. Press [F8] (labeled "Enter Data") after the last field.

Message:

• • • Group X - Line XXXXX Hold Time > = XX minutes

[F3] **HoldTime Minimum** (Minimum Line Holding Time)

The line holding time refers to the length of time a line has been in use for a single call. If you turn on this exception, CMS notifies you when the length of time a line has been in use is less than the threshold you set. If the holding time of a line is consistently short, it may signal a line problem.

Prompt:

MINIMUM HOLD-TIME (seconds): ON/OFF?___ Line Group A:___ B:___ C:___ D:___

Action:

1. Type ***on*** or ***off,*** or leave this field blank if you want to keep the current value.
2. If you want to enter threshold values, enter a number of seconds (1 through 99) for each line group. To keep the current value, leave the field blank. To turn off this exception for a particular line group, type a hyphen (-).
3. Press [F8] (labeled "Enter Data") after the last field.

Message: **• • • Group X - Line XXXXX - Hold Time < = XX seconds**

[F8] **Select Exceptns** (Select Exceptions)

Press this function key to return to the Select Exceptions screen.

[F10] **Help**

Press this function key to display a Help screen or the Group Exceptions screen.

Printing System 25 Administration Instructions

System 25 must be administered to support CMS operation. In order for CMS to function properly, System 25 must reflect the same port numbers, PDCs, voice terminal types, trunk numbers, and trunk types as CMS. Therefore, if you make changes to any of the above for agent stations, PC jacks, voice announcement units or lines (CMS or transfer-queue), you must print out System 25 Administration Instructions and have the System 25 Administrator make the necessary changes before resuming CMS call management; otherwise, CMS will not operate correctly.

> **NOTE:** Changes to the CMS supervisor station(s) do not appear on the System 25 Administration Instructions. Any changes to a supervisor's station should be discussed with, and administered by, the System 25 Administrator.

To remind you that System 25 administration is needed, CMS prompts you to print administration instructions when you attempt to exit CMS administration. The following message is displayed:

You made changes affecting SYSTEM 25 Admin: Print Instructions? (Y/N):___

Type ***y*** and press [Enter] to print the instructions. The following screen is displayed.

```
PRINT SYSTEM25 INSTRUCT                                ADMIN CMS1.0 3:44p 04/18

                                   Form Print

                            System 25 CMS Administration

Turn on Printer and Align Paper. (When Ready, Select a Labeled Function Key)
 F Full   F Partial F Update                                          F Admin
 1 Print   2 Print   3 S25 File                                       8 Menu
```

You can also access the screen at any time by pressing [F7] (labeled " S25 Admn Instrctn") from the Administration Menu screen. With this screen you can:

- Obtain a Full Print of the System 25 Administration Instructions ([F1])

  You only need this report initially to administer System 25 for CMS.
- Obtain a Partial Print of the System 25 Administration Instructions ([F2])
- Update the System 25 file ([F3])
- Return to the Administration Menu ([F8])
- Obtain Help ([F10])

When you access the Print System25 Instruct screen, the following message appears on the prompt line:

Turn on Printer and Align Paper. (When Ready, Select a Labeled Function Key.)

To print the System 25 Administration instructions:

1 Turn on the printer connected to your PC. Make sure the "Ready" light is on, indicating that the printer is ready to print.

2 Press [F1] to obtain a Full Print or [F2] to obtain a Partial Print of System 25 Administration Instructions.

Below are descriptions of the Full Print, Partial Print, and Update S25 File options.

[F1] **Full Print**

When you request a Full Print report, CMS prints out forms consisting of information necessary to administer the agent stations, PC jacks, announcement units, CMS lines, and transfer-queue lines. (Remember that there is no printout for the supervisor stations.) The Full Print option also automatically updates the System 25 file after the print is completed. Therefore, no further updating using [F3] (labeled "Update S25 File") is necessary.

Select this print option when you initially administer CMS and any time afterwards when you want to get a full set of System 25 Administration Instructions.

To print out a Full Print report:

1 Press [F1] (labeled "Full Print").

The following prompt appears:

FULL PRINT: Print all SYSTEM 25 Instructions? (Y/N):___

2 Type ***y*** or ***n*** and press [F8] (labeled "Enter Data").

If you type ***y,*** the system checks that the printer is ready, and then prints out the forms.

If you type ***n,*** the original Print System25 Instruct screen appears.

3 Remove the instructions from the printer, and give them to the System 25 Administrator.

WARNING

If you selected this option because you made changes, CMS will not work correctly until System 25 is administered to reflect these changes. In the meantime, follow the instructions for "Managing Calls When CMS is Not Running", in Section 9 of this manual.

[F2] Partial Print

Request the Partial Print of System 25 Administration Instructions whenever you make changes after the initial System 25 administration for CMS. A Partial Print report prints out only the forms that have been affected since the last time [F3] (labeled "Update S25 File") was pressed or a Full Print ([F1]) was done.

In most cases, after you do a Partial Print, you should update the System 25 file by pressing [F3] (labeled "Update S25 File"), and give the print to the System 25 Administrator to make the necessary changes. The only exception to this print update sequence is if you are planning to make more changes affecting System 25 administration before resuming call management. In this case, you can do as many interim prints as you like, but wait until after the final print is done (Partial or Full) before updating the System 25 file. Give only the final print to the System 25 Administrator.

To print out the Partial Print instructions:

1 Press [F2] (labeled "Partial Print").

The following prompt appears:

PARTIAL PRINT: Print only SYSTEM 25 changes from last S25 File Update? (Y/N):___

2 Type ***y*** or ***n*** and press [F8] (labeled "Enter Date").

If you type ***y,*** the system checks that the printer is ready and then prints out the necessary forms.

If you type ***n,*** the system returns to the original Print System25 Instruct screen.

NOTE: If no changes were made that require System 25 administration, the following message appears on the error line:

Can't find any changes since last S25 File Update affecting SYSTEM 25

and the system returns to the original Print System25 Instruct screen.

3 Remove the instructions from the printer and give them to the System 25 Administrator.

4 Press [F3] (labeled "Update S25 File") to update the System 25 file. (For more information about updating the System 25 File, see [F3] Update S25 File, later in this section.)

WARNING

CMS will not work correctly until the System 25 administration is complete. In the meantime, follow the instructions for "Managing Calls When CMS is Not Running", in Section 9 of this manual.

[F3] **Update S25 File**

After you have obtained the System 25 Administration Instructions Partial Print, press this function key to update the System 25 file with all the changes made prior to your last Partial Print of System 25 instructions. In most instances, you should update the file immediately following a Partial Print.

> **NOTE:** The Full Print option updates the System 25 file automatically, so you don't need to press [F3] after a Full Print is done.

Backing Up Shift Configurations

By routinely making a backup copy (on a diskette) of your shift configurations and system tables files, you will have a current version to use if you need to restore your system after a problem. If your hard disk drive ever becomes inoperable, you can also use your backup copy to run CMS from the floppy disk drive. However, you cannot save historical data or administer CMS when you run CMS using the floppy diskette. (For more information see "Running CMS From a Floppy Diskette Backup," in Section 9.)

> **NOTE:** If you plan to archive your historical data, see Section 8, "Archiving Data". The Archiving Data procedure is different from the one described here and must be done on a different diskette.

COPYING SHIFT CONFIGURATIONS AND SYSTEM TABLES

To make a backup copy of your shift configurations and system tables files:

1. Exit to MS-DOS by pressing [F8] (labeled "Exit to DOS") on the CMS Menu.
2. Insert the diskette labeled "SYSTEM 25 CMS SYSTEM WORKING COPY" into disk drive A. For instructions on how to make a working copy diskette, see "Duplicating the CMS Diskettes" in Section 3.
3. To change to the cmsmgmt directory on the hard disk, type the following command at the **c>** prompt:

   cd \cms \cmsmgmt

   then press [Enter].
4. Change to the cmsmgmt directory on the floppy diskette as follows. At the **c>** prompt type

   a:

   then press [Enter]. At the **A>** prompt type

   cd \cms \cmsmgmt

   then press [Enter].
5. To copy all your shift configurations from the hard disk onto the floppy diskette, type

   copy c:shift*.cms a:

   then press [Enter].
6. To copy the system tables onto the floppy diskette, type

   copy c:systbls.cms a:

   then press [Enter].
7. Remove the working copy diskette when the in-use light on disk drive A goes out.
8. With a felt tip pen, write the current date on a label and attach it to the diskette.

9 To return to the cms directory on disk drive C, do the following. At the **A>** prompt type

c:

then press [Enter]. At the **C>** prompt type

cd . .

then press [Enter].

10 To display the CMS Menu, type

cms

and then press [Enter].

RESTORING SHIFT CONFIGURATIONS AND SYSTEM TABLES

If you ever lose a shift configuration (for instance, if you clear a configuration by accident), copy the desired configuration (or all configurations) from the working copy diskette as follows:

1 Repeat steps 1 through 4 in the previous procedure.

2 To copy all your shift configurations from the duplicate onto the hard disk, type

COPY a:shift.cms c:*

then press [Enter] .

or

To copy a single shift configuration from the working copy diskette, type the following, replacing the X with the number of the shift configuration.

copy a:shiftX.cms c:

then press [Enter].

3 To copy the system tables from the working copy diskette onto the hard disk, type

copy a:systbls.cms c:

then press [Enter].

4 Remove the working copy diskette when the in-use light on the disk drive goes out.

5 To return to the CMS directory on disk drive C, do the following. At the **A>** prompt type

c:

then press [Enter]. At the **c>** prompt type

cd. .

then press [Enter].

6 To display the CMS Menu, type

cms

and then press [Enter].

Section 5: Supervising CMS

Overview

"Supervising CMS" means starting and monitoring call management, making changes in the configuration being used to manage calls, and operating CMS day to day. This section is organized as follows:

Startup Procedures

Describes turning on your PC and starting data collection and call management.

Making Agents Available for CMS Calls

Describes how agents make themselves available for CMS calls and how they can enter the After-Call-Work state or Logged Out state.

Monitoring Call Management

Explains how to read the status screens to obtain current information on agent and split activity, call traffic, and system problems.

Supervising Your Agents

Describes the Service Monitoring feature that allows you to monitor agents' calls, and the Assist feature that enables agents to signal you when they need assistance.

Dynamic Reconfiguration

Describes changing the active shift configuration while CMS is managing calls. Typical changes during dynamic reconfiguration are reassigning agents and turning intraflow on or off. This part also tells you how to save the changes you have made, and how to select a new configuration for call management.

Selecting Day or Night Service

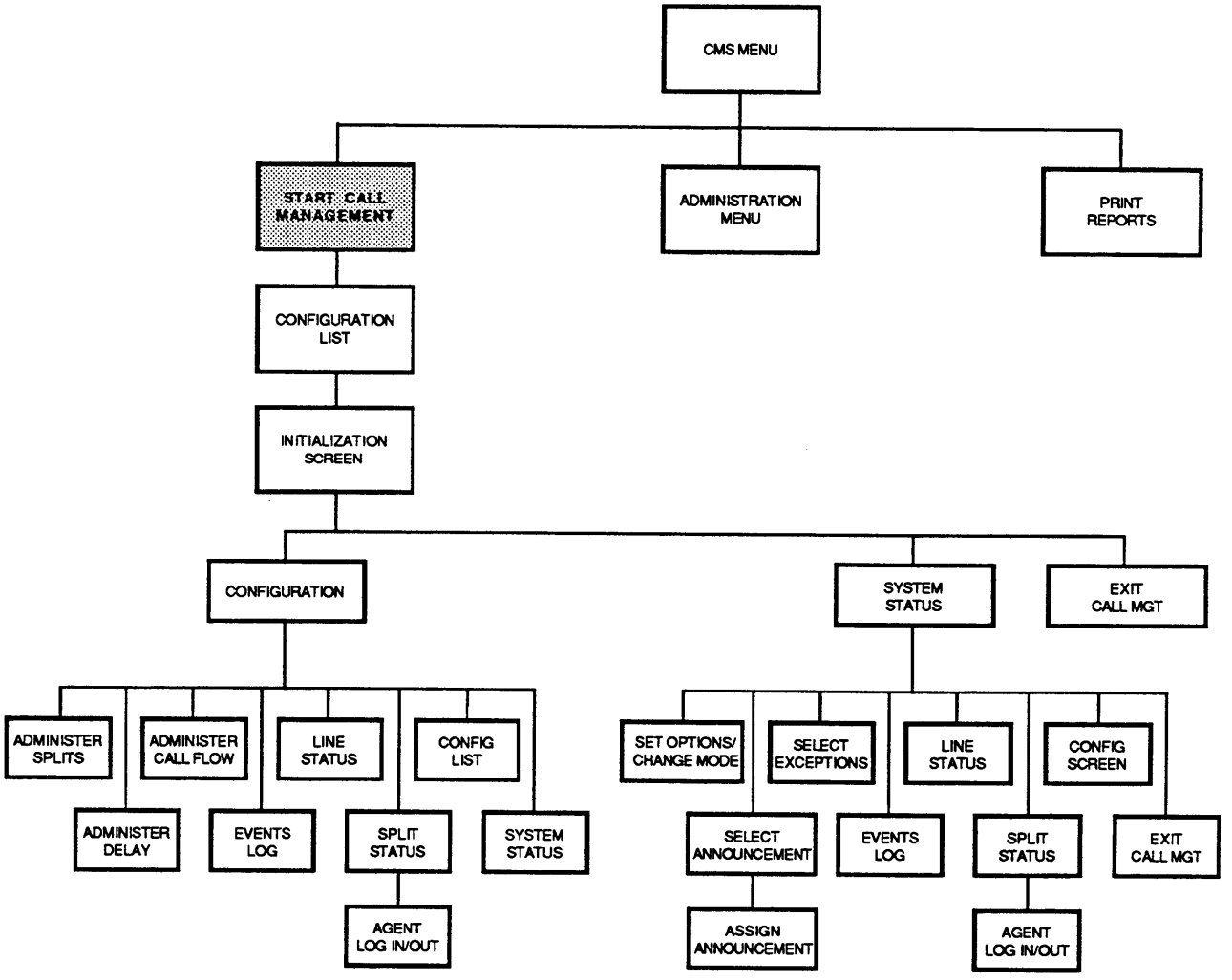
Describes changing CMS from Day Service mode (where CMS routes calls to agents) to Night Service mode (where CMS answers calls, connects them to a delay message, and then disconnects them).

Day-to-Day Operation of CMS

Describes how the CMS Supervisor at Bon Voyage Travel, a fictitious business, uses CMS on a typical day. You may want to read this brief part first to become more familiar with the types of activities involved in using CMS.

Figure 5-1, "Menu Map for Call Management," on the following page shows the screens you use to monitor call management and perform dynamic reconfiguration.

FIGURE 5-1 Menu Map for Call Management.



To start CMS call management, follow these steps:

1 Turn on your PC.

If your PC automatically starts the CMS program, the CMS Menu, shown below, appears soon after you turn on the PC. For information on automatic startup, refer to "The AUTOEXEC.BAT File" in Section 3 of this manual.

If you do not use automatic startup, do the following:

- When the MS-DOS prompt **c>** appears, type

  cd \ cms

  and press [Enter].

- When **c>** appears again, type

  cms

  and press [Enter].

  This starts the CMS program. The CMS Menu screen, shown below, appears.

```
CMS MENU                                        CMS CMS1.0 9:19a 04/18

        CALL   MANAGEMENT   SYSTEM   (CMS)
         FOR  THE   AT&T   SYSTEM   25   PBX
                  (C) 1988 by AT&T

                F1 Start Call Management

                F4 Administer CMS

                F5 Print Reports

                F8 Exit to DOS

                                                        F10 - Help
 F Start                F Admin  F Print                    F Exit
 1 Call Mgt             4 CMS    5 Reports                  8 to DOS
```

2 Press [F1] (labeled “Start Call Mgt”) to begin call management.

3 If you have previously selected a particular shift configuration to begin automatically during call management startup, go to step 5. For more information about activating a configuration automatically, see “Selecting a Startup Configuration” in Section 4 of this manual.

If you have not preselected a startup shift configuration, a list of configurations and a prompt appear, as shown below.

```
INITIALIZATION                                        DAY CMS1.0 6:02p 04/20

                    STORED  SHIFT  CONFIGURATIONS

                          1 — DAY
                          2 — EVENING
                          3 — WEEKEND
                          4 — UNUSED
                          5 — UNUSED
                          6 — UNUSED

SELECT CONFIGURATION: Config # (l-6): ___
 F Cancel                                                    F Enter
 1 Prompt                                                    8 Data
```

4 Enter the number of the configuration you want to activate and press [F8] (labeled “Enter Data”).

5 The following Initialization screen appears.

```
INITIALIZATION                                    DAY CMS1.0 6:10p 04/20

                    INITIALIZATION IN PROGRESS
```

6 CMS performs a series of checks. If the CMS-Port Personal Line Button Verification option is on, the following message appears below the "INITIALIZATION IN PROGRESS" message:

PC-Port Verification In Progress--May Last Up to 4 Minutes

CMS will verify that the Personal Line appearances of the CMS trunks are correctly administered on PC jack CU1. Any problems appear on this screen below the "INITIALIZATION IN PROGRESS" message, as well as in the Events Log.

If you receive an error message, find the error message in Section 9, "Troubleshooting," and take the recommended corrective action.

NOTE: Eleven error messages will fit on the Initialization screen. If more than eleven errors are found, the earlier messages displayed will scroll off the screen. In that case, exit call management and print the Events Log Report. By checking the "Time" and "Date" columns on the Events Log Report, you can locate all the error messages generated during call management startup. For more information about generating the Events Log Report, see "Events Log Report" and "How to Generate Reports " in Section 7 of this manual.

You can disable the CMS-Port Personal Line Button Verification option from the administration Set Options screen. Refer to "Setting Options" in Section 4, "Administering CMS ".

7 After successful system checks, the following screen appears and call management begins.

```
INITIALIZATION                                    DAY CMS1.0 6:10p 04/20

                    INITIALIZATION  COMPLETED

                  CMS IS NOW MANAGING CALLS

                                                          F10 - Help
 F Con fig          F System                                  F Exit
 1 Screen           3 Status                                  8 Call Mgt
```

NOTE: When call management begins, all agents are automatically in the Logged Out state. To make themselves available, agents have to press the Available button on their voice terminals. This turns on the light next to the Available button and signals CMS that they are ready to receive calls.

8 Press the function key for the activity you want to perform next. For information on moving the cursor in prompts, entering data, and editing data, see "Using Your PC with CMS" in Section 3.

The function keys active on this screen are:

[F1] **Config Screen** (Configuration Screen)

Press this function key to select the Configuration screen, which displays the active shift configuration. From the Configuration screen you can make changes to the configuration while it is managing calls. For instance, you may want to replace an agent who is absent. For more information, see "Dynamic Reconfiguration, " later in this section.

[F3] **System Status**

Press this function key to select the System Status screen, the "home" screen while CMS call management is running. The System Status screen summarizes the activity in each agent split and line group and lists the status of each voice announcement unit. For information on interpreting this screen, see "Key to System Status Screen Data," later in this section.

[F8] **Exit Call Mgt** (Exit Call Management)

Press this function key to stop call management. You are prompted to confirm your request. Your CMS stops answering new incoming calls but continues to function until all calls already answered by CMS, whether connected to the voice announcement unit, on hold waiting for an agent, or connected to an agent are completed. The status screens continue to be updated as long as calls are being handled.

When all calls are completed, the historical data are written to the PC's hard disk and the CMS Menu screen appears. From the CMS Menu you can choose to administer CMS, print reports, exit to MS-DOS, or start call management again.

[F10] **Help**

Press this function key to display a Help screen containing a description of the functions available from the Initialization screen.

Since it is important that CMS knows when an agent is available for CMS calls, agents must understand how to indicate the work state they are in. In this way your CMS can run efficiently and maintain accurate records.

Agents assigned to splits in an active configuration can be in one of three agent states:

- **Available state.** An agent is available for CMS calls when the light next to the agent's Available button is on.
- **After-Call-Work (ACW) state.** Agents may need to complete work related to the current CMS call. In order to do so, before hanging up from the call, they should place themselves in the ACW state by pressing the ACW button. This turns on the light next to the ACW button. An agent will not receive CMS calls while in the ACW state.
- **Logged Out state.** When agents are neither available for CMS calls nor doing after-call-work, they must be in the Logged Out state. The light next to the agent's Logged Out button must be on. Time spent in this state is not included in report statistics. When CMS is in Night Service mode, all agents are in the Logged Out state.

Agents in the Available or ACW states are considered logged in.

MOVING FROM STATE TO STATE

Logged Out State

When an agent is neither available to accept CMS calls nor doing after-call-work, the agent can enter the Logged Out state by pressing the Logged Out button. (The light next to the Logged Out button goes on.) As the CMS Supervisor, you can also place an agent in the Logged Out state from the Split Status screen.

All agents are automatically in the Logged Out state when CMS call management begins and when CMS stops managing calls with one shift configuration and begins managing calls with another. While CMS is in the Night Service mode, all agents in the active configuration are in the Logged Out **Nite** state.

Individual agents are automatically placed in the Logged Out state:

- When you add an agent to an active configuration.
- When an agent in an active configuration is moved to another station or split .
- When the Agent Logout ACW exception is on and an agent has been in the ACW state for longer than the time specified as the exception threshold. For more information, see "Selecting Agent Exceptions" in Section 4.

Available State

When call management begins, all agents are automatically placed in the Logged Out state. Tell your agents when CMS call management has begun so they can make themselves available for CMS calls. Those agents who are ready for CMS calls can turn on the light next to the Available button at their voice terminals by pressing the Available button.

When agents want to reenter the Available state from the ACW or Logged Out state, they can signal their availability by pressing the Available button and thus turning on the light next to it.

> **NOTE:** Remind agents whom you add to a configuration, move to a new split, or move to a different agent station that they must press the Available button to signal their availability.

After-Call-Work State

When agents need to finish paperwork associated with a CMS call, they can announce their unavailability by pressing the ACW button. (The light next to it goes on.) Agents who refuse a CMS call (that is, the agents do not answer the call within the number of rings specified in the Transfer Return Threshold on the Set Options screen) are automatically placed in the ACW state.

Once you begin call management (as described earlier in "Startup Procedures"), you can monitor line group and split activity through the status screens. The following status screens are described in this section:

- **System Status screen**

  This screen is considered the "home" screen during call management. It summarizes the activity in each line group and split.

- **Split Status screens**

  There is a Split Status screen for each split. This screen describes the activity of each agent in the split and summarizes the activity for the entire split. From this screen you can log in or log out an agent in the displayed split (that is, make an agent available or unavailable for CMS calls).

- **Line Status screen**

  This screen summarizes the activity for each line and line group. From this screen you can change the priority of a CMS or transfer-queue line.

- **Events Log screen**

  This screen lists the 19 most recent exception, warning, and system error messages along with the time they occurred.

By monitoring the status screens, you can discover problems as they occur and correct them through dynamic reconfiguration. See "Dynamic Reconfiguration", later in this section.

To obtain a printed copy of a displayed screen, hold down [Shift] and press [Print Scrn].

CAUTION

If you see the message Don'tPrtSc **on the top line of the screen or** WARNING-- Printer Not Ready. Using Prt Sc Key Will Halt CMS **on the error line, do NOT attempt to print a screen. If you attempt to print a screen while either of these messages is displayed, CMS will stop managing calls.**

If the printer is not ready, you can perform the following checks:

- Make sure the printer is plugged in, turned on, and that the Ready light is on.
- Make sure there is paper in the printer and that the paper is aligned properly and not jammed.
- Press the Form Feed button on the printer to make sure the paper feeds properly. (After you do that, make sure you turn the Ready light back on.)

See "Printer Problems" in Section 9 for more information about troubleshooting your printer.

STATUS SCREEN TERMS

The System Status, Split Status, and Line Status screens provide continuously updated data to help you monitor your CMS. The following terms are used in the remainder of this section to distinguish between different types of calls:

- **Serviced vs. Abandoned**

  "Serviced" calls have come into CMS and were connected to an agent for longer than the Abandoned vs. Incoming Call Threshold. "Abandoned" calls have come into CMS but were not handled by an agent. Either the call was disconnected before being transferred to an agent, or the talk time was less than the Abandoned vs. Incoming Call Threshold set on the Set Options screen. For information about the Abandoned vs. Incoming Call Threshold, see "Setting Options" in Section 4.

- **Completed vs. Not Completed**

  "Completed" calls are those that have been serviced by agents and then disconnected. "Not completed" calls are those that either were abandoned or are currently in progress (ringing, on hold, or connected to agents). When these terms are used to describe "other" (that is, non-CMS) calls, a "completed" call is any call that has been disconnected, and a "not completed" call is one that has not yet been disconnected.

  Many CMS statistics are based on completed activities for a certain hour. If a call is in progress when an hour ends, the data on that call are not included in the statistics for that hour. The data on the call are included instead in the statistics for the hour in which the call is completed. Therefore, some statistics, such as total holding time of a line, may show more than 60 minutes of activity within a given hour.

- **ACD vs. Other**

  Incoming calls to CMS lines which are answered by CMS and transferred to an available agent are considered "ACD" (Automatic Call Distributor) calls. ACD calls include calls that are transferred to an agent using the Transfer-into-Queue feature.

  "Other" calls are non-ACD incoming calls, outbound calls (even if they use CMS lines), inside calls, and calls transferred to a specific agent by another agent or person on System 25 (whether or not the call was originally an ACD Call).

The System Status screen, an example of which is shown below, summarizes the activity in each line group and agent split. It is considered the “home” screen during call management. For an explanation of the data on this screen, see “Key to System Status Screen Data,” later in this section.

```
SYTEM STATUS                                          DAY CMS1.0 10:26a 05/19


          LINE GROUP INFORMATION                ANNOUNCEMENT UNIT STATUS
     Line  |...Lines... ||...Splits... |  |...1... ||...2... ||...3... | |...4... |
     Group  Busy  Total  Main  Sec  Flow   PUBLIC   BUSINES   CHARTER
    A PUBLC  2     9     1    4    Off    IDLE     - - - -   - - - -   - - - -
    B BUSNS  5     6     2    3    On     - - - -  CNCT      - - - -   - - - -
    C CHART  0     5     3    2    Off    - - - -  - - - -   IDLE      - - - -
    D  -     0     0     -    -    Off    - - - -  - - - -   - - - -   - - - -


                                 SPLIT  INFORMATION
          |-------Agents------- ||-Waiting- ||-Abandon- |Intrflw |-Calls Handled- |Serv
    Split  ACD  Aval  ACW  Out  Othr  Num  Old  Num  Delay  In  Out  Num  AvgTalk  ASA  Levl
    1 PUBLC 2   2     1    1    0    0    0s   1    7s     0   0   66   2:02    10s  90%
    2 BUSNS 3   0     0    0    0    2    7s   0    0s     0  11   42   2:55    37s  57%
    3 CHART 0   2     0    0    1    0    0s   0    0s    11   0   51   2:25    51s  33%
    4 SUPPT 0   0     0    5    0    0    0s   0    0 s    0   0    0   0:00     0s   0%
    5-      0   0     0    0    0    0    0s   0    0s     0   0    0   0:00     0s   0%
    6 -     0   0     0    0    0    0    0s   0    0s     0   0    0   0:00     0s   0%


                                                                      F10  -  Help
 FSet  Opt/F  Select  F Select F Events  F  Line  F Split  F Config F  Exit
 1Chg  Mode 2 Anncs   3Exceptns 4  Log   5 Status 6 Status 7 Screen 8Call Mgt
```

So you can tell at a glance if CMS is operating efficiently, the System Status screen lists:

- The status of line groups (the number of busy lines and the total number of lines in the line group)
- How splits are assigned to line groups and whether or not intraflow is turned on
- The status of each voice announcement unit and an indication of the line group(s) to which it is assigned
- Status information on each split (such as the number of agents on CMS calls and the number of available agents)
- The number of calls waiting for each split
- Important data collected since the beginning of the report hour (such as the number of calls handled and the service level)

If the System Status screen indicates a call management problem that needs immediate correction, you can make that correction through dynamic reconfiguration. For more information, see “Dynamic Reconfiguration,” later in this section.

You can access the screen used to change the system from Day Service mode to Night Service mode by pressing [F1] (labeled “Set Opt/Chg Mode”) on the System Status screen. In Day Service mode, CMS routes calls to agents. In Night Service mode, CMS connects incoming calls to a voice announcement unit and disconnects them when the announcement is over. For more information, see “Selecting Day or Night Service,” later in this section.

To select another screen from the System Status screen, or to exit call management, press the corresponding function key:

[F1] **Set Opt/Chg Mode** (Set Options/Change Mode)

Press this function key to select the Set Options/Modes screen to change the system from Day Service mode to Night Service mode or vice versa. For more information, see “Selecting Day or Night Service,” later in this section. You can also change the Service Level Limit, Abandoned vs. Incoming Call Threshold, Audible Alarm, and Transfer Return Threshold options from this screen. For more information on these options, see “Setting Options“ in Section 4.

[F2] **Select Anncs** (Select Announcements)

Press this function key to reassign voice announcement units to line groups or to change the condition of a unit to removed or available. You can also change the maximum message length of each announcement from this screen. You cannot change the port or PDC associated with a voice announcement unit while CMS is managing calls. This must be done through CMS administration. For more information about administering voice announcement units, see “Administering Announcements” and “Assigning Announcements” in Section 4.

[F3] **Select Exceptns** (Select Exceptions)

Press this function key to display the Select Exceptions screen, which enables you to select different exceptions or change exception thresholds. For more information, see "Selecting Exceptions" in Section 4.

[F4] **Events Log**

Press this function key to select the Events Log screen, which displays the 19 most recent exception, warning, and system error messages. For more information, see “Using the Events Log Screen,“ later in this section.

[F5] **Line Status**

Press this function key to select the Line Status screen, which displays information about every line in every line group. You can also change line priority from this screen. For more information, see “Using the Line Status Screen” and “Key to Line Status Screen Data,” later in this section.

[F6] **Split Status**

Press this function key to view a Split Status screen for a particular split. You are prompted for the split number. The Split Status screens give you a detailed picture of the activity in each split. You can change the status of an agent to Available or Logged Out from these screens. For more information, see "Using the Split Status Screen" and "Key to Split Status Screen Data," later in this section.

[F7] **Config Screen** (Configuration Screen)

Press this function key to select the Configuration screen. From that screen you can begin dynamic reconfiguration of your system. This involves modifying the configuration that is currently managing calls. For more information, see "Dynamic Reconfiguration," later in this section.

[F8] **Exit Call Mgt** (Exit Call Management)

Press this function key to stop call management. You are prompted to confirm your request. Your CMS stops answering new incoming calls but continues to function until all calls already answered by CMS, whether connected to the voice announcement unit, on hold waiting for an agent, or connected to an agent are completed. The status screens continue to be updated as long as calls are being handled.

Once all calls are completed, the historical data are written to the disk and the CMS Menu screen appears. From the CMS Menu you can choose to administer CMS, print reports, exit to MS-DOS, or start call management again.

[F10] **Help**

Press this function key to view a Help screen for the System Status screen.

Key to System Status Screen Data

```
SYSTEM STATUS                                                    DAY  CMS1.0 10:26a 05/19

                                                                  (7)
                LINE GROUP INFORMATION                            ANNOUNCEMENT UNIT STATUS
 (1)  (2)        (3)   (4)  (5)   (6)
 Line  |--Lines--|  |--Splits--|-|      |---1---|  |---2---|  |---3---|  |---4---|
 Group  Busy  Total   Main Sec  Flow     PUBLIC    BUSINES   CHARTER
 A PUBLC  2     9      1   4    Off      IDLE      ----      ----      ----
 B BUSNS  5     6      2   3    On       ----      CNCT      ----      ----
 C CHART  0     5      3   2    Off      ----      ----      IDLE      ----
 D -      0     0      -   -    Off      ----      ----      ----      ----

                                 SPLIT INFORMATION
   (8)  (9)  (10)  (11)  (12)  (13)  (14)  (15)  (16)  (17)  (18)  (19)  (20)  (21)  (22)  (23)
    |-|----|Agents--|----|--| |-Waitng-||-Abandon-| Intrflw |-Calls Handled-| Serv
 Split  ACD Aval ACW Out Othr  Num  Old  Num Delay  In  Out  Num AvgTalk ASA  Levl
 1 PUBLC  2   2   1   1   0    0   0s   1   7s   0   0   66  2:02  10s  90%
 2 BUSNS  3   0   0   0   0    2   7s   0   0s   0  11   42  2:55  37s  57%
 3 CHART  0   2   0   0   1    0   0s   0   0s  11   0   51  2:25  51s  33%
 4 SUPPT  0   0   0   5   0    0   0s   0   0s   0   0    0  0:00   0s   0%
 5 -      0   0   0   0   0    0   0s   0   0s   0   0    0  0:00   0s   0%
 6 -      0   0   0   0   0    0   0s   0   0s   0   0    0  0:00   0s   0%

                                                                   F10 - Help
FSet Opt/ F Select  F Select  F Events  F  Line   F Split   F Config  F  Exit
1Chg Mode 2 Anncs   3Exceptns 4  Log    5 Status  6 Status  7 Screen  8Call Mgt
```

The numbers in the following list correspond to the circled numbers provided in the above screen.

LINE GROUP INFORMATION

1 Line Group — The line group letter and line group ID.

2 Lines Busy — The number of lines in the line group that are not idle. They may be connected, ringing, or on hold.

3 Lines Total — The total number of lines assigned to the line group.

4 Splits Main — The number of the main split assigned to the line group. If no main split is assigned, a hyphen (-) appears instead of a number.

5 Splits Sec — The number of the secondary split assigned to the line group for intraflow. The secondary split can receive calls for the line group only if intraflow is on. If no secondary split is assigned, a hyphen (-) appears instead of a number.

6 Flow — Intraflow status is indicated by ***On*** or ***Off***.

ANNOUNCEMENT UNIT STATUS	**7** Announcement Unit Status	Number, ID, and status of each voice announcement unit. Statuses are as follows: **—**: the unit is not assigned to that particular line group or is not administered in CMS. **BUSY:** the unit is in use on a CMS call, but the call is not connected to a line in that line group. **CNCT:** the unit is connected to one of the line group's calls. **IDLE:** the unit is in service and assigned to that line group, but is not connected to a call at the moment. **RMVD:** the unit has been taken out of service by the CMS Supervisor, but is still assigned to that line group. **BRKN:** CMS has determined that the unit is not working and has taken it out of service. **TEST:** CMS is performing a test on the unit to see if it will answer a call. This test is performed automatically when a unit is put back into service and also when CMS call management is started. **OTHR:** A non-CMS call is connected to the unit or the message is being played during the test call.
SPLIT INFORMATION	**8** Split	The number and ID of each split.
	9 Agents ACD	The number of agents currently active on ACD (CMS) calls. Active calls include both calls currently connected to an agent and calls the agent has placed on hold.
	10 Agents Avail	During Day Service, the number of agents currently available to receive ACD (CMS) calls (that is, agents whose Available light is on and whose voice terminals are on-hook).
	11 Agents ACW	During Day Service, the number of agents on-hook in the After-Call-Work state.
	12 Agents Out	During Day Service, the number of agents in the Logged Out state. During Night Service, the number of agents on-hook.

13 Agents Othr	During Day Service, the number of agents in the Available or ACW state that are currently active on non-ACD calls such as outgoing calls, non-ACD incoming calls, and inside calls. Active calls include calls currently connected to agents and calls agents have placed on hold. Also included are agents handling calls transferred directly to them by other agents using the System 25 Transfer feature, even if the calls originally came in on CMS lines. (Note, however, that agents handing calls transferred to them through the CMS Transfer-into-Queue feature are counted as being active on an ACD call.) During Night Service, the number of agents off-hook.
14 Waiting	The number of CMS calls that are waiting to be transferred to an agent in the split.
15 Waiting Old	The number of seconds the current oldest call has been waiting to be transferred to an agent in a particular split. Call waiting time begins when a call reaches System 25. The waiting time ends when the call begins ringing at the station of the agent who answers it.

The following information reflects activity during the current hour only.

16 Abandon Num	The number of abandoned calls for a particular split. Abandoned calls include those that were disconnected prior to being answered by an agent and those that were answered by an agent but had a talk time less than the Abandoned vs. Incoming Call Threshold. Abandoned calls are credited to the main split, even if the call was abandoned after being intraflowed to the secondary split.
17 Abandon Delay	The average length of time (in seconds) abandoned calls spent waiting in the system.
18 Intrflow In	The number of serviced calls intraflowed into this split from another split. Calls are credited to the split after they are completed (that is, disconnected).
19 Intrflow Out	The number of serviced calls originally queued for this split but intraflowed to the secondary split. Calls are credited to the split after they are completed (that is, disconnected).

20 Calls Handled Num	The total number of ACD calls serviced by a split. This includes completed calls only; abandoned calls are not counted.
21 Calls Handled Avg Talk	The average time (in minutes and seconds) that agents in a particular split spent on each CMS call they completed. Talk time includes time that calls were put on hold by an agent. Completed intraflowed calls are also included.
22 Calls Handled ASA	The average speed of answer (ASA) for completed calls. It is the average number of seconds that these calls waited for an agent. Waiting time includes the initial ringing time, CMS hold time, and the time the call rings at an agent's voice terminal. Abandoned calls are not counted. An average speed of answer of zero means no calls were answered by that split. The waiting time for intraflowed calls is reflected in the average speed of answer for both the main and secondary splits; that is, the waiting time is divided proportionally based on the amount of time the call waited in each split.
23 Service Levl	The service level is the percentage of calls connected to agents within the Service Level Limit set by the CMS Supervisor on the Set Options screen. This includes completed calls only; abandoned calls are not counted.

With the Split Status screens, you can get a detailed picture of the activities of each agent-in each split. You can also make an agent available or unavailable for CMS calls by logging the agent in or out from the Split Status screen.

The same type of data is collected for each split. Each Split Status screen contains one split's data. Pressing [F6] (labeled "Split Status") from any other status screen, the Configuration screen, or the Events Log screen, prompts you to enter the split number for the Split Status screen you want to see. A sample Split Status screen appears below.

```
SPLIT STATUS                                          DAY  CMS1.0 4:27P 06/14

                        SPLIT 2: BUSNS                          SPLIT STATUS
                     |---ACD Calls--- | Calls |--Other-- |       |Waiting |
PDC  ID   Stat   Line  Num  AvgTlk  AvgACW  Rfusd  Num  AvgTlk  Split  Num  Old
407 SARAH Ring         5  2:19   0:23    0      0   0:00  1 PUBLC   1   6s
408 JOHN  ACD  W1242   5  1:39   0:27    0      0   0:00  2 BUSNS   2  122s
409 JIM   Aval         4  2:04   0:00    1      3   1:54  3 CHART   2  55s
Spl 2:2 Avail/3 Tot   14  2:00   0:25    1      3   1:54  4 SUPPT   0   0s
                                                           5  -     0   0s
                                                           6  -     0   0s

                                                        CALL FLOW
                                                     |Splits- | Intra
                                                     Gp  Main  Sec  Flow
                                                     A    1    4    On
                                                     B    2    3    Off
                                                     C    3    2    On
                                                     D    -    -    Off

                                                                   F10 - Help
Log In   Flog Out          F Events F Line   F Split   F Config F System
1 Agent  2 Agents          4 log    5 Status 6 Status  7 Screen 8 Status
```

NOTE: If the split has more than 14 agents, the Split Status screen contains two pages.

The left section of the screen describes the activities of each agent in the split and summarizes the activity in the entire split. The right side of the screen keeps you in touch with the system as a whole by displaying the number of calls waiting to be transferred to agents for each split and call flow status for each line group. For an explanation of each type of data, see "Key to Split Status Screen Data" later in this section.

If the data on a Split Status screen indicate a problem that needs immediate correction, you can do so through dynamic reconfiguration. For more information, see "Dynamic Reconfiguration," later in this section.

To log in or log out an agent or view the next or previous page of a list of agents, press the corresponding function key:

[F1] **Log In Agent**

Press this function key to place an agent currently in the Logged Out state into the Available state. The agent must be in the displayed split of the active configuration. The light next to the agent's Available button will automatically turn on, and the light next to the Logged Out button will turn off. The agent's status will be updated on the Split Status screen to **Aval** if the agent station is on-hook, or **Othr** if the station is off-hook.

> **NOTE:** This function is available only when CMS is in Day Service mode.

After you press [F1] (labeled " Log In Agent") , the following prompt appears:

Prompt: **LOG IN AGENT: ID: _____**

Action: **1** Enter the ID of an agent in the displayed split of the active configuration.

2 Press [F8] (labeled "Enter Data").

[F2] **Log Out Agent**

Press this function key to log out an agent who is presently in the Available or in the ACW state. The agent must be in the displayed split. An agent who is currently handling a CMS call cannot be logged out until he or she has finished the call. The light next to the agent's Logged Out button automatically turns on, and the light next to the Available or ACW button turns off. The agent's status is updated on the Split Status screen to **LOut** .

> **NOTE:** This function is available only when CMS is in Day Service mode.

After you press [F2] (labeled "Log Out Agent") , the following prompt appears:

Prompt: **LOG OUT AGENT: ID: _____**

Action: **1** Enter the ID of an agent in the displayed split who is currently in the Available or ACW state.

2 Press [F8] (labeled "Enter Data").

[F3] **Next/Previous Page**

If there are more than 14 agents in the displayed split, you can press this function key (labeled "Next Page") to view the second page of the list of agents. When you are viewing the second page of the agent list, you can press this function key (labeled "Previous Page") to view the first page again. If you have fewer than 14 agents in the split, [F3] is blank.

To select another screen from the Split Status screen, press the corresponding function key:

[F4] **Events Log**

Press this function key to select the Events Log screen, which lists the 19 most recent exception, warning, and system error messages. For more information, see "Using the Events Log Screen," later in this section.

[F5] **Line Status**

Press this function key to select the Line Status screen, which displays information about every line and every line group. For more information, see "Using the Line Status Screen" and "Key to Line Status Screen Data," later in this section.

[F6] **Split Status**

Press this function key to view the Split Status screen for a different split. You are prompted to enter a split number.

[F7] **Config Screen** (Configuration Screen)

Press this function key to select the Configuration screen. From that screen you can begin dynamic reconfiguration of your system. For more information, see "Dynamic Reconfiguration, " later in this section.

[F8] **System Status**

Press this function key to select the System Status screen, which summarizes the activity in each split and line group. For more information, see "Using the System Status Screen" and "Key to System Status Screen Data," earlier in this section.

[F10] **Help**

Press this function key to view a Help screen for the Split Status screen.

Key to Split Status Screen Data

```
SPLIT STATUS                                                    DAY  CMS1.0 4:27p 06/14
                                                                                  (20)   (21)   (22)
(1)   (2)   (3)  (4)   (5)  (6)   (7)                 (8)   (9)   (10)            SPLIT STATUS
                       SPLIT 2: BUSNS                                                |Waiting|
                     |---ACD|Calls-|-|  Calls |--Other--|--|                 |
PDC   ID    Stat  Line  Num AvgTlk AvgACW Rfusd Num AvgTlk                Split   Num  Old
407   SARAH Ring        5   2:19   0:23   0    0   0:00                1 PUBLC   1   6s
408   JOHN  ACD   W1242 5   1:39   0:27   0    0   0:00                2 BUSNS   2  122s
409   JIM   Aval        4   2:04   0:00   1    3   1:54                3 CHART   2   55s
Spl 2:2 Avail/3   Tot   14  2:00   0:25   1    3   1:54                4 SUPPT   0   0s
(11)  (12)  (13)        (14) (15)  (16)  (17) (18) (19)                5 -       0   0s
                                                                        6 -       0   0s
                                                                  (23)  (24)  (25)  (26)
                                                                        CALL FLOW
                                                                      |-Splits-|  Intra
                                                                  Gp  Main  Sec  Flow
                                                                  A    1    4    On
                                                                  B    2    3    Off
                                                                  C    3    2    On
                                                                  D    -    -    Off

                                                                                F10 - Help
F Log In  FLog Out          F Events  F  Line   F Split   F Config  F System
1 Agent   2 Agent           4  Log    5 Status  6 Status  7 Screen  8 Status
```

The numbers in the following list correspond to the numbers circled in the sample screen above. *The statistics presented on this screen reflect the current hour only.*

AGENT STATUS

1 PDC — The PDC of the agent's voice terminal.

2 ID — The ID assigned to the agent.

3 Status	The agent's current status. During CMS Day Service an agent's status can be as follows: **Aval:** The agent is currently available to accept an ACD (CMS) call. The light next to the agent's Available button is on, and the agent's voice terminal is on-hook. **ACD:** The light next to the agent's Available or ACW button is on, but the agent is busy on an ACD (CMS) call or has placed an ACD call on hold. The associated line ID is displayed in the "Line" column. **ACW:** The light next to the agent's ACW button is on, and the agent's voice terminal is on-hook. **Othr:** The light next to the agent's Available or ACW button is on, but the agent is busy on a non-ACD call. **LOut:** The light next to the agent's Logged Out button is on. **Ring:** The agent's voice terminal is ringing with an ACD (CMS) call. During CMS Night Service, an agent's status can be: **Nite:** The agent's voice terminal is on-hook. **Othr:** The agent's voice terminal is off-hook.
4 Line	The line ID of the line to which the agent is connected while servicing an ACD (CMS) call.
5 ACD Calls Num	The number of completed ACD (CMS) calls the agent has serviced. This figure includes intraflowed calls.
6 ACD Calls AvgTlk	The average amount of time (in minutes and seconds) the agent has spent on each completed ACD (CMS) call. This figure includes intraflowed calls .
7 ACD Calls AvgACW	The average amount of time (in minutes and seconds) the agent has spent on-hook in the After-Call-Work state. Time spent off-hook on non-ACD ("other") calls while in the After-Call-Work state is not included. If no ACD calls were serviced by the agent during the data collection period, the total ACW time is reported instead of the average ACW time.

8 Calls Rfusd	The number of ACD (CMS) calls that rang at an agent's station and were not answered by the agent before the Transfer Return Threshold was reached. **NOTE:** A CMS call continues to ring at an agent station beyond the Transfer Return Threshold if no other agent is available and the caller has already heard the announcement (or no announcement is available). Even though the call continues to ring at the station, CMS moves the station from the Available to the ACW state when the Transfer Return Threshold is exceeded. To receive credit for the call after it has exceeded the threshold, the agent must press the Available button before answering the call. Otherwise, the agent is credited for handling an "other" call.
9 Other Num	The number of completed non-ACD calls the agent has placed or received.
10 Other AvgTlk	The average amount of time (in minutes and seconds) the agent has spent on completed "other" calls. This includes any time during which the agent had the calls on hold.

SPLIT SUMMARY LINE

Summary data for the agent split appear in reverse video (dark letters on a light background) below the agent data. The figures are totals and averages for the entire split during the current hour.

11 Spl X	The number of the split, such as Spl 1 for split 1.
12 XX Avail	The number of agents currently available to answer ACD (CMS) calls.
13 XX Tot	The total number of agents currently assigned to the split.
14 ACD Calls Num	The total number of ACD calls answered by agents in the split.
15 ACD Calls AvgTalk	The average talk time per ACD (CMS) call (not per agent).
16 ACD Calls AvgACW	The average ACW time per call.
17 Calls Rfusd	The total number of calls refused.
18 Other Num	The total number of non-ACD calls placed or answered.

19 Other AvgTlk	The average talk time per non-ACD call.

SPLIT STATUS

The top right section of the screen summarizes calls waiting for all splits.

20 Split	The number and ID of the split.
21 Waiting Num	The number of CMS calls that are waiting to be transferred to an agent in the split.
22 Waiting Old	The number of seconds the current oldest call has been waiting to be transferred to an agent in a particular split. Call waiting time ends when the call begins ringing at the station of the agent who answers it.

CALL FLOW INFORMATION

The bottom right section of the screen shows how splits are assigned to line groups and whether intraflow is turned on or off for each line group.

23 GP	The line group letter.
24 Splits Main	The number of the main split assigned to the line group. A hyphen (-) indicates that there is no main split assigned to the line group.
25 Splits Sec	The number of the secondary split assigned to the line group. A hyphen (-) indicates that there is no secondary split assigned to the line group.
26 IntraFlow	The intraflow status for the line group (On or Off).

The Line Status screen, a sample of which is shown below, summarizes the activity for each line in each line group. Pressing [F5] (labeled “Line Status”) from any other status screen, the Configuration screen, or the Events Log screen selects the Line Status screen.

```
LINE STATUS                                                    Day  CMS1.0  10:28a  06/14

                                  LINE STATUS
  Sub                          |.Calls.|    Sub                        |.Calls.|    SPLIT  STATUS
Gp  Gp  Line  P  Status  Num  HldT  Gp  Gp  Line P  Status  Num  HldT  |Waiting |
 A  PL  L3070  ↔  JOEL   4    13m  B  3   BUSY/6 Total      15 Calls  Split   Num   Old
    PL  L3071  ↔  LINDA  2     6m                                  1 PUBLC  2     21s
    PL  L3072  ↔  IEN    2     7m  C  CLL1234 ↔  BERNE  6 13m  2 BUSNS  1     76s
    PL  L3073  ↔  JENNY  2     7m     CL L1235 ♫ DON    4  9m  3 CHART  2     36s
    PW  W4185  ↔  BILL   1     3m     CW W3000 ↔ ALLAN  4  9m  4 SUPPT  0      0s
    PW  W4186  ↔  SCOTT  1     3m     CW W3001   ANNC3  3  9m  5 -      0      0s
    PS  S4950  +  RING   0     0m     CW W3002   Ring   2  6m  6 -      0      0s
    PS  S4951  +  RING   0     0m  C  5   Busy/5 Total      19 Calls
    Q1   Q500  +  IDLE   0     0m                                 CALL  FLOW
A  8  Busy/9  Total  12Calls        D  0   Busy/0 Total       0 Calls |-Splits- |Intra
                                                                     Gp Main Sec  Flow
B  BW  W1242 ♫  SARAH 5  12m                                          A  1   4   On
   BW  W1243     Idle  5  13m                                          B  2   3   Off
   BW  W1244     Ring  3   7m                                          C  3   2   On
   BW  W1245  ↔  JOHN  2   6m                                          D  -   -   Off
   BL  L8300     Idle  0   0m
   BL  L8301     Idle  0   0m

                                                                   F10 - Help
   F Change        F Events       F Split     F Config   F System
   1Priority         4 Log       6 Status    7 Screen   8 Status
```

The left section of the Line Status screen summarizes the activity for each line and line group. The right side of the screen keeps you in touch with the system as a whole by displaying the number of calls waiting to be transferred to agents for each split and call flow status for each line group. For an explanation of the data on this screen, see “Key to Line Status Screen Data,” later in this section.

If the data on the Line Status screen indicate a problem that needs immediate correction, you can do so through dynamic reconfiguration. For more information, see “Dynamic Reconfiguration,” later in this section. You can also change the priority of a CMS or transfer-queue line from this screen. (Calls on priority lines are answered before calls on nonpriority lines.)

To change a line's priority or select another screen, press the corresponding function key:

[F1] **Change Priority**

Press this function key to display the prompt that allows you to change a CMS or transfer-queue line from a priority line to a nonpriority line, or vice versa. The priority of a line determines its position in the queue of calls waiting to be answered by an agent. Priority lines are answered first and are indicated by a "+" in the P (priority) column of the Line Status screen.

After you press [F1] (labeled "Change Priority") , the following prompt appears.

Prompt: **CHANGE PRIORITY: Line ID: _____**

Action: **1** Enter a line ID to change the priority of that line.

2 Press [F8] (labeled "Enter Data").

[F4] **Events Log**

Press this function key to select the Events Log screen, which displays the 19 most recent exception, warning, and system error messages. For more information, see "Using the Events Log Screen " later in this section.

[F6] **Split Status**

Press this function key to view the Split Status screen for a particular split. You are prompted to enter a split number. The Split Status screens summarize the activity in each split. You can also make an agent available or unavailable for CMS calls by logging the agent in or out from these screens. For more information, see "Using the Split Status Screens" and "Key to Split Status Screen Data, " earlier in this section.

[F7] **Config Screen** (Configuration Screen)

Press this function key to select the Configuration screen. From that screen you can begin dynamic reconfiguration of your system. For more information and instructions, see "Dynamic Reconfiguration," later in this section.

[F8] **System Status**

Press this function key to select the System Status screen, which summarizes the activity in each split and line group. For more information, see "Using the System Status Screen" and "Key to System Status Screen Data," earlier in this section.

[F10] **Help**

Press this function key to display a Help screen for the Line Status screen.

Key to Line Status Screen Data

```
LINE STATUS                                                    DAY  CMS1.0 10:28a 06/14

                                  LINE STATUS                                                  SPLIT STATUS
Sub                          |-Calls-|      Sub                        |-Calls-|            |Waiting|
Gp Gp  Line  P    Status Num HldT  Gp  Gp  Line P  Status Num HldT                Split    Num Old
A  PL L3070  <-> JOEL   4 13m  B   3 Busy/6 Total      15 Calls                 1 PUBLC   2  21s
   PL L3071  <-> LINDA  2  6m                                                  2 BUSNS   1  76s
   PL L3072  <-> IEN    2  7m  C   CL  L1234 <-> BERNE 6 13m                  3 CHART   2  36s
   PL L3073  <-> JENNY  2  7m     CL  L1235 ♫  DON   4  9m                   4 SUPPT   0  0s
   PW W4185  <-> BILL   1  3m     CW  W3000 <-> ALLAN 4  9m                   5 -       0  0
   PW W4186  <-> SCOTT  1  3m     CW  W3001     ANNC3 3  9m                   6 -       0  0s
   PS S4950 +    Ring   0  0m     CW  W3002     Ring  2  6m
   PS S4951 +    Ring   0  0m  C   5 Busy/5 Total      19 Calls                                CALL FLOW
   Q1  Q500 +    Idle   0  0m                                                      |-Splits-| Intra
A  8 Busy/9 Total    12 Calls     D   0 Busy/0 Total      0 Calls                Gp Main Sec Flow
B  BW W1242 ♫ SARAH        5 12m                                                  A  1.   4   On
   BW W1243      Idle        5 13m                                                 B  2    3   Off
   BW W1244      Ring        3  7m                                                 C  3    2   On
   BW W1245 <-> JOHN         2  6m                                                 D  -    -   Off
   BL L8300      Idle        0  0m
   BL L8301      Idle        0  0m

                                                                                   F10 - Help
F Change                     F Events          F Split    F Config   F System
1Priority                    4  Log            6 Status   7 Screen   8 Status
```

The numbers in the following list correspond to the numbers circled in the above screen. *The statistics described on this screen reflect information for the current hour only.*

LINE STATUS

1 Gp	The letter assigned to the line group.
2 SubGp	The sub-group ID of the line.
3 Line	The ID of the line.
4 P	Line priority status. A "+" in this column indicates that the line is a priority line. Priority lines are answered before nonpriority lines in the line group.

5 Status — The line status, which can be one of the following:

Ring: A call ringing on the line, but CMS has not answered it.

Idle: The line is not in use.

Queued: The call is in the CMS hold state. The call has already been played the announcement and is on hold, waiting for an agent to become available.

♫**AGTID:** The call has been transferred to an agent with the ID, AGTID, but the call has not yet been answered by an agent.

↔ **AGTID:** The agent with the ID, AGTID, has answered and is handling the call.

ANNCX: The call is being played announcement number "X".

Othr: The line is being used by an incoming or outgoing non-CMS call.

NOTE: When a CMS call that comes in on a CMS line (Central Office trunk) is transferred by an agent to a transfer-queue line, the status of the CMS line changes from "↔ AGTID" to "Othr" when the agent who transfers the call goes on-hook.

6 Calls Num — The number of CMS calls that came in on a particular line in the current hour. This includes serviced and abandoned calls. Calls answered by stations other than agent stations are not included. Outgoing calls are also not included.

7 Calls HldT — The amount of time between the moment a call begins ringing at System 25 and the time it is disconnected. Calls HldT includes completed calls only. It includes both serviced and abandoned calls. It does not include calls connected to non-agents nor does it include data on outgoing calls.

LINE GROUP SUMMARY LINE

A line group summary line appears below the data for the lines in the line group. The summary line is displayed in reverse video (dark letters on a light background).

8 XX Busy — The number of lines (XX) in the line group that are currently in use for incoming or outgoing calls.

9 XX Total — The total number of lines (XX) in the line group.

10 XX Calls — The total number of completed CMS calls (XX) to the line group during the current hour. Both serviced and abandoned calls are included.

SPLIT STATUS

The top right section of the screen summarizes calls waiting for all splits.

11 Split	The number and ID of the split.
12 Waiting Num	The number of CMS calls that are waiting to be transferred to an agent in the split.
13 Waiting Old	The number of seconds the current oldest call has been waiting to be transferred to an agent in a particular split. Call waiting time ends when the call begins ringing at the station of the agent who answers it.

CALL FLOW INFORMATION

The bottom right section of the screen shows how splits are assigned to line groups and whether intraflow is turned on or off for each line group.

14 Gp	The line group letter.
15 Splits Main	The number of the main split assigned to the line group. A hyphen (-) indicates that there is no main split assigned to the line group.
16 Splits Sec	The number of the secondary split assigned to the line group. A hyphen (-) indicates that there is no secondary split assigned to the line group.
17 IntraFlow	The intraflow status for the line group (On or Off).

Using the Events Log Screen

The Events Log screen displays the last 19 exception, warning, and system error messages with the time and date they occurred. For more information about exception messages, see “Setting Exceptions” in Section 4 of this manual.

Pressing [F4] (labeled “Events Log”) on any status screen or the Configuration screen selects the Events Log screen. A sample Events Log screen is shown below.

```
EVENTS LOG                                          DAY CMS1.0 3:46p 04/20

  Time Date                    Event
  3:02p 05/18 *** Split 2 - Agent JOHN - Talk Time > = 480 seconds
  4:25p 05/18 *** Split 1 - Agent LINDA - Refused Calls
  4:30p 05/18 *** Split 1 - Oldest Call Waiting > = 45 seconds
  5:35p 05/18 Night Service Now In Effect
  5:43p 05/18 Normal Call Management Shutdown
  5:47p 05/18 REPORT ABORTED - Check Printer
  8:0la 05/19 CMS for System 25 PBX Version 1.0 Call Management Started
  8:02a 05/19 Firmware Version 2.1. Clock Type 18.205
  8:lla 05/19 Day Service Now In Effect
  9:15a 05/19 *** Group C - All Lines Busy >= 240 seconds
  9:27a 05/19 *** Split 1 - Agent JOEL - Refused Calls
 10:03a 05/19 *** Group A - Line L3071 - Hold Time >= 8 minutes
 10:21a 05/19 *** Split 3 - Agent DON - Talk Time >= 480 seconds
 11:20a 05/19 *** Split 2 - #Abandoned Calls >= 3
 ll:32a 05/19 *** Split 1 - Oldest Call Waiting >= 45 seconds
 ll:54a 05/19 *** Split 1 - Agent JENNY - Refused Calls
 12:44p 05/19 *** Group A - Line L3072 - Hold Time >= 8 minutes
  l:33p 05/19 *** Split 3 - Oldest Call Waiting >= 30 seconds
  l:45p 05/19 *** Split 2 - Agent BERNE - Refused Calls
  l:56p 05/19 *** Split 1 - #Abandoned calls >= 4

                                                          F10 - Help
                                F Line   F Split   F Con fig  F System
                                5 Status 6 Status 7 Screen  8 Status
```

You must select the specific exceptions your CMS monitors. If you have not selected any exceptions, the Events Log screen lists only system and warning messages.

If an exception indicates a problem that needs immediate correction, you can do so through dynamic reconfiguration. For more information, see "Dynamic Reconfiguration", later in this section.

To access another screen from the Events Log screen, press the corresponding function key:

[F5] **Line Status**

Press this function key to select the Line Status screen, which displays information about every line in every line group. For more information, see “Using the Line Status Screen” and “Key to Line Status Screen Data,“ earlier in this section.

[F6] **Split Status**

Press this function key to view the Split Status screen for a particular split. (You are prompted for the split number.) The Split Status screens give you a detailed picture of the activity in each split. You can also make an agent available or unavailable for CMS calls by logging the agent in or out from this screen. For more information, see "Using the Split Status Screens" and "Key to Split Status Screen Data," earlier in this section.

[F7] **Config Screen** (Configuration Screen)

Press this function key to select the Configuration screen. From that screen you can begin dynamic reconfiguration of your system. For more information, see "Dynamic Reconfiguration," later in this section.

[F8] **System Status**

Press this function key to select the System Status screen, which summarizes the activity in each split and line group. For more information, see "Using the System Status Screen" and "Key to System Status Screen Data," earlier in this section.

[F10] **Help**

Press this function key to display a Help screen for the Events Log screen.

Supervising Your Agents

As the CMS Supervisor, you may find the CMS Service Monitoring and Assist features useful in supervising your CMS agents. These features require System 25 button administration on your voice terminal.

SERVICE MONITORING

The CMS Service Monitoring feature provides a means of monitoring agents' calls without being detected by the agent or the caller. This feature can be very useful in the agent training process. You can also use the Service Monitoring feature to join a call when an agent requests help with a customer. For this feature, your multiline voice terminal must have one Personal Line button administered for each CMS and transfer-queue line you want to monitor.

ASSIST BUTTONS

Providing your agents with an Assist button gives them a means of visually signaling you when they need help. To do so, an agent presses a System 25 Station-to-Station Message Waiting button, labeled "Assist," administered on his or her voice terminal. When the agent presses the Assist button, the green light next to that button on the agent's voice terminal goes on, as does a corresponding Station-to-Station Message Waiting (Assist) button on your voice terminal. You can also use the Assist button on your voice terminal to turn on the light next to the corresponding Assist button on the agent's voice terminal. If either person presses the Assist button when the green light is on, the Assist button lights at both voice terminals go off. You need one Assist button for each agent whom you want to signal or who may need to signal you.

For more information about these features, see Section 6, "Handling CMS calls."

Once you activate a shift configuration (as described earlier in “Startup Procedures”), you can modify it through dynamic reconfiguration. For example, you can reassign agents or turn on intraflow to handle unexpected increases in incoming call traffic.

Such changes are immediately activated in the current configuration. If you want, you can save the changes before you shut down CMS or before you select another shift configuration. Otherwise, the changes are not saved when the current configuration is no longer active.

You use the following screens during dynamic reconfiguration:

- Configuration screen
- Configure Splits screen
- Configure Call Flow screen
- Configuration List screen

These screens are almost identical to the configuration screens you use for CMS administration. During administration, however, CMS is *not* managing calls. CMS *is* managing calls during dynamic reconfiguration.

Pressing [F1] (labeled “Config Screen”) from the Initialization screen or [F7] (labeled “Config Screen”) from any status screen selects the Configuration screen. It displays the current configuration, as shown in the example below.

```
 CONFIGURATION                                   DAY   CMS1.0  3:20p 04/18

            AGENT SPLITS                      ANSWER/FORCE  DELAY
      |--Agent-- |          |--Agent-- |              Num  Answer  Force
 Split  PDC  ID    Split   PDC   ID      Group  Lines  Delay  Delay
 1 PUBLC 401LINDA  4 SUPPT 417 CRAIG      A PUBLC  9    10s   Off
         402JOEL           418 BARB       B BUSNS  6     0s   On
         403IEN            424 CJ         C CHART  5     5s   Off
         404JENNY  5 -                    D  -     0     5s   Off
         405SCOTT  6 -
         406BILL
 2 BUSNS 407SARAH                                CALL FLOW
         408JOHN                                          Flow
         409JIM                          |-Splits- |Intra Spl  Thresh
 3 CHART 410BERNE                       Gp  Main  Sec  Flow   1   50s
         411DON                         A   1     4    On     2   30s
         412ALLAN                       B   2     3    Off    3   30s
 4 SUPPT 415ANDY                        C   3     2    Off    4   30s
         416LOU                         D   -     -    Off    5   30s
                                                             6   30s
Configuration #1 - Day

                                                          F10 - Help
F Splits  FAns/Forc  F Call  F Events  F Line   F Split  F Config F System
1         2 Delay    3 Flow  4 Log     5 Status 6 Status 7 List   8 Status
```

From the Configuration screen you can perform the types of reconfiguration described below or select other screens. Each of these topics is described in detail later in this section.

- **Reconfiguring Splits**

  Press [F1] (labeled “Splits”) to reach the Configure Splits screen. Through this screen you can add, move, or remove the agents in splits. You can also change the ID of a split.

- **Changing Answer Delay or Force Delay**

  Press [F2] (labeled “Ans/Fore Delay”) to display the Configure Delay screen. Through this screen, you can change the number of seconds calls to a line group ring before CMS answers them and connects them to a delay message if no agents are available to answer the calls (the Answer Delay). You can use the Force Delay option to indicate if you want all callers to a line group to hear a delay message before being transferred to agents.

- **Reconfiguring Call Flow**

  Press [F3] (labeled “Call Flow”) to reach the Configure Call Flow screen. Through this screen you can reassign splits to line groups, change Intraflow Thresholds, and turn intraflow on or off.

- **Using the Configuration List**

  Press [F7] (labeled "Config List") to reach the list of stored shift configurations. With this screen, you can select a different configuration for call management, save your changes either in the current configuration or in another configuration, rename a configuration, or select a startup configuration.

You can also reach the status screens from the Configuration screen.

Once you are familiar with dynamic reconfiguration, you can use the “Quick Reference Guide to Dynamic Reconfiguration,” later in this section. To see how the CMS Supervisor at Bon Voyage Travel uses dynamic reconfiguration during a typical day, see “Day-to-Day Operation of CMS", later in this section.

Pressing [F1] (labeled “Splits”) from the Configuration screen selects the Configure Splits screen, shown below. It looks the same as the Configuration screen except that a box appears around the Agent Splits portion of the screen and the function keys are relabeled. Use this screen to reassign, add, or remove agents in the active configuration.

```
CONFIGURE SPLITS                                        DAY CMS1.0 3:27p 04/18

                 AGENT SPLITS                          ANSWER/FORCE DELAY
          |--Agent--|            |--Agent--|                 Num Answer Force
 Split    PDC  ID       Split    PDC  ID          Group Lines Delay Delay
 1 PUBLC  401 LINDA    4 SUPPT  417 CRAIG        A PUBLC  9    10s   Off
          402 JOEL              418 BARB         B BUSNS  6     0s   On
          403 IEN               424 CJ           C CHART  5     5s   Off
          404 JENNY    5 -                       D -      0     5s   Off
          405 SCOTT    6 -
          406 BILL
 2 BUSNS  407 SARAH                                   CALL FLOW
          408 JOHN                                                Flow
          409 JIM                            |-Splits-| Intra  Spl Thresh
 3 CHART  410 BERNE                          Gp Main  Sec  Flow  1   50s
          411 DON                            A  1    4    On    2   30s
          412 ALLAN                          B  2    3    Off   3   30s
 4 SUPPT  415 ANDY                           C  3    2    Off   4   30s
          416 LOU                            D  -    -    Off   5   30s
                                                                 6   30s

 Configuration #1 - DAY

                                                                   F10 Help
F Add    F Remove F Move   F Replace F New   F Change F Config F Agent
1 Agent  2 Agent  3 Agent  4 Agent   5 Agent 6 Split ID 7 Screen 8 Directry
```

To reconfigure splits, press the function key for the activity you want to perform and follow the instructions:

[F1] Add Agent

Press this function key to assign an agent already listed on the Agent Directory screen to the active configuration. *When you add agents, they are automatically placed in the Logged Out state.* They must make themselves available for calls by pressing the Available button. No report statistics are collected for an agent until this is done.

Prompt: **ADD AGENT: ID:_____ PDC: _____ to Split #:___**

Action:

1 Enter an ID of an agent already entered in the Agent Directory.

2 Enter the System 25 PDC of an agent station that is already entered on the Administer Stations screen.

3 Enter a split number (1 through 6).

4 Press [F8] (labeled “Enter Data”).

[F2] **Remove Agent**

Press this function key to remove an agent from the active configuration. (The agent entry remains on the Agent Directory screen.)

Prompt: **REMOVE AGENT: ID: _____**

Action:

1. Enter the agent's ID.
2. Press [F8] (labeled "Enter Data").
3. When the confirmation prompt appears, type ***y*** to confirm your request or ***n*** to cancel it.
4. Press [F8] (labeled "Enter Data").

[F3] **Move Agent**

Press this function key to move an agent from one agent station to another and/or from one split to another. (This is equivalent to removing the agent from one agent station or split and adding the agent to another agent station or split.)

> **NOTE:** The agent is automatically placed in the Logged Out state, and no statistics are collected for the agent until the agent makes himself or herself available or until you make the agent available by logging in the agent from the Split Status screen. See "Using the Split Status Screen", earlier in this section.

Prompt: **MOVE AGENT: ID: _____ New PDC: _____ New Split #: _**

Action:

1. Enter the ID of the agent you want to move.
2. You may enter a new PDC, a new split number, or both. To skip a field, press [F6] (labeled "Next Field").
3. Press [F8] (labeled "Enter Data") after your last entry.

Check the Splits section of the screen to make sure you moved the agent as you intended.

Moving an agent to a different station in the same split does not affect the data being collected for that agent. Moving an agent from one split to another, however, results in partial collected data for the hour in which the move was made. To keep the agent's data as accurate as possible, do not use the Move Agent function key to move an agent to a different split. Instead, *remove* the agent from the first split and *add* the agent to the second split with a *different* ID. (If the Agent Directory screen does not already have more than one ID for that agent, use the New Agent function key to add the agent with a different ID.)

For example, an agent named Hal might have the ID HAL1 when he works in split 1 and HAL2 when he works in split 2. If you use a separate ID for him for each split in which he works, the data will show Hal's work in each split separately.

[F4] **Replace Agent**

Press this function key to substitute agents at a particular agent station. This is equivalent to removing one agent and adding another agent to the same agent station in the same split.

> **NOTE:** The agent you added remains in the same state as the agent being replaced.

Prompt: **REPLACE AGENT: Remove Agent ID: _____and Add Agent ID: _____**

Action:

1. Enter the ID of the agent to be removed.
2. Enter the ID of the new agent. (This agent must already be entered into the Agent Directory.)
3. Press [F8] (labeled "Enter Data").

[F5] **New Agent**

Press this function key to add a new agent (one who is not listed in the Agent Directory) to the active configuration. Agents added using the New Agent function on the Configure Splits screen are simultaneously added to the Agent Directory.

Prompt:

NEW AGNT: ID: _____ Last Name: _____ First: _____ PDC: ___ Split #:____

Action:

1. Enter the agent ID, up to 5 uppercase letters or numbers. (The ID must be unique.)
2. Enter the agent's last name, up to 12 uppercase and/or lowercase letters, numbers, or special characters, with no spaces between them.
3. Enter the agent's first name, up to 8 uppercase and/or lowercase letters, numbers, or special characters, with no spaces between them.
4. Enter the System 25 PDC. (The PDC must already be assigned to a station, that is, already listed on the Administer Stations screen.)
5. Enter the split number (1 through 6).
6. Press [F8] (labeled "Enter Data").

[F6] **Change Split ID**

Press this function key to assign, change, or delete a split ID. Each split ID must be unique. However, a split and a line group can have the same ID.

Prompt: **CHANGE SPLIT ID: Split # (l-6): _ New Split ID: _____**

Action: **1** Enter a split number (1 through 6).

2 Enter a split ID (up to 5 uppercase letters or numbers).

3 Press [F8] (labeled "Enter Data").

NOTE: Once you have entered a split ID for a split in one shift configuration, it remains the same for that split in other shift configurations.

[F7] **Config Screen** (Configuration Screen)

Press this function key to return to the Configuration screen. The box around the agents section of the screen disappears and the functions keys are relabeled.

[F8] **Agent Directry** (Agent Directory)

Press this function key to view the Agent Directory screen if you need to look up an agent's ID in order to add the agent to a split. You can also edit the Agent Directory. From the Agent Directory screen, press [F7] (labeled "Config Splits") to return to the Configure Splits screen.

[F10] **Help**

Press this function key to display a Help screen for the Configure Splits screen.

Reconfiguring Answer Delay or Force Delay

You can change the current setting for the Answer Delay or Force Delay option at any time.

ANSWER DELAY

The **Answer Delay** is the number of seconds CMS lets a call ring before connecting it to a voice announcement unit if no agent is available to service the call.

Think of Answer Delay as a trade-off between the time a customer spends listening to ringing and the time the customer spends on hold. You can use a different Answer Delay value for each line group, depending on the type of lines in the group and the amount of time the caller is likely to wait before an agent is available.

The initial setting for Answer Delay is 5 seconds, the approximate length of time from the beginning of one ring to the beginning of the next. Consider these factors when choosing an Answer Delay value for a line group:

- Someone begins paying for a call as soon as the line is answered. If calls are likely to be on hold before an agent is available, you can increase the Answer Delay value in order to decrease the amount of time on hold and the cost of the call.
- You may want to increase the Answer Delay value if you know callers have to wait for an agent. Callers may be less inclined to hang up if they wait a little longer for CMS to answer the call but spend less time on hold.

FORCE DELAY

The **Force Delay** option controls the transfer of calls to and from the voice announcement unit. If Force Delay is on for a particular line group, calls that arrive for that line group will not be transferred to an agent until callers have heard the entire message, even if an agent is available. This means that calls may be queued up waiting to hear the delay message even when agents are available.

When Force Delay is on, the Answer Delay setting for that line group is ignored by CMS; that is, calls to that line group are transferred to the line group's voice announcement unit as soon as it is available. If Force Delay is off, the caller will be transferred to an agent as soon as one becomes available.

Pressing [F2] (labeled "Ans/Forc Delay") from the Configuration screen selects the Configure Delay screen. A box appears around the Answer/Force Delay area of the screen and a prompt appears, as shown in the following example of a Configure Delay screen.

```
CONFIGURE DELAY                                          DAY CMS1.0 3:31p 04/18

                    AGENT SPLITS                          ANSWER/FORCE DELAY
              |--Agent--|          |--Agent--|                Num Answer Force
      Split   PDC  ID      Split   PDC  ID          Group Lines Delay Delay
    1 PUBLC 401 LINDA   4 SUPPT  417 CRAIG         A PUBLC  9    10s  Off
            402 JOEL             418 BARB          B BUSNS  6     0s  On
            403 IEN              424 CJ            C CHART  5     5s  Off
            404 JENNY   5 -                        D -      0     5s  Off
            405 SCOTT   6 -
            406 BILL
    2 BUSNS 407 SARAH                                      CALL FLOW
            408 JOHN                                                Flow
            409 JIM                          |-Splits-| Intra   Spl Thresh
    3 CHART 410 BERNE                        Gp Main Sec Flow     1  50s
            411 DON                          A  1   4  On        2  30s
            412 ALLAN                        B  2   3  Off       3  30s
    4 SUPPT 415 ANDY                         C  3   2  Off       4  30s
            416 LOU                          D  -   -  Off       5  30s
                                                                 6  30s
    Configuration #1 - DAY

ANS/FORCE DELAY: Grp (A-D):___ Ans Delay (0-99 sec):___ Force Delay (ON/OFF):____
  F Cancel                          F Previous F Next          F Enter
  1 Prompt                          5 Field    6 Field         8 Data
```

To change Answer Delay or Force Delay for a line group, respond to the prompt:

Prompt:

ANS/FORCE DELAY: Grp (A-D):___ Ans Delay (0-99 sec): ___ Force Delay (ON/OFF): ___

Action:

1 Enter the line group letter (A through D).

2 Enter the Answer Delay, the number of seconds (0 through 99) you want calls to ring before CMS connects them to an announcement unit if an agent is not available. Leave the field blank to keep the current value.

3 Type ***on*** or ***off*** to turn Force Delay on or off for the line group. Leave the field blank to keep the current value.

4 Press [F8] (labeled “Enter Data”).

If you experience unexpected changes in call traffic, you may need to reconfigure call flow assignments in the active configuration. For instance, you may decide to reassign secondary splits or turn on intraflow for some line groups. Pressing [F3] (labeled “Call Flow”) from the Configuration screen selects the Configure Call Flow screen, a sample of which is shown below.

```
CONFIGURE LIST                                   DAY CMS1.0 3:32p 04/18

                 AGENT SPLITS                        ANSWER/FORCE DELAY
            |--Agent--|            |--Agent--|                Num  Answer  Force
     Split  PDC  ID       Split    PDC  ID          Group  Lines Delay  Delay
     1 PUBLC 401 LINDA    4 SUPPT  417 CRAIG       A PUBLC  9    10s    Off
             402 JOEL              418 BARB        B BUSNS  6     0s    On
             403 IEN               424 CJ          C CHART  5     5s    Off
             404 JENNY    5 -                      D -      0     5s    Off
             405 SCOTT    6 -
             406 BILL
     2 BUSNS 407 SARAH                        CALL FLOW
             408 JOHN                                   Flow
             409 JIM                   |-Splits-| Intra  Spl Thresh
     3 CHART 410 BERNE                Gp Main Sec Flow   1   50s
             411 DON                  A  1    4   On     2   30s
             412 ALLAN                B  2    3   Off    3   30s
     4 SUPPT 415 ANDY                 C  3    2   Off    4   30s
             416 LOU                  D  -    -   Off    5   30s
                                                         6   30s
   Configuration #1 - DAY

                                                                F10 Help
F Assign F Flow F  Set                                  F Config
1 Splits 2 ON/OFF 3 Thresh                              7 Screen
```

Use the Configure Call Flow screen to set thresholds for intraflow, assign splits to line groups, and turn intraflow on or off.

To reconfigure call flow, press the function key for the activity you want to perform:

[F1] Assign Splits

Press this function key to assign main splits and secondary splits to line groups. If you do not want to assign a secondary split for a line group, enter a hyphen (-) instead of a split number. For more information on intraflow, see “Administering Call Flow” in Section 4.

Prompt:

ASSIGN SPLITS for Call Flow: Line Group (A-D): ___ Main Split:___ Secondary Split:___

Action: **1** Enter a line group letter (A through D).

2 Enter a main split number (1 through 6), or leave the field blank if you do not want to change it.

3 Enter a secondary split number (1 through 6), or enter a hyphen (-) if you do not want to assign a secondary split. Leave the field blank if you do not want to change it.

4 Press [F8] (labeled "Enter Data").

[F2] **Flow On/Off** (Turn Intraflow On/Off)

Press this function key to turn intraflow on or off for a particular line group. Each line group's intraflow status appears in the Intraflow column of the Call Flow area of the screen.

Prompt: **CHANGE INTRAFLOW: Line Group (A-D): ___**

Action: 1 Enter a line group letter (A through D).

2 Press [F8] (labeled "Enter Data"). The intraflow designation for that line group automatically changes from ***On*** to ***Off*** or vice versa.

[F3] **Set Thresh** (Set Intraflow Threshold)

Press this function key to change the Intraflow Threshold for a split. This threshold is based on the number of seconds the oldest call has been waiting in a split's queue. The initial setting is 30 seconds. For more information on intraflow and Intraflow Thresholds, see "Administering Call Flow" in Section 4.

Prompt:

SET CALL FLOW THRESHOLD: Split # (1-6):___ Threshold (0-999 sec):___

Action: 1 Enter a split number (1 through 6).

2 Enter a number of seconds (0 through 999).

3 Press [F8] (labeled "Enter Data").

[F7] **Config Screen** (Configuration Screen)

Press this function key to return to the Configuration screen.

[F10] **Help**

Press this function key to display a Help screen for the Configure Call Flow screen.

Using the Configuration List

The Configuration List screen, shown below, is very similar during call management and administration.

```
CONFIGURATION  LIST                                  DAY CMS1.0 3:18p 04/18

                    STORED  SHIFT  CONFIGURATIONS

              (edited)   1 - DAY (Startup)
                         2 – EVENING
                         3 – WEEKEND
                         4 – UNUSED
                         5 – UNUSED
                         6 – UNUSED

                                                              F10  Help
F Select  F Save  F Rename  F Choose                     F Config  F System
1 Config  2 Config  3 Config  4 Startup                  7 Screen  8 Status
```

The shift configuration currently in use for call management is shown in reverse video. If you made any changes to the configuration but have not yet saved them, the word **(edited)** appears to the left of that configuration number. If you have chosen a configuration to be invoked automatically when you start call management, the word **(Startup)** appears to the right of that configuration name.

During call management, you can perform these activities with the Configuration List:

- Select a different shift configuration for call management.
- Save the changes you made during dynamic reconfiguration.
- Rename a configuration.
- Select a startup configuration.
- Display the Configuration screen for the active configuration.
- Display the System Status screen.

To use the Configuration List, press the function key for the activity you want to perform:

[F1] **Select Config** (Select Configuration)

Press this function key to select a different shift configuration for call management.

Prompt: **SELECT CONFIGURATION: Config # (1-6): ___**

Action:

1 Enter a configuration number (1 though 6).

2 Press [F8] (labeled "Enter Data").

3 When the confirmation prompt appears, type ***y*** to confirm your request or ***n*** to cancel it.

4 Press [F8] (labeled "Enter Data").

When CMS is changing from one shift configuration to another in response to your request, calls are handled as follows:

- All ACD (CMS) calls connected to agents (that is, in-progress calls) are considered "completed" for the purpose of report statistics at the time of the request to select a new configuration.
- Calls already in the queue for agent splits are placed in a temporary queue. The time of arrival for each call is saved.
- All new incoming calls are connected to the delay message and then placed in a temporary queue.

When the new configuration is activated:

- Calls currently connected to agents are credited as "other" calls, in the split in the new configuration.
- Calls in the temporary queue are assigned to the appropriate queues according to their order of arrival.
- New calls (that is, those received after the new shift configuration is active) are handled normally.

NOTE: All agents in the new configuration are automatically placed in the Logged Out state and must make themselves available for CMS calls by pressing their Available button.

[F2] **Save Config** (Save Configuration)

Press this function key to save any changes you made to the active configuration. If you don't save the changes, they will be lost when you stop managing calls with that configuration. You can save the edited configuration in the active configuration, in a previously unused configuration, or you can store it in place of another configuration.

Prompt: **SAVE CONFIGURATION: in Config #: ___**

Action: **1** Press [F8] (labeled “Enter Data”) to save the edited configuration under the same configuration name and number as the original (in other words, to replace the original with the edited copy).

or

Enter another configuration number and press [F8] (labeled “Enter Data”) to save the edited configuration under a different configuration number.

A second prompt appears:

SAVE CONFIGURATION: Replace Contents of Config #X - NAME? (Y/N):___

The number of the configuration you want to replace and its name appear in this prompt.

2 Type ***y*** to confirm your request or ***n*** to cancel it.

3 Press [F8] (labeled “Enter Data”).

[F3] **Rename Config** (Rename Configuration)

Press this function key to name or rename a configuration. Configuration names can contain up to 10 uppercase letters, numbers, or special characters. Spaces are not allowed, so you may want to use hyphens or underlines instead.

Prompt:

RENAME CONFIGURATION: Config # (1-6):___ New Name: _____

Action: **1** Enter the configuration number (1 through 6).

2 Enter the new name (up to 10 uppercase letters, numbers, or special characters).

3 Press [F8] (labeled “Enter Data”).

NOTE: If you rename an inactive configuration as “UNUSED", you will delete its contents. The current configuration cannot be renamed “UNUSED” since an unused configuration cannot be activated.

Also, if you attempt to rename the startup configuration "UNUSED", an error message appears on the screen.

[F4] **Choose Startup** (Choose Startup Configuration)

Press this function key to select a shift configuration to be invoked automatically during call management startup. Don’t select a startup configuration, however, if you want to choose a startup configuration each time you begin call management.

Prompt: **CHOOSE STARTUP CONFIGURATION: Config # (1-6 or '-' for none): ___**

Action: **1** Enter the configuration number of the startup configuration, or enter a hyphen (-) if you do not want a startup configuration.

2 Press [F8] (labeled "Enter Data"). The word (startup) appears next to the configuration you selected.

[F7] **Config Screen** (Configuration Screen)

Press this function key to display the Configuration screen for the active configuration.

[F8] **System Status**

Press this function key to display the System Status screen.

[F10] **Help**

Press this function key to display a Help screen for the Configuration List screen.

Quick Reference Guide to Dynamic Reconfiguration

This guide shows what screens to select if you want to activate a different configuration or make changes to the active configuration. While call management is running, you can do the following:

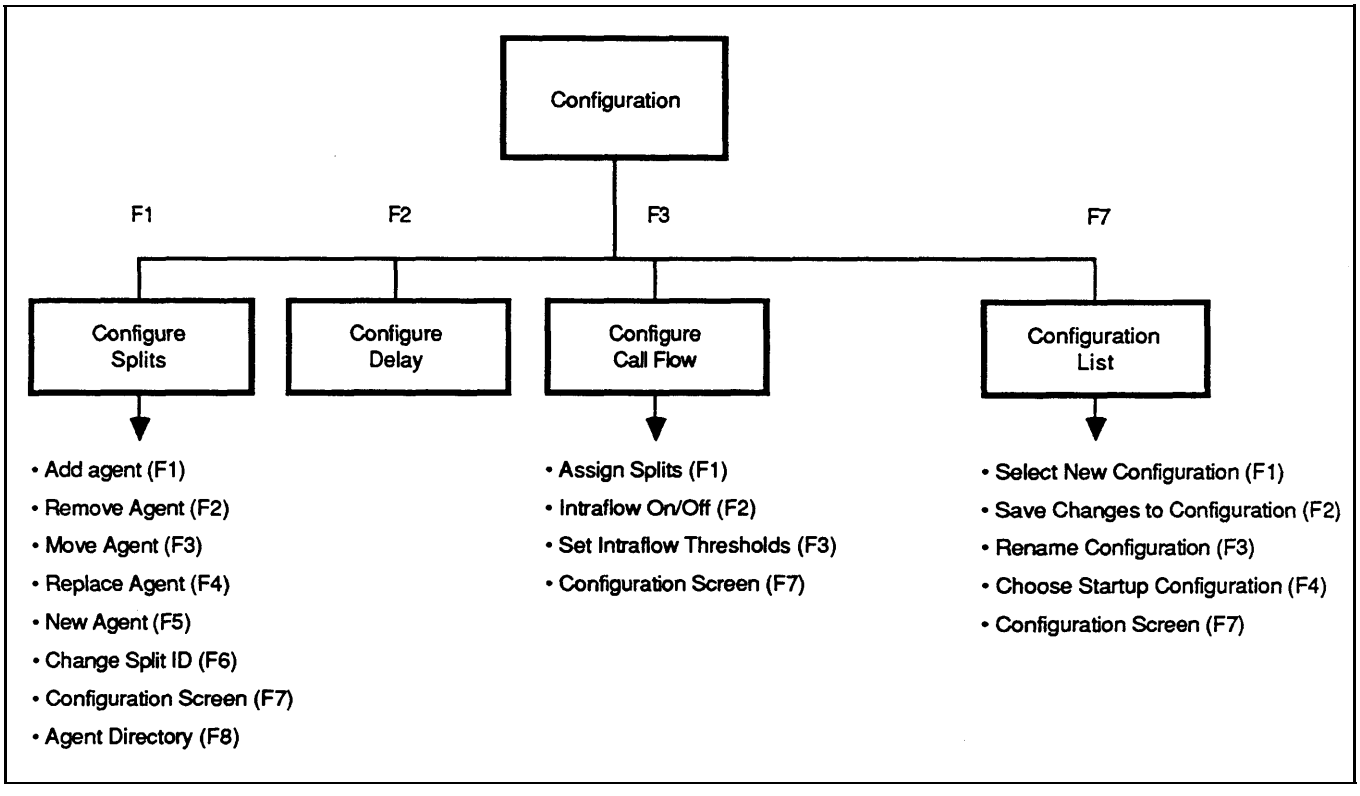
- Reconfigure agent splits
- Change Answer Delay or Force Delay
- Reconfigure call flow
- Use the Configuration List screen to save your changes or to activate a different configuration

For detailed descriptions of these procedures, see “Dynamic Reconfiguration", earlier in this section.

You can make changes in an active CMS configuration from the Configuration screen. You can access this screen from:

- The Initialization screen, from which you start call management
- Any of the status screens

The screens and function keys used for dynamic reconfiguration are illustrated in the following diagram.



After you make a change, press [F7] (labeled “ Config Screen”) to return to the Configuration screen. Continue with dynamic reconfiguration or press the appropriate function key to access one of the status screens.

Selecting Day or Night Service

CMS provides two modes of call management: Day Service and Night Service. During Day Service, one of your shift configurations is active and CMS routes each call to an agent. During Night Service, CMS answers each incoming call, connects it to the appropriate voice announcement unit, and disconnects the call after the message is over. Depending upon the needs of your business, you may choose to use a tape answering machine instead of the Dacon voice announcement unit during Night Service so that callers can leave a recorded message after hearing the announcement. For more information, see "Caller Message Recording During Night Service", later in this section.

You may want callers to hear a different message when Night Service is in effect than when Day Service is in effect. If that is the case, record two announcements, a Day Service and a Night Service announcement, on each announcement unit.

When you start call management, CMS is automatically in Day Service mode. Change the mode of service from the System Status screen by pressing [F1] (labeled “Set Opt/Chg Mode”). The Set Options/Modes screen, shown below, appears. Press [F5] (labeled “Chg Serv Mode”) , and continue with the instructions below for the mode to which you are changing.

```
SET  OPTIONS/MODES                                    DAY CMS1.0 3:36p 04/18

                    OPTION AND MODE SETTINGS

                 Option/Mode                        Value

               F1 Service Level Limit               20 sec

               F2 Abandoned vs. Incoming Call Threshold   10 sec

               F3 Audible Alarm (ON/OFF)            ON

               F4   Transfer Return Threshold       5 rings

               F5 Change Mode of Service (Day/Night)      DAY

                                                          F10 - Help
F Service F Abandon F Alarm   F Return F Chg Serv           F System
1 Level   2 Thresh 3 On/Off 4 Thresh 5 Mode                8 Status
```

CHANGING TO NIGHT SERVICE

To change from Day Service to Night Service:

Prompt: **SERVICE MODE: Change to NIGHT Service? (Y/N):___**

Action:

1 Type ***y*** to change to Night Service mode or type ***n*** to keep call management in Day Service mode.

2 Press [F8] (labeled "Enter Data").

3 If you typed ***y*** to change mode, the prompt reads:

Change Anncs for NIGHT, then press F8 when ready; or to Cancel press F1.

Until you press a key in response to this prompt, CMS will not answer any ringing calls. Calls that are connected to an announcement unit or that have heard an announcement will be distributed to agents and recorded in the data.

4 Switch to the night message, if you have one, by pressing the "Chan." button on the front of the Dacon voice announcement unit and then responding to the prompt.

– If some CMS calls are connected to agents or are on hold waiting for an agent when you press [F8], the following message will appear on the screen:

Night Service Now in Effect. Some Day Calls Still Active

Then, when agents finish handling all those calls, the following message is displayed:

Night Service Now in Effect. All Day Calls Finished

– If no CMS calls are in progress when you press [F8], the following message is displayed:

Night Service Now in Effect. All Day Calls Finished

Ringing CMS calls and new incoming CMS calls are connected to the night message, then disconnected. The word **NIGHT** appears to the left of the CMS release number on the ID line of the screen. All agent stations are put in the Logged Out state.

5 Press a function key to select another activity or screen.

CHANGING TO DAY SERVICE

To change from Night Service to Day Service:

Prompt: **SERVICE MODE: Change to DAY Service? (Y/N): ___**

Action:

1 Type **y** to change to Day Service mode or type ***n*** to keep call management in Night Service mode.

2 Press [F8] (labeled "Enter Data").

3 If you typed ***y*** to change mode, the prompt reads:

Change Anncs for DAY then press F8 when ready; or to Cancel press F1.

When the prompt appears, CMS stops answering ringing calls (that is, the calls keep ringing). Any calls already connected to the voice announcement unit stay connected until the message is finished, and are then disconnected. Any calls not yet connected to the voice announcement unit remain ringing until Day Service mode is in effect. At that time, the calls are answered by CMS and connected to an agent or a voice announcement unit, as appropriate.

4 Switch to the day message, if necessary, by pressing the "Chan." button on the front of the Dacon voice announcement unit, and then respond to the prompt.

When you press [F8], the last configuration that was active on the system is activated again. Call management and data collection proceed as normal for Day Service, and the following message appears:

Day Service Now in Effect.

The word **DAY** appears to the left of the CMS release number on the ID line of the screen. When Day Service call management begins, all agents in the configuration are automatically in the Logged Out state. To become available to answer calls, they must press their Available button to turn on the Available light on their voice terminals.

5 Press a function key to select another activity or screen.

CMS OPERATION DURING NIGHT SERVICE

You can access all your status screens while CMS is in the Night Service mode. If you start Night Service during a data collection hour, then for the rest of that hour the status screens show whatever Day Service data had been collected prior to the switchover, plus any Night Service data collected. After that hour is over, the screens show only Night Service data.

The System Status screen shows Night Service data for the number of busy lines and for calls waiting. It shows agent status as **Othr** if the agent station is off-hook, and as **Out** if the agent station is on-hook. Time spent in Night state is not counted as time logged in for reporting purposes.

On the Split Status screen, the "Stat" column will show **Nite** when the agent station is on-hook and **Othr** when the agent station is off-hook. The number of calls shown in the "Other" (Calls) column will reflect the number of calls placed plus the number of calls received and answered during that hour.

You can also access reconfiguration screens during Night Service. Any changes you make on these screens do not influence Night Service operation, but do affect the last active configuration (that is, the displayed shift configuration). If you return to Day Service, any changes you made in the last active configuration will be in effect.

CALLER MESSAGE RECORDING DURING NIGHT SERVICE

For standard CMS operation during Day Service, it is strongly recommended that you use a digital voice announcement unit. However, there may be situations during Night Service when call volume is low. At those times you may choose to use a tape answering machine instead, so callers can leave a message for you. The tape answering machine must be one which you can program to answer calls on the first ring and which has a voice-activated message length.

You can set up the tape answering unit in either of two ways:

- You can disconnect the voice announcement unit used during Day Service and connect the tape answering unit in its place for Night Service.
- You can administer the tape answering unit as a valid announcement unit and keep it connected at all times. However, you can change the status of the tape answering unit reflected in the "Annc Condtn" column on the Assign Announcement screen to **REMVD** (Removed) during Day Service,. and change the status of the digital voice announcement unit to **AVAIL** (Available). When you switch to Night Service, you can change the tape answering unit's status to **AVAIL** on the Assign Announcement screen and change the status of the digital voice announcement unit to **REMVD.**

Your day-to-day interaction with CMS primarily involves monitoring system status during call management and using dynamic reconfiguration to make any needed changes in the configuration being used to manage calls.

The following example illustrates how the CMS Supervisor at Bon Voyage Travel interacts with the system during a typical day.

THE CMS SUPERVISOR'S ACTIVITIES AT BON VOYAGE TRAVEL

At 9 A.M. each business day, Pat Roberts turns on Bon Voyage's PC and starts managing calls with the Day configuration. All agents are automatically in the Logged Out state when call management begins. Pat asks the agents to press the Available button on their voice terminals to make themselves available for CMS calls.

Pat performs several dynamic reconfiguration activities during the day. First, Pat removes Linda Seiler from her position in the Public Travel split because she is on vacation, and moves a new agent, Allan Brown, into Linda's position in that split. Pat tells Allan to place himself in the Available state.

As the peak calling hour approaches, Pat turns on intraflow for the Public line group. Pat tells the agents in the Support split that they may now receive calls for the Public line group. (The Support split is a secondary split for the Public line group.)

Throughout his shift, Pat monitors the System Status screen, the Line Status screen, and the Split Status screens. Pat can use the [Shift] + [Print Scrn] keys to print any of these screens if desired. The screens provide a detailed picture of activity throughout the system. Using them, Pat can tell when to turn intraflow on or off, when a new agent may be having trouble handling calls, or when all lines in a line group are busy. Pat can use dynamic reconfiguration to correct these situations as they occur.

For instance, Pat notices that three calls are waiting in the Charter Travel split's queue, and there have been several abandoned calls. Pat turns on intraflow to allow waiting calls to be sent to the Business Travel split (the secondary split for the Charter line group). Pat also increases the Answer Delay (the length of time a call rings before CMS connects it to a voice announcement unit when no agents are available) so callers will spend a little less time on hold.

Pat has a new agent in the Business Travel split. Yesterday, Pat spent time with the new agent, explaining the voice terminal features the agent will be using. As the new agent answers CMS calls for the first time, Pat watches the Split Status screen to see when the agent is on a call, and then monitors the call. In this way, Pat is able to give the agent advice on handling calls.

Pat also looks at the Management Information System (MIS) reports to determine if Bon Voyage Travel has an efficient number of lines and agents. The Events Log Report lists many occurrences of the All Lines Busy exception, which means that people heard a busy signal if they called during those times. Pat can use exception information like this to determine if more lines are needed for some line groups or line sub-groups.

Section 6: Handling CMS Calls

Overview

When a call comes into CMS during Day Service, the system looks for an available agent in the main split assigned to the line group for the call. If agents are available, CMS routes the call to the agent who has been idle the longest. After answering the call, the agent may need to do the following:

- Transfer the call to another agent or person on System 25
- Transfer the call to another line group's queue
- Signal the CMS Supervisor for help

When the conversation with the customer is completed, the agent may need to enter the After-Call-Work state to complete the necessary paperwork associated with the call.

So that agents can complete all of these CMS duties with a minimum of difficulty, it is important that they understand how to use their voice terminal features. In most cases, you, as the CMS Supervisor, will be the person responsible for teaching the agents how to use their voice terminals and the one whom agents will call should problems arise.

This section will help you understand how you and your CMS agents can use your voice terminals and features to handle CMS calls efficiently. The information in this section is organized as follows:

The Agent's Voice Terminal

Describes the types of voice terminals agents can use, the features to be assigned to agent voice terminal buttons, and procedures for using these features.

The CMS Supervisor's Voice Terminal

Describes the type of voice terminal the CMS Supervisor needs, the features the CMS Supervisor uses, and the procedures for using these features.

The Agent's Voice Terminal

This section describes the voice terminals and the features that enable CMS agents to handle ACD (CMS) calls efficiently. The CMS Agent Card also describes procedures for using the agent voice terminal for CMS.

The information in this section supplements the information in the *AT&T System 25 Multiline Terminal User Guide.* That guide describes many other System 25 features you may find useful.

Selecting Voice Terminals for Your Agents

A critical factor in selecting a voice terminal for your agents is choosing a voice terminal with enough buttons to accommodate the necessary CMS and System 25 features. The following information will help you decide the number of buttons with lights your agents' voice terminals will need, and, in turn, help you decide the size of the voice terminal that you should assign each agent.

You may use any of these as a CMS agent voice terminal:

- 5-Button Voice Terminal
- 10-Button Voice Terminal
- 10-Button Hands-Free Answer on Intercom (HFAI) Voice Terminal
- 10-Button Built-in Speakerphone (BIS) Voice Terminal
- 22-Button BIS Voice Terminal
- 34-Button Voice Terminal
- 34-Button Deluxe Voice Terminal
- 34-Button Built-in Speakerphone (BIS) Voice Terminal
- 34-Button Deluxe BIS Voice Terminal
- 34-Button BIS Voice Terminal with Display
- 34-Button Deluxe BIS Voice Terminal with Display
- Direct Trunk Attendant Console (DTAC), a 34-Button Deluxe Voice Terminal or 34-Button Deluxe BIS Voice Terminal
- Switched Loop Attendant Console (SLAC), a 34-Button Deluxe BIS Voice Terminal with Display

NOTE: A headset cannot be used with a 5-button voice terminal or a 10-button HFAI voice terminal.

Each of these types of voice terminals provides basic telephone functions, such as Transfer, Conference, and Hold. However, other features required or useful for CMS may be administered on agent voice terminals.

All agent voice terminals will require buttons with lights for the following features:

- System Access buttons. Each agent voice terminal must have at least one System Access button. Two System Access buttons are recommended.
- Agent State buttons. Three agent-state buttons, Available, ACW (After-Call-Work), and Logged Out, are required on each agent voice terminal.

In addition, the optional Assist feature requires a button with lights.

- Assist button. Agents may need to signal you visually that they require assistance. These agents must have a Station-to-Station Message Waiting (MSG WAIT) button on their voice terminal. (Your supervisor voice terminal will have a corresponding button so that you will know when the agent needs help.)

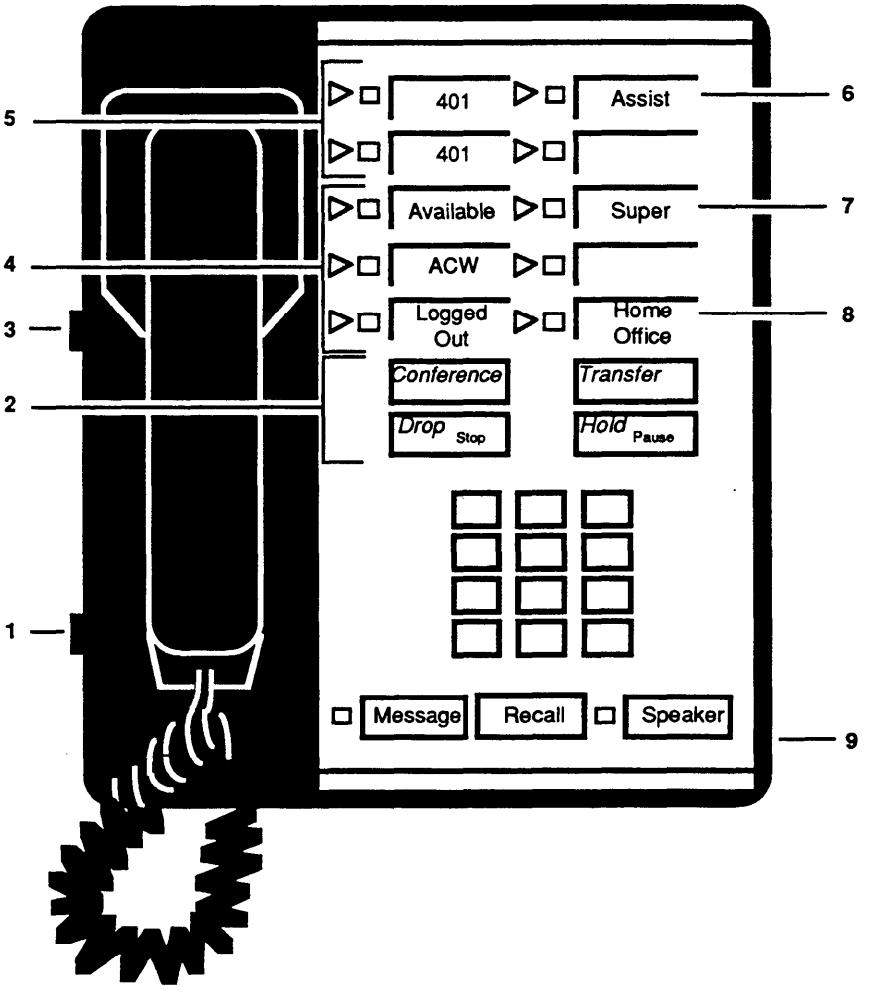
You may want to reserve buttons (with or without lights) for other System 25 features, such as Direct Station Selection (DSS) or Repertory Dialing. These and other available features are described in the *AT&T System 25 R2VI Reference Manual* and in the *AT&T System 25 Multiline Terminal User Guide.*

> **IMPORTANT:** An agent voice terminal must *not* have either a Send All Calls or an Exclusion button administered on it. These System 25 features interfere with CMS operation.

A TYPICAL AGENT VOICE TERMINAL

Figure 6-l shows typical agent voice terminal button assignments. (This example shows a 10-button voice terminal; your agents may be using a different voice terminal.)

FIGURE 6-1 Typical Button Assignments on a CMS Agent Voice Terminal.



1 The volume control adjusts speaker and ringer loudness.

2 Conference, Drop, Transfer, and Hold help the agent handle calls more efficiently.

3 The T/P switch is used to program and test voice terminal features. For CMS operation, the switch must be set to the middle position.

4 The lights next to the three agent-state buttons (Available, ACW, and Logged Out) let CMS know whether an agent is currently available for CMS calls, doing after-call-work, or is logged out.

5 The flashing green lights next to the System Access buttons show the button on which a call is coming in. The number on the button label is the PDC (extension) of this voice terminal.

6 An Assist (MSG WAIT) button is used by the agent to turn on a light at the supervisor voice terminal to signal that the agent needs help. The agent can use this signal at any time, even during a call.

7 DSS or Flexible DSS buttons allow an agent to place inside calls with one touch.

8 Repertory Dialing buttons allow an agent to place inside or outside calls with one touch.

9 An optional headset and adaptor maybe plugged into the jack labeled "Other" or “HFU” underneath some types of voice terminals.

Using the Agent Voice Terminal for CMS

Your CMS agents can announce their availability or unavailability for CMS calls, place and answer both inside and outside calls, signal you for assistance, transfer calls, and, when CMS is not managing calls, answer calls that come into a DGC group.

In the following procedures, some button names have brackets surrounding them, such as [AVAILABLE] or [DSS]. This indicates the feature assigned to the button. For features such as DSS, Flexible DSS, or Repertory Dialing, you may choose to label the agent's voice terminal buttons with a telephone number that has been programmed onto that button for automatic dialing.

> **NOTE:** Agents can use the CMS Agent Card as a quick reference for using their voice terminals for CMS.

USING THE AVAILABLE, ACW, AND LOGGED OUT BUTTONS

During call management, an agent may enter and leave the following work states: Available, After-Call-Work, and Logged Out. Every agent voice terminal needs a button for each of these three work states. When agents are in either the Available or ACW state, they are considered logged in.

Available State

In order to receive CMS calls, an agent's voice terminal must be in the Available state.

To enter the Available state, the agent must:

- Press [AVAILABLE].
  (The green light next to the Available button turns on.)

After-Call-Work State

Entering the ACW state makes the agent unavailable for CMS calls while finishing paperwork associated with the previous CMS call.

To enter the ACW state, the agent should do the following:

- Before hanging up from a CMS call, the agent should press [ACW].
  (The light next to the ACW button turns on, and the light next to the Available button turns off.)

> **NOTE:** If the agent does not press [ACW] while still off-hook, CMS can send the agent another ACD (CMS) call when the agent hangs up the handset.

Logged Out State

An agent is automatically placed in the Logged Out state by CMS when call management starts, when a new configuration is selected, and when the agent is moved or added to a configuration. You can log out the agent from the Split Status screen. If the Agent Logout ACW exception on the Agent Exceptions screen is turned on, agents who have been in the ACW state more than the time specified as the exception threshold are placed in the Logged Out state.

To enter the Logged Out state, the agent should do the following:

- Press [LOGGED OUT].
  (The light next to the Logged Out button turns on, and the light next to the Available or ACW button turns *off.)*

When ready for CMS calls again, the agent should press the Available button. (The light next to the Available button turns on.)

ANSWERING CMS CALLS

During Day Service, when a CMS call comes in, the CMS automatically distributes the call to the agent in the appropriate split who has been idle the longest. If all agents are busy, CMS connects the caller to a recorded delay message and then puts the call on hold. The caller is connected to an agent when one becomes free.

> **NOTES:** All CMS calls, including those transferred through the Transfer-into-Queue feature, ring on the System Access button(s).
>
> Agents will receive CMS calls only if the light next to the button labeled “Available” is on and the agent’s voice terminal is on-hook.

To answer a ringing call, the agent must do the following:

- Lift the handset or switch on the headset.
  (The agent is automatically connected to the CMS call.)

  If the agent does not answer a CMS call within the time specified in the Transfer Return Threshold (see “Setting Options” in Section 4), the call is transferred to another agent, if available, or is connected to the voice announcement unit, if the caller has not yet heard the delay message. If neither an agent nor a voice announcement unit is available, the call will continue to ring at the agent’s station until an agent or voice announcement unit becomes available. The agent who didn’t answer the call is then placed in the ACW state (the light next to the Available button turns off, and the light next to the ACW button turns on), and the CMS statistics show that the agent refused a call. The agent will not receive any more CMS calls until he or she announces availability again by pressing the Available button. If the call is still ringing at the refusing agent’s station because no other agent or voice announcement unit is available, and the agent answers the call without first pressing the Available button, the agent will get credited for answering an "Other" call rather than an ACD (CMS) call.

When the CMS call is finished, the agent should:

- Hang Up the handset, or press the switchhook, or switch off the headset

  but

  if the agent needs to complete paperwork associated with a previous CMS call, the agent should press the ACW button before hanging up from the call. If the agent waits to press the ACW button until after he or she hangs up, CMS may send the agent another CMS call before the agent has a chance to press the ACW button.

USING THE ASSIST BUTTON

At times an agent may want to signal you that assistance is needed. To do so, the agent can press the Assist button. (This will not interrupt the current CMS call.) This action turns on the green light next to the corresponding Assist button at your voice terminal. To find out what line the agent is using so that you can join the agent's call in progress, look at the CMS Line Status screen or appropriate Split Status screen. Either you or the agent can turn off the Assist button lights at both voice terminals by pressing the Assist button next to the light that is on. (If you need to assign Assist buttons, refer to the CMS Planning Guide for information.)

If agents need help with a CMS call in progress, they should do the following:

- Without hanging up, press [ASSIST].
  (The green light next to the Assist button on the agent's voice terminal and the green light next to the corresponding button on the supervisor voice terminal turn on.)

To turn off the Assist button on both the agent voice terminal and the supervisor voice terminal, do the following:

- Press [ASSIST].
  (The green light next to the Assist button on the agent voice terminal and the corresponding button on the supervisor voice terminal turn off.)

PLACING A CALL ON HOLD

If an agent puts a call on hold and then places the voice terminal on-hook, CMS considers the call finished and makes the agent available for another CMS call. When the agent then lifts the handset to pickup the call again, CMS credits the agent with an "other" call. Therefore, if an agent is to receive ACD credit for the entire call, the agent must leave the handset off-hook while the call is on hold.

To place a call on hold, the agent should do the following:

- Press [HOLD]. *Do not hang up the handset.*
  (The green light next to the held call's line button winks.)

  NOTE: If the agent hangs up while a call is on hold, the agent is automatically available for another CMS call.

To return to the call on hold, the agent should:

- Press the button next to the winking light of the held call.

TRANSFERRING CALLS

After answering a CMS call, an agent may need to transfer the call:

- To a specific person (agent or non-agent) on your System 25
- Into another line group's queue of calls

Transferring Calls to a Specific Person on System 25

To transfer a call to a specific person on System 25, the agent must do the following:

1 Press [TRANSFER].
(The green light next to the button of the call winks, indicating the call is put on hold.)

2 Listen for dial tone.

3 Dial the person's PDC or press the [DSS], [FLEX DSS], or [REP DIAL] button for that person.

NOTE: If the agent misdials the number, the agent can return to the held call by pressing the button next to the winking light. Then return to step 1.

4 Announce the call when the other person answers.

NOTE: If a busy signal is heard or the other person doesn't answer, return to the held call by pressing the button next to the winking light of the held call.

5 Hang up.

Transferring Calls to Another Line Group's Queue

If the Transfer-into-Queue feature has been administered for your CMS, agents can transfer a call to another line group's queue as follows:

1 Press [TRANSFER].
(The call is put on hold, and the green light next to the button of the held call winks.)

2 Listen for dial tone.

3 Dial the PDC or press the [DSSJ, [FLEX DSS], or [REP DIAL] button for the line group's queue (that is, the PDC of the single-line station associated with the transfer-queue line).

NOTE: If the agent misdials the number, the agent can return to the held call by pressing the button next to the winking light. Then return to step 1.

4 When the call starts ringing, hang up. Do *not* wait for the call to be answered.
(If a busy signal is heard, press the button next to the winking light to return to the held call.)

NOTE: This feature can also be used by non-CMS agents to transfer a call into a line group's queue. People who may need to use this feature, such as the System 25 Attendant, should be trained in its use.

DGC GROUPS

Direct Group Calling (DGC) groups may be set up to provide an alternate means of call distribution when CMS is not able to distribute calls. When CMS is managing calls, all agents must remove themselves from their assigned DGC groups so that CMS can distribute calls to them.

If CMS is not able to distribute calls, the agents must return to their DGC group assignments so that System 25 can distribute calls to the CMS agents. When System 25 is distributing calls, and agents need to make themselves unavailable for CMS calls, they must remove themselves from their DGC groups.

For more information, refer to "Managing Calls When CMS is Not Running" in Section 9 of this manual.

In order to remove themselves from assigned DGC groups, agents must do the following:

1 Lift the handset.

2 Listen for dial tone.

3 Dial ⋆ 4.

4 Listen for confirmation tone (three short tones).

5 Hang Up.

When CMS is not managing calls, you must inform your agents to return to their DGC groups by following this procedure:

1 Lift the handset.

2 Listen for dial tone.

3 Dial ⋆ 6

4 Listen for confirmation tone (three short tones).

5 Hang up.

The CMS Supervisor's Voice Terminal

As the CMS Supervisor, you are required to have one 34-button deluxe voice terminal. On your voice terminal you may want the following features:

- A Personal Line appearance for each CMS and transfer-queue line is recommended in order to provide you with the ability to do Service Monitoring. These Personal Line button assignments will also allow you to answer and/or join CMS calls, if the need arises. One button with lights is required for each Personal Line appearance.
- You will also need one Station-to-Station Message Waiting button for each agent with an Assist (MSG WAIT) button. These buttons must have lights.

You may need additional buttons for other System 25 features. Refer to the *AT&T System 25 R2V1 Reference Manual* for descriptions of these features.

> **NOTE:** It is recommended that you do *not* have an Exclusion button on your voice terminal. If you press this button while you are monitoring a call, you will drop the agent from the call.

Using Your Voice Terminal for CMS

SERVICE MONITORING

If your voice terminal has a Personal Line button for every CMS and transfer-queue line, you can listen to any CMS call without being detected by the caller or the agent. This Service Monitoring feature is useful for training agents.

To use Service Monitoring:

1 Look at the Line Status screen or appropriate Split Status screen to see which line the agent you want to monitor is using.

– On the Line Status screen, look at the "Status" column to locate the agent. A ↔ **AGTID** (where AGTID represents the agent's CMS ID) in the "Status" column indicates the agent is handling a CMS call. Look in the "Line" column to see which line the agent is handling.

– On the Split Status screen, **ACD** will be displayed next to the agent's ID, in the "Stat" column and the ID of the CMS line will be displayed in the "Line" column.

2 Check the light next to the Personal Line button to make sure that the call is not on hold. (The green light should be steady rather than winking.)

NOTE: If Service Monitoring is done incorrectly, it will interfere with the handling of CMS calls. If you try to monitor a CMS call that has not yet been answered by an agent or that is on hold, CMS will relinquish control of the call.

3 Press the Personal Line button on your voice terminal.

4 Press [SPEAKER] to join the call.

You will not be able to speak to either person unless you lift your handset. If you listen to the call through the handset instead of through the voice terminal speaker, the caller and agent may be able to hear surrounding room noise.

5 Press [SPEAKER] again to leave the call.

USING THE ASSIST FEATURE

For each agent who may need a visual means of signaling you for help, there must be a System 25 Station-to-Station Message Waiting button on the agent's voice terminal and a paired Station-to-Station Message Waiting button on your supervisor voice terminal. On both voice terminals, label the button either ASSIST or MSG WAIT and the PDC of the corresponding voice terminal. When an agent needs assistance, the agent can press the Assist (MSG WAIT) button on the agent voice terminal. The green light next to the corresponding button on your supervisor voice terminal will turn on.

You can see which agent is signaling you by following this procedure:

1 Your Assist buttons should be marked with the PDC of the corresponding voice terminal so that you will be able to tell which station is signaling you for assistance.

2 If necessary, look at the Split Status screen to see which agent is handling calls at that station.

To turn off the light next to the Assist button on both the agent's and your supervisor voice terminal, press the Assist button next to the light you want to turn off.

Section 7: Generating CMS Reports

Overview

In addition to real-time status screens, CMS provides a wealth of Management Information System (MIS) data through historical reports. They can help you manage your resources efficiently and cost effectively. For instance, you can use reports to forecast staffing needs and to see if line groups need more or fewer lines.

The reports are generated from historical data stored on the hard disk. You can print reports whenever CMS is not managing calls.

This section, "Generating CMS Reports" is organized as follows:

How to Generate Reports describes how to select and print reports.

Types of CMS Reports describes the MIS reports:

- Agent Split Summary
- Split Report
- Line Group Report
- Sub-Group Report
- Events Log Report

Also included in this section is a description of the Print All Reports option.

You can also copy historical data onto floppy disks so that you will always have the data available should you want to generate or regenerate reports at any time in the future. For more information, see Section 8, "Archiving Data."

WARNING

Several types of changes that you can make could affect the historical data for a line group, agent, or split. These changes include:

- **Adding or removing a station**
- **Removing an agent from the Agent Directory**
- **Adding a line to a line group, removing a line from a line group, or moving a line from one line group to another**
- **Adding a line to a sub-group, removing a line from a sub-group, or moving a line from one sub-group to another**
- **Assigning an agent an ID that used to belong to another agent**
- **Changing line group IDs or the number of line groups on the Administer Line Groups screen**
- **Changing line sub-group IDs or the number of sub-groups on the Administer Line Groups or the Admin Queued Transfer screen**
- **Changing a split ID or changing the number of splits on the Configure Splits screen**

To keep your historical data accurate, print any outstanding historical reports and delete the old historical data files before making any of the changes listed. The historical files are located in the directory \cms\cmsrept. For instructions on deleting files, see the MS-DOS user's guide that came with your PC.

Types of CMS Reports

The CMS reports are described individually in this order:

- Agent Split Summary
- Split Report
- Line Group Report
- Sub-Group Report
- Events Log Report

The first four reports give you the option of selecting either a Daily Report or a Cumulative Report. You can choose to print all daily or all cumulative reports at the same time by using the Print All Reports option described in this section.

Daily reports cover one day's activities from 12:00 A.M. through 11:59 P.M. Many of the report statistics are based on activities completed during one particular hour. If an activity is still in progress at the end of an hour, its data are not included in that hour's statistics. Instead, those data are included in the statistics for the hour in which the activity is completed.

For instance, one line of a daily report might show data collected from 3:00 P.M. through 3:59 P.M. The next line would show data collected from 4:00 through 4:59. If a call was answered at 3:50 and ended at 4:05, that call would be included in the statistics on the 4:00 line. This makes it possible for some statistics, such as the holding time of a line, to show more than 60 minutes of activity within a single hour.

In the reports, the term ACD (Automatic Call Distributor) calls refers to incoming calls on CMS or transfer-queue lines that were handled by CMS agents.

Cumulative reports cover activities that span anywhere from 2 to 93 days, inclusive, thus allowing you to generate quarterly reports. The Split, Line Group, and Sub-Group Reports break this down even further by allowing you to select cumulative reports that cover activities by the hour or by the day.

The Events Log Report lists the 200 most recent exceptions and system messages. Depending on how often exceptions and system messages occur in your system, this report may span several days or part of one day.

How to Generate Reports

You can select and print MIS reports whenever you are *not* administering CMS and are not using CMS to manage calls. (If you need to automatically distribute calls when you are generating reports, follow the directions in "Managing Calls When CMS is Not Running" in Section 9 of this manual.)

To generate a report, go to the CMS Menu and follow these steps:

1 Press [F5] (labeled "Print Reports").

The Print Reports Menu screen, shown below, appears.

```
PRINT REPORTS MENU                                  REPT CMS1.0 10:04a 04/20
____________________________________________________________________________


                         Print Reports Menu


                   F1 Print Agent Split Sumary
                   F2 Print Split Report
                   F3 Print Line Group Report
                   F4 Print Sub-Group Report
                   F5 Print All Reports (Fl, F2, F3, & F4)


                   F7 Print Events Log Report
                   F8 Exit Reports (Go to CMS Menu)









____________________________________________________________________________
Turn on Printer and Align Paper. (When Ready, Select a Labeled Function Key)
 F Agent   F Split   FLine Grp FSub-Grp F All            F Events F Exit
 1Summary 2 Report 3 Report 4 Report 5                   7Log Rept 8Reports
```

2 To get the printer ready:

a Turn on the printer.

b Press the Ready button.
(The Ready light goes off.)

c Press the Form Feed button.

d Align the paper and press the Ready button.
(The Ready light goes on.)

If you have trouble with your printer, refer to "Printer Problems" in Section 9.

3 Press the function key for the type of report(s) you want to print.

– [F1] Print Agent Split Summary for all splits active.

– [F2] Print Split Report for all splits active.

– [F3] Print Line Group Report for all line groups active.

– [F4] Print Sub-Group Report for all line groups.

– [F5] Print All Reports (Fl, F2, F3, and F4) for all active line groups and splits.

– [F7] Print Events Log Report.

If you select the Events Log Report, the error line reads:

Generating Events Log Report

and printing begins automatically. Go to step 5.

4 If you press function key F1 through F5, you are prompted to select a daily or cumulative report (or all daily or cumulative reports).

► If you select a daily report (or all daily reports), the following prompt appears:

PRINT [report name]: Select Report Date: mm/dd/yy

where mm/dd/yy is the current date or the date of the last report requested.

If the date that you see in the prompt is correct, press [F8] (labeled "Enter Data").

If you want to select a different date than the one shown in the prompt, enter a new date (for instance, 05/19/88 for May 19, 1988) and press [F8] (labeled "Enter Data").

► If you select a cumulative report (or all cumulative reports), one of these prompts appears, according to the type of cumulative report you have chosen:

PRINT CUMULATIVE REPORT BY DAY: Starting:___/___/___ Ending:___/___/___

or

PRINT CUMULATIVE REPORT BY HOUR: Starting:___/___/___ Ending:___/___/___

If the starting and ending dates shown in the prompt are correct, press [F8] (labeled "Enter Data").

If you want to select a different starting and/or ending date, enter the new date(s) (for instance, 06/10/88 for June 10, 1988) and press [F8] (labeled "Enter Data").

After you supply the date, the error line reads:

Generating [report name]...

5 Press another function key to select another report or press [F8] (labeled "Exit Reports") to return to the CMS Menu.

Agent Split Summary

Press [F1] (labeled "Agent Summary") on the Print Reports Menu screen to reach the Print Agent Summary screen, shown below.

```
PRINT AGENT SUMMARY                                  REPT CMS1.0 10:04a 04/20

                    F1 Print Daily Agent Split Summary
                    F2 Print Cumulative Agent Split Summary

                    F8 Return to Print Reports Menu

PRINT AGENT SPLIT SUMMARY REPORT:                                  F10 - Help
 F Daily   F Cumltive                                               F Reports
 1 Report 2 Report                                                   8 Menu
```

You can request either a daily or a cumulative Agent Split Summary Report from this screen.

DAILY AGENT SPLIT SUMMARY REPORT

The Daily Agent Split Report provides daily summary data for each agent in a given split. There is a different Daily Agent Split Summary page for each split.

This report can help you:

- Understand the skills of your top performers and transfer those skills to other agents.
- Implement incentive programs by providing objective data about agent activity.

During Night Service, only data on "other" calls are recorded in the Daily Agent Split Summary Report. Time spent in the Logged Out or Night states is not counted as time staffed in this report.

> **NOTE:** If an agent serves in two different splits during the same hour, it is a good idea to assign the agent a different agent ID for each split. This keeps the report data separate. Otherwise, all data for that hour will be shown as if the agent had been in the second split for the whole hour.

To print the Daily Agent Split Summary Report:

1 Press [F1] (labeled “Daily Report”) on the Print Agent Summary screen.

The following prompt appears:

PRINT DAILY AGENT SUMMARY: Select Report Date:___ / ___ / ___

2 If the date next to “Select Report Date” is correct, press [F8] (labeled “Enter Data”).

If you want to select a different date than the one shown in the prompt, enter the new date and press [F8] (labeled “Enter Data”).

A sample Daily Agent Split Summary is shown below.

```
                        DAILY AGENT SPLIT SUMMARY
SPLIT 1: PUBLC
Date:  04/20/88

                       |---------ACD CALLS--------- ||OTHER CALLS |
                          Num   Avg  Avg   Avg   Num   Avg   Total
                          ACD   Talk After Work  Other Talk  Time
      Agent             Calls  Time Call  Time  Calls Other Staffed
    ---------------------------------------------------------------------------
    Fenton      Scott      20  2:40 13:44 16:25    22 0:46  8.5hr
    Kesselring  Ana        13  2:38 7:21  9:59     1 1:51  4.1hr
    Mack        Joel        6  3:15 66:49 70:04    31 0:54  8.5hr
    Masson      Bill       26  6:00 4:30  10:30     8 0:44  8.4hr
    Ong         Ien        25  2:41 3:23  6:04    64 1:02  8.5hr
    Seiler      Linda       7  3:25 19:27 22:52    10 3:22  4.3hr
    Stickler    Craig      39  2:56 2:10  5:06    17 1:00  8.5hr
    Walsh       Jenny      21  2:12 8:29  10:41    22 1:17  8.5hr
    Woll        Harvey     41  2:13 2:20  4:33    10 1:17  8.5hr
    Yang        C J        35  1:57 2:41  4:41    32 0:50  8.5hr
    ---------------------------------------------------------------------------
    Split 1 Totals        233  2:54  6:42  9:36   217 1:05  76.3hr

    Note
      1.  Call statistics are counted in the hour and day in which they complete.

      2.  Split totals may not be the sum of the agent total if agents have been
          moved between splits within an hour.

    CALL MANAGEMENT SYSTEM FOR THE SYSTEM 25 PBX
    Date Printed: 2/21/88 Time Printed:  9:30am
```

CUMULATIVE AGENT SPLIT SUMMARY REPORT

The Cumulative Agent Split Summary Report is identical in format to the Daily Agent Split Summary Report except for the following:

- The start and end dates are shown on the report instead of the single report date.
- The word “Cumulative” replaces the word "Daily" in the report title.
- Days for which there are no CMS data do not appear in the report; these dates are listed in the "Note" section at the bottom of the report.

To print the Cumulative Agent Split Summary Report:

1. Press [F2] (labeled “Cumltive Report”) on the Print Agent Summary screen.
2. The following prompt appears:

   PRINT CUMULATIVE REPORT BY DAY: Starting:___/___/___ Ending: ___/___/___

3. If the dates next to “Starting” and "Ending" are correct, press [F8] (labeled “Enter Data”).

   If you want to use a different starting and/or ending date than the ones shown in the prompt, enter the desired date(s) and press [F8] (labeled “Enter Data”).

A sample Cumulative Agent Split Summary Report is shown below.

```
                    CUMULATIVE AGENT SPLIT SUMMARY

SPLIT  1:  PUBLC
Period of:  04/20/88 - 04/24/88

                      |---------ACD CALLS--------- | |OTHER CALLS |
                         Num   Avg   Avg   Avg   Num   Avg   %    Total
                         ACD   Talk  After Work  Other Talk ACD  Time
      Agent              Calls Time  Call  Time  Calls Other Time Staffed
    ---------------------------------------------------------------------
    Fenton     Scott      48  2:25 16:16 18:41    42 1:35 59%  25.4hr
    Kesselring Ana       118  2:09 2:08  4:17    33 1:00 33%  25.4hr
    Leonard    Mike       53  2:22 5:22  7:44    22 0:48 40%  17.0hr
    Mack       Joel       17  2:17 3:34  5:51     8 1:56 45%  3.7hr
    Masson     Bill       65  2:20 13:09 15:29   67 1:06 58%  29.0hr
    Ong        Ien        64  2:51 12:31 15:22   96 1:28 56%  29.2hr
    Seiler     Linda      31  2:31 14:02 16:33   43 1:27 52%  16.3hr
    Stickler   Craig      51  4:40 4:10  8:49   19 0:46 45%  16.8hr
    Walsh      Jenny      70  2:26 3:17  5:43  165 1:12 26%  25.3hr
    Woll       Harvey    103  2:05 3:57  6:02   78 0:52 37%  28.2hr
    Yang       CJ         92  2:30 4:36  7:06   48 0:51 43%  25.4hr
    ---------------------------------------------------------------------
    Split 1 Totals       712 2:32 6:39  9:11  621 1:11 45%  241.6hr

    Note
      1.  Call statistics are counted in the hour and day in which they complete.

      2.  Split totals may not be the sum of the agent totals if agents have been
          moved between splits within an hour.


    CALL MANAGEMENT SYSTEM FOR THE SYSTEM 25 PBX
    Date Printed: 4/25/88 Time Printed: 9:31am
```

Key to Agent Split Summary Data

DAILY AGENT SPLIT SUMMARY

SPLIT 1: PUBLC
Date: 04/20/88

(1) Agent		(2) Num ACD Calls	(3) ACD CALLS Avg Talk Time	(4) ACD CALLS Avg After Call	(5) ACD CALLS Avg Work Time	(6) OTHER CALLS Num Other Calls	(7) OTHER CALLS Avg Other Talk Time	(8) % ACD Time	(9) Total Time Staffed
Fenton	Scott	20	2:40	13:44	16:25	22	0:46	64%	8.5hr
Kesselring	Ana	13	2:38	7:21	9:59	1	1:51	52%	4.1hr
Mack	Joel	6	3:15	66:49	70:04	31	0:54	83%	8.5hr
Masson	Bill	26	6:00	4:30	10:30	8	0:44	54%	8.4hr
Ong	Ien	25	2:41	3:23	6:04	64	1:02	30%	8.5hr
Seiler	Linda	7	3:25	19:27	22:52	10	3:22	62%	4.3hr
Stickler	Craig	39	2:56	2:10	5:06	17	1:00	39%	8.5hr
Walsh	Jenny	21	2:12	8:29	10:41	22	1:17	44%	8.5hr
Woll	Harvey	41	2:13	2:20	4:33	10	1:17	37%	8.5hr
Yang	CJ	35	1:57	2:44	4:41	32	0:50	32%	8.5hr
Split 1 Totals (10)		233	2:54	6:42	9:36	217	1:05	49%	76.3hr

Note

1. Call statistics are counted in the hour and day in which they complete.

2. Split totals may not be the sum of the agent totals if agents have been moved between splits within an hour.

CALL MANAGEMENT SYSTEM FOR THE SYSTEM 25 PBX
Date Printed: 4/21/88 Time Printed: 9:30am

The numbers in the following list correspond to the circled numbers in the sample Agent Split Summary screen above.

NOTE: Activities in progress at the end of an hour are included in the statistics for the hour in which the activities were completed.

AGENT

1 Agent — The agent's last name (up to 12 characters) and first name (up to 8 characters), as it appears in the Agent Directory.

ACD CALLS

2 Num ACD Calls — The number of completed ACD calls each agent serviced while logged into this split. The total includes intraflowed calls serviced by the agent. Abandoned calls are not included.

3 Avg Talk Time — The average amount of time (in minutes and seconds) the agent spent on each ACD call. The total includes intraflowed calls serviced by the agent. Abandoned calls are not included.

	4 Avg After Call	The average amount of time (in minutes and seconds) the agent spent in each ACW state period. It is calculated by adding up the amount of time the agent spent in the ACW state (that is, the time the light next to the agent's ACW button was lit and the agent station was on-hook), divided by the number of ACD calls the agent completed. If the agent did not complete any ACD calls, the cumulative, instead of the average, ACW time is shown.
	5 Avg Work Time	The average amount of time (in minutes and seconds) spent on CMS-related work (the sum of the ACD Avg Talk Time and the ACD Avg After Call time).
OTHER CALLS	**6** Num Other Calls	The number of non-ACD calls completed by the agent during the data collection period. The figure includes data from both Day and Night Service. Both incoming and outgoing calls are included.
	7 Avg Talk Other	The average amount of time the agent spent on each non-ACD call. The figure includes data from both Day and Night Service.
ADDITIONAL DATA	**8** % ACD Time	The percentage of time the agent spent on CMS-related work (on ACD calls and in the After-Call-Work state). It is calculated as follows: 100% multiplied by the Avg Work Time multiplied by the Num ACD Calls divided by the Total Time Staffed.
	9 Total Time Staffed	The total amount of time (rounded to the nearest tenth of an hour) the agent was logged into a given split on a particular day (and under a given ID).
	10 Split X Totals	Totals and averages for split number X in each of the above categories.

Split Report

Press [F2] (labeled “Split Report”) on the Print Reports Menu screen to reach the following Print Split Report screen.

```
PRINT SPLIT REPORT                                  REPT CMS1.0 10:04a 04/20

                    F1 Print Daily Split Report
                    F2 Print Cumulative Split Report by Day
                    F3 Print Cumulative Split Report by Hour

                    F8 Return to Print Reports Menu

PRINT SPLIT REPORT:                                              F10 - Help
 F Daily   F Cumltive F Cumltive                                   F Reports
 1 Report 2 Day Rep 3 Hour Rep                                     8 Menu
```

You can request either a daily or cumulative Split Report from this screen.

DAILY SPLIT REPORT

The Daily Split Report shows the statistics for *a particular split* by hour and summarized for each hour (up to 24 hours) that CMS was managing calls. During Night Service, only data on “other” calls are recorded in the Daily Split Report an example of which is shown on the following page. You can use this report to:

- Compare the performance of splits that answer similar calls.
- Pinpoint peak calling hours for each split and staff the splits accordingly.
- See if the splits are reaching your target service level.

To print the Daily Split Report:

1. Press [F1] (labeled “Daily Report”) on the Print Split Report screen.
2. The following prompt appears:

   PRINT DAILY SPLIT REPORT: Select Report Date:___/___/___

3. If the date next to "Select Report Date" is correct, press [F8] (labeled “Enter Data”).

   If you want to select a different date than the one shown in the prompt, enter the new date and press [F8] (labeled “Enter Data“).

The following is a sample Daily Split Report.

```
                        DAILY SPLIT REPORT

SPLIT 1: PUBLC
Date:  04/20/88

       |----------ACD  CALLS--------- ||-OTHER CALLS- |
            Avg  Num                   Avg   Avg   Num   Avg  Avg  %
            Speed Calls  Num  Flow Flow Talk  After Other Talk Num ACD  Serv
    Time    Ans  Aband ACD  In   Out Time  Call  Calls Other Pos Time Levl
    ..........................................................................
     7:00a  12s  1      5   1    0   2:56 4:44   20   0:46  2.6  25% 80%
     8:00a   8s  1     20   0    0   3:46 4:44   30   0:46  8.0  35% 100%
     9:00a   8s  2     36   2    0   2:40 5:21   21   0:56  8.0  60% 92%
    10:00a   8s  0     29   5    0   3:26 3:50   22   0:50  8.0  44% 97%
    11:00a   7s  0     20   1    0   2:25 9:15   14   1:52  8.1  48% 95%
    12:00p   8s  1     25   4    0   3:36 9:30   25   0:56  0.0  55% 92%
     1:00p  15s  1     31   3    0   2:04 10:49  12   1:53 10.0  67% 84%
     2:00p   9s  0     30   4    0   2:17 5:37   30   1:36 10.0  39% 90%
     3:00p   8s  2     31   2    0   3:20 5:15   40   0:55 10.0  44% 90%
     4:00p   7s  0      6   0    0   2:21 8:44    3   1:06  1.7  67% 100%
    --------------------------------------------------------------------------
             9s  8    233  22   0   2:54 6:42   217  1:05  7.6  48% 92%


Note
 1.  Call statistics are counted in the hour and day in which they complete.

CALL MANAGEMENT SYSTEM FOR THE WSYSTEM 25 PBX
Date Printed: 4/21/88/ Time Printed: 9:32am
```

CUMULATIVE SPLIT REPORT

The Cumulative Split Report is identical in format to the Daily Split Report with the following exceptions:

- The start and end dates are shown instead of the single report date.
- The word “Cumulative” replaces the word “Daily” in the title.
- Days for which there are no CMS data are excluded from the report; these dates appear in the “Note” section at the bottom of the report.
- On the Cumulative Split Report by Hour, hours that CMS was in Night Service mode for the entire duration of the hour are not included in the report; these excluded Night Service hours are listed in the “Note” section at the bottom of the report.
- On the Cumulative Split Report by Day, each line of data is a daily summary instead of an hourly summary. The first column of this report lists the date summarized instead of the hour.

To print the Cumulative Split Report:

1 Press the function key that corresponds to the desired cumulative report, either [F2] (labeled “Cumltive Day Rep”) or [F3] (labeled “Cumltive Hour Rep”).

One of the following prompts appears:

PRINT CUMULATIVE REPORT BY DAY: Starting:___/___/___ Ending: ___/___/___

or

PRINT CUMULATIVE REPORT BY HOUR: Starting:___/___/___ Ending: ___/___/___

2 If the dates next to “Starting” and “Ending” are correct, press [F8] (labeled “Enter Data”).

If you want to select a different starting and/or ending date for the reports, enter the new date(s) and press [F8] (labeled “Enter Data”).

A sample Cumulative Split Report by Hour is shown below.

```
                    CUMULATIVE SPLIT REPORT

SPLIT   1:   PUBLC
Period: 04/20/88 - 04/24/88

       |---------ACD CALLS--------- ||-OTHER CALLS- |
          Avg  Num  Num                Avg  Avg   Num  Avg   Avg   %
          Speed Calls ACD  Flow  Flow  Talk After Other Talk  Num  ACD  Serv
    Time  Ans  Aband Calls In   Out   Time Call  CAlls Other Pos  Time Levl
    ---------------------------------------------------------------------
    7:00a 13s  1    18   5  0   2:40 1:46  33   0:54  1.7  20%  83%
    8:00a 10s  3   100  10  0   2:38 2:18  78   1:19  6.2  33%  91%
    9:00a  9s  3   109   7  0   2:31 5:23  76   1:17  7.0  52%  92%
    10:00a 9s  6    90  11  0   2:33 6:28  88   0:57  7.5  45%  94%
    11:00a 8s  2    69   7  0   1:59 10:57 56   1:46  7.8  48%  91%
    12:00p 8s  1    75   9  0   2:44 7:47  54   1:11  7.4  45%  93%
    1:00p 11s  3    76   7  0   2:28 11:06 50   1:05  7.2  59%  87%
    2:00p  9s  1    79   7  0   2:21 6:01  84   1:11  7.3  38%  94%
    3:00p  8s  3    84   9  0   2:51 6:25  91   0:57  7.2  45%  90%
    4:00p  8s  0    12   1  0   2:31 9:21  11   1:15  1.1  56%  92%
    ---------------------------------------------------------------------
            9s 23   712  73 0   2:32 6:39  621  1:11  6.0  45%  91%

Note
  1.  Call statistics are counted in the hour and day in which they complete.
  2.  Hours in which CMS was in Night Sevice for the entire duration of the
      hour will not be included in the averages.

  3.     NO CMS DATA EXISTS FOR THE FOLLOWING DAY(S)

       04/24/88

CALL MANAGEMENT SYSTEM FOR THE SYSTEM 25 PBX
Date Printed: 4/25/88 Time Printed: 10:50pm
```

Key to Daily Split Report Data

DAILY SPLIT REPORT

SPLIT 1: PUBLC
Date: 04/20/88

	ACD CALLS							OTHER CALLS			
Time	Avg Speed Ans	Num Calls Aband	Num ACD Calls	Flow In	Flow Out	Avg Talk Time	Avg After Call	Num Other Calls	Avg Talk Other	Avg Num Pos	% ACD Time	Serv Levl
7:00a	12s	1	5	1	0	2:56	4:44	20	0:46	2.6	25%	80%
8:00a	8s	1	20	0	0	3:46	4:44	30	0:46	8.0	35%	100%
9:00a	8s	2	36	2	0	2:40	5:21	21	0:56	8.0	60%	92%
10:00a	8s	0	29	5	0	3:26	3:50	22	0:50	8.0	44%	97%
11:00a	7s	0	20	1	0	2:25	9:15	14	1:52	8.1	48%	95%
12:00p	8s	1	25	4	0	3:36	9:30	25	0:56	10.0	55%	92%
1:00p	15s	1	31	3	0	2:04	10:49	12	1:53	10.0	67%	84%
2:00p	9s	0	30	4	0	2:17	5:37	30	1:36	10.0	39%	90%
3:00p	8s	2	31	2	0	3:20	5:15	40	0:55	10.0	44%	90%
4:00p	7s	0	6	0	0	2:21	8:44	3	1:06	1.7	67%	100%
	9s	8	233	22	0	2:54	6:42	217	1:05	7.6	48%	92%

Note
1. Call statistics are counted in the hour and day in which they complete.

CALL MANAGEMENT SYSTEM FOR THE SYSTEM 25 PBX
Date Printed: 4/21/88 Time Printed: 9:32am

The numbers in the following list correspond to the numbers circled in the sample Daily Split Report above.

TIME

1 Time — The start time of each data collection hour. Hours in which no agents were logged into the split during Day Service mode, or no calls were placed or received at an agent station during Night Service mode, are not shown on the report.

ACD CALLS

2 Avg Speed Ans — The average speed of answering for ACD calls answered by agents in the split during a given hour. This is determined by dividing the wait time for all completed calls in the split (the time from when the call first reaches System 25 until it is answered by an agent) by the number of completed calls. Abandoned calls are not counted.

The waiting time for intraflowed calls is reflected in the average speed of answer for both the main and secondary splits; that is, the waiting time is divided proportionally based on the amount of time the call waited in each split.

	3 Num Calls Aband	The number of ACD calls which were disconnected before reaching the Abandoned vs. Incoming Call Threshold set by the CMS Supervisor on the Set Options screen.
	4 Num ACD Calls	The total number of completed ACD calls to agents during a given hour. Abandoned calls are not counted. Calls still in progress at the end of the hour are included in the next hour's data.
	5 Flow In	The total number of completed calls intraflowed from another split into this split during a given hour. Abandoned calls are not included. Intraflowed calls still in progress at the end of the hour are included in the next hour's data.
	6 Flow Out	The total number of completed calls intraflowed out of this split and answered by agents in another split during a given hour. Abandoned calls are not included.
	7 Avg Talk Time	The average amount of time (in minutes and seconds) agents in the split spent on an ACD call. The average includes time a call may have been placed on hold by an agent. Calls still in progress at the end of the hour are included in the next hour's data. Abandoned calls are not included.
	8 Avg After Call	The average amount of time (in minutes and seconds) the agent spent in each After-Call-Work state period. It is calculated by adding up the amount of time the agent spent in the ACW state (that is, the time the light next to the agent's ACW button was lit and the agent station was on-hook), divided by the number of ACD calls the agent completed. If the agent did not complete any ACD calls, the cumulative, instead of the average ACW time is shown.
OTHER CALLS	**9** Num Other Calls	The number of non-ACD calls (incoming or outgoing) completed by agents in the split during a given hour. This includes calls transferred to a specific agent by another agent, even if the calls were originally ACD calls. The total includes data from both Day and Night service.
	10 Avg Talk Other	The average amount of time (in minutes and seconds) spent on non-ACD calls by agents in the split during a given hour. The total includes data from both Day and Night Service.

ADDITIONAL DATA	**11** Avg Num Pos	The average number of agent stations (to the nearest “tenth of an agent”) staffed during a given hour. The average is determined by dividing the total number of minutes all agents in the split are logged in during the hour by 60.
	12 % ACD Time	The percentage of time agents spent on CMS-related work (on ACD calls and in the ACW state). It is calculated by taking the sum of the time spent on ACD calls plus the time spent in the ACW state and multiplying by 100% and then dividing by the cumulative time the agents were logged into the split during the hour.
	13 Serv Levl	The percentage of completed calls that were connected to an agent in the split within the Service Level Limit. The value of the Service Level Limit is set on the Set Options screen.

Press [F3] (labeled "Line Grp Report") on the Print Reports Menu screen to select the Print Line Group Report screen, shown below.

```
PRINT LINE GROUP REPORT                                REPT CMS1.0 10:04a 04/20

                    F1 Print Daily Line Group Report
                    F2 Print Cumulative Line Group Report by Day
                    F3 Print Cumulative Line Group Report by Hour

                    F8 Return to Print Reports Menu

PRINT LINE GROUP REPORT:                                          F10 - Help
 F Daily   F Cumltive F Cumltive                                     F Reports
 1 Report 2 Day Rep 3 Hour Rep                                       8 Menu
```

You can request either a daily or cumulative Line Group Report from this screen.

DAILY LINE GROUP REPORT

The Daily Line Group Report gives hour-by-hour data for a given line group. It includes data for every hour that CMS is in Day Service or Night Service mode during the 24-hour period the report covers. You can use this information to control your expenses for telephone lines. For instance:

- A high number of abandoned calls may indicate too few agents.
- You can add more lines if you see that all lines in a group are often busy, even if agents seem to be handling calls quickly.
- You can eliminate lines in line groups with light call traffic.

During Night Service, the Daily Line Group Report shows the number of calls offered (calls that rang) per line group per hour, the average and total holding times, and data on "other" calls.

To print the Daily Line Group Report:

1 Press [F1] (labeled "Daily Report") on the Print Line Group Report screen.

The following prompt appears:

PRINT DAILY LINE GROUP REPORT: Select Report Date: ___/___/___

2 If the date next to "Select Report Date" is correct, press [F8] (labeled "Enter Data").

If you want to select a different date than the one shown in the prompt, enter the new date and press [F8] (labeled “Enter Data”).

A sample Daily Line Group Report is shown below.

```
                    DAILY LINE GROUP REPORT

LINE GROUP A: PUBLC                                   Size:  8 Lines
Date:  04/20/88

        |---------ACD CALLS------------ ||----OTHER CALLS--- |
             Calls    Num    Num  Avg Total     Num Avg    Total  % All
         Offered   Calls  Calls Hold Hold    Other Hold   Hold  Lines
    Time Night  Day Aband Handled Time Time   Calls Time   Time   Busy
   ---------------------------------------------------------------------
    7:00a 0     5  1      4  2:42  14m    0  0:00    om     0%
    8:00a 0    21  1     20  4:05  86m    0  0:00    0m     0%
    9:00a 0    36  2     34  2:53 104m    1  3:20    3m     5%
   10:00a 0    24  0     24  3:51 92m     0  0:00    0m     0%
   11:00a 0    19  0     19  3:45  71m    0  0:00    0m     0%
   12:00p 0    20  1     19  3:37  72m    0  0:00    0m     0%
    1:00p 0    31  1     30  3:28 107m    1  2:44    3m     4%
    2:00p 0    26  0     26  3:21  87m    0  0:00    om     1%
    3:00p 0    30  2     28  3:56 118m    0  0:00    0m     3%
    4:00p 0     7  0      7  3:33  25m    0  0:00    0m     0%
   ---------------------------------------------------------------
          0   219  8    211  3:33 776m    2  3:02    6m     1%

Busiest hours:  1- 3:00p,  2- 1:00p,  3- 9:00a

Note
 1.  Call statistics are counted in the hour and day in which they complete.


CALL MANAGEMENT SYSTEM FOR THE SYSTEM 25 PBX
Date Printed: 3/21/88  Time Printed: 9:55am
```

CUMULATIVE LINE GROUP REPORT

The Cumulative Line Group Report is identical in format to the Daily Line Group Report with the following exceptions:

- The start and end dates are shown instead of the single report date.
- The word “Cumulative” replaces the word “Daily” in the title.
- Days for which there is no CMS data are excluded from the report; these dates are listed in the “Note” section at the bottom of the report.
- On the Cumulative Line Group Report by Day, each line of data is a daily summary instead of an hourly summary. The first column of this report lists the date summarized instead of the hour.

To print the Cumulative Line Group Report:

1 Press the function key that corresponds to the desired cumulative report, either [F2] (labeled "Cumltive Day Rep") or [F3] (labeled “Cumltive Hour Rep”).

One of the following prompts appears:

PRINT CUMULATIVE REPORT BY DAY: Starting: ___/___/___ Ending: ___/___/___

or

PRINT CUMULATIVE REPORT BY HOUR: Starting: ___/___/___ Ending: ___/___/___

2 If the dates next to “Starting” and "Ending" are correct, press [F8] (labeled “Enter Data”).

If you want to select a different starting and/or ending date than the ones shown in the prompt, enter the new date(s) and press [F8] (labeled “Enter Data").

A sample Cumulative Line Group Report by Hour is shown below.

```
                    CUMULATIVE LINE GROUP REPORT

LINE GROUP A:  PUBLC                                Size:  8 Lines
Period: 04/20/88 - 04/24/88

        |--------ACD CALLS------------ ||----OTHER CALLS-- |
            Calls    Num   Num  Avg  Total     Num  Avg   Total  % All
     Time  Offered  Calls  Calls Hold  Hold    Other Hold  Hold  Lines
           Night Day Aband Handled Time Time    Calls Time  Time  Busy
    ---------------------------------------------------------
     7:00a  0   13   1     12 3:01   39m     0   0:00   0m    0%
     8:00a  0   93   3     90 3:17  305m     0   0:00   0m    2%
     9:00a  0  106   3    103 2:59  317m     1   3:20   3m    7%
    10:00a  0   83   6     77 3:03  254m     0   0:00   0m    5%
    11:00a  0   64   2     62 3:21  214m     0   0:00   0m    2%
    12:00p  0   65   1     64 2:59  194m     0   0:00   0m    0%
     1:00p  0   74   3     71 3:25  253m     1   2:40   3m    1%
     2:00p  0   73   1     72 3:06  226m     0   0:00   0m    0%
     3:00p  0   75   3     72 3:18  247m     2   4:01   8m    3%
     4:00p  0   14   0     14 3:34   50m     0   0:00   0m    0%
    ---------------------------------------------------------
            0  660  23    637 3:11 2099m     4   3:31  14m    2%

Busiest hours:  1- 9:00,  2- 8:00a,  3- 10:00a

Note
  1.  Call statistics are counted in the hour and day in which they complete.

  2.     NO CMS DATA EXISTS FOR THE FOLLOWING DAY(S)

       04/20/88


CALL MANAGEMENT SYSTEM FOR THE SYSTME 25 PBX
Date printed: 3/25/88  Time Printed: 9:58pm
```

Key to Line Group Report Data

DAILY LINE GROUP REPORT

LINE GROUP A: PUBLC — Size: 8 Lines
Date: 04/20/88

	ACD CALLS						OTHER CALLS			
(1) Time	(2) Calls Offered Night	(3) Calls Offered Day	(4) Num Calls Aband	(5) Num Calls Handled	(6) Avg Hold Time	(7) Total Hold Time	(8) Num Other Calls	(9) Avg Hold Time	(10) Total Hold Time	(11) % All Lines Busy
7:00a	0	5	1	4	2:42	14m	0	0:00	0m	0%
8:00a	0	21	1	20	4:05	86m	0	0:00	0m	0%
9:00a	0	36	2	34	2:53	104m	1	3:20	3m	5%
10:00a	0	24	0	24	3:51	92m	0	0:00	0m	0%
11:00a	0	19	0	19	3:45	71m	0	0:00	0m	0%
12:00p	0	20	1	19	3:37	72m	0	0:00	0m	0%
1:00p	0	31	1	30	3:28	107m	1	2:44	3m	4%
2:00p	0	26	0	26	3:21	87m	0	0:00	0m	1%
3:00p	0	30	2	28	3:56	118m	0	0:00	0m	3%
4:00p	0	7	0	7	3:33	25m	0	0:00	0m	0%
	0	219	8	211	3:33	776m	2	3:02	6m	1%

(12) Busiest hours: 1- 3:00p, 2- 1:00p, 3- 9:00a

Note
1. Call statistics are counted in the hour and day in which they complete.

CALL MANAGEMENT SYSTEM FOR THE SYSTEM 25 PBX
Date Printed: 4/21/88 Time Printed: 9:55am

The numbers in the following list correspond with the circled numbers in the above sample Line Group Report.

TIME

1 Time — The start time of the data collection hour.

ACD CALLS

2 Calls Offered Night — The number of ACD calls to the line group during each hour CMS was in Night Service mode. The figure does not include calls answered at non-agent stations.

3 Calls Offered Day — The number of ACD calls to a line group during each hour while CMS was in Day Service mode. This total is equal to the sum of the Num Calls Aband and the Num Calls Handled. Calls answered at non-agent stations are not included.

4 Num Calls Aband — The number of incoming calls to the line group which were abandoned while CMS was in Day Service mode.

	5 Num Calls Handled	The number of completed ACD calls (including intraflowed calls) to the line group while CMS was in Day Service mode. Calls still in progress at the end of the data collection hour are included in the next hour's data. Abandoned calls are not included.
	6 Avg Hold Time	The average amount of time (in minutes and seconds) each incoming call held a line. Avg Hold Time is determined by dividing the cumulative hold time (measured from the time the call reaches System 25 to line disconnect, for both abandoned and completed calls) by the Calls Offered Day. The average does not include calls answered at non-agent stations. Calls still in progress at the end of the data collection hour are included in the next hour's data.
	7 Total Hold Time	The total amount of time (to the nearest minute) all lines were held (in use) by incoming calls. The total includes times for serviced and abandoned calls, and for calls placed during both Day and Night Service, but does not include times for calls answered at non-agent stations. Calls still in progress at the end of the data collection hour are reported with the statistics for the next hour.
OTHER CALLS	**8** Num Other Calls	The number of "other" calls on the line group's lines during the indicated hour. Outgoing calls placed on CMS lines, incoming calls on CMS lines that are answered at non-agent voice terminals and incoming calls on CMS lines that have been answered by an agent and then transferred to another voice terminal are included. Calls still in progress at the end of the hour are included in the next hour's data.
	9 Avg Hold Time	The average amount of time (in minutes and seconds) each "other" call completed during the reporting hour held a CMS line.
	10 Total Hold Time	The total amount of time (to the nearest minute) all lines were held (in use) by completed "other" calls .

ADDITIONAL DATA	**11** % All Lines Busy	The percentage of time in a given hour that all lines (both CMS and transfer-queue lines) in the line group were simultaneously busy.
	12 Busiest Hours	The three data collection hours with the largest ACD Calls Total Hold Time values appear, in descending order, under the totals line. Fewer than three hours will appear if there were fewer than three hours in which calls were handled.

Sub-Group Report

Press [F4] (labeled "Sub-Grp Report") on the Print Reports Menu screen to select the Print Sub-Group Report screen, shown below.

```
PRINT SUB-GROUP REPORT                                  REPT CMS1.0 10:04a 04/20

                    F1 Print Daily Sub. Group Report
                    F2 Print Cumulative Sub-Group Report by Day
                    F3 Print Cumulative Sub-Group Report by Hour

                    F8 Return to Print Reports Menu

PRINT SUB-GROUP REPORT:                                          F10 - Help
 F Daily   F Cumltive F Cumltive                                    F Reports
 l Report 2 Day Rep 3 Hour Rep                                      8 Menu
```

You can request either a daily or cumulative Sub-Group Report from this screen.

DAILY SUB-GROUP REPORT

The Daily Sub-Group Report allows you to generate a report by sub-group on all line sub-groups. Similar to the Daily Line Group Report, this report gives you hour-by-hour data for all lines within a line sub-group. For example, Bon Voyage Travel has a line group called BUSNS (the Business Line Group) whose lines are divided into two sub-groups, one sub-group containing four WATS lines and another sub-group containing two local lines. The firm uses the Daily Sub-Group Report to find out how each of the two sub-groups is doing. As with the Daily Line Group Report, you can detect the following situations which may occur:

- A high number of abandoned calls, indicating that there are too few agents to handle calls to the line group.
- Frequent periods when all the lines in this sub-group are busy, indicating that you should consider adding more lines.
- Frequent periods when there is light call traffic, indicating you may want to consider eliminating lines.

For hours that CMS was in Night Service mode, the Daily Sub-Group Report shows the number of calls offered (calls that rang) per line (in the sub-group) per hour, the average and total holding times, and data on "other" calls. (All calls during Night Service are reported as "Othr".)

To print the Daily Sub-Group Report:

1 Press [F1] (labeled “Daily Report”) on the Print Sub-Group Report screen.

The following prompt appears:

PRINT DAILY SUB-GROUP REPORT: Select Report Date: ___/___/___

2 If the date next to “Date” is correct, press [F8] (labeled “Enter Data”).

If you want to select a different date than the one shown in the prompt, enter the new date and press [F8] (labeled “Enter Data”).

A typical Daily Sub-Group Report is shown below.

```
                    DAILY LINE SUB - GROUP REPORT

SUB - GROUP: PL                                   Size: 4 Lines
LINE GROUP A: PUBLC
Date:   04/20/88

        |---------ACD CALLS-------------- ||--OTHER CALLS--- |
             Calls                Num   Num  Avg  Total     Num   Avg   Total  % All
           Offered               Calls Calls Hold Hold    Other Hold  Hold   Lines
    Time   Night Day             Aband Handled Time Time   Calls Time  Time   Busy
    ---------------------------------------------------------------------------------
     7:00a  0     3   1       2  2:39    7 m    0   0:00    0m     0%
     8:00a  0    12   0      12  4:02   49 m    0   0:00    0m     1%
     9:00a  0    21   1      20  3:05   68 m    1   3:20    3m     3%
    10:00a  0    12   0      12  3:59   51 m    0   0:00    0m     0%
    11:00a  0    11   0      11  3:51   43 m    0   0:00    0m     0%
    12:00p  0    11   0      11  3:01   30 m    0   0:00    0m     0%
     1:00p  0    19   1      18  3:16   61 m    0   0:00    0m     2%
     2:00p  0    17   0      17  3:03   50 m    0   0:00    0m     0%
     3:00p  0    16   1      15  3:51   61 m    0   0:00    0m     1%
     4:00p  0     4   0       4  3:32   14 m    0   0:00    0m     0%
    ---------------------------------------------------------------
            0   126   4     122  3:26  434m     1   3:20    3m     1%

Busiest hours:  1 - 9:00a.  2- 1:00p.  3- 3:00p

Note
 1.  Call statistics are counted in the hour and day in which they complete.

CALL MANGEMENTS SYSTEM FOR THE SYSTEM 25 PBX
Date Printed: 4/21/88 Time Printed: 2:16pm
```

CUMULATIVE SUB-GROUP REPORT

The Cumulative Sub-Group Report is identical to the Daily Sub-Group Report with the following exceptions:

- The start and end dates are shown instead of the single report date.
- The word “Cumulative” replaces the word “Daily” in the title.
- Days for which there is no CMS data are excluded from the report; these dates are listed in the “Note” section at the bottom of the report.
- On the Cumulative Sub-Group Report by Day, each line of data is a daily summary instead of an hourly summary. The first column of this report lists the date summarized instead of the hour.

To print the Cumulative Sub-Group Report:

1 Press the function key that corresponds to the desired cumulative report, either [F2] (labeled “Cumltive Day Rep”) or [F3] (labeled “Cumltive Hour Rep”).

One of the following prompts appears:

PRINT CUMULATIVE REPORT BY DAY: Starting: ___/___/___ Ending:___/___/___

or

PRINT CUMULATIVE REPORT BY HOUR: Starting: ___/___/___Ending:___/___/___

2 If the dates next to “Starting” and Ending” are correct, press [F8] (labeled “Enter Data”).

If you want to select a different starting and/or ending date, enter the new date(s) and press [F8] (labeled “Enter Data”).

A sample Cumulative Sub-Group Report by Hour is shown below.

CUMULATIVE LINE SUB - GROUP REPORT

SUB - GROUP: PL Size: 4 Lines
of LINE GROUP A: PUBLC
Period: 04/20/88 - 04/24/88

	x ---------ACD CALLS---------- x						x --OTHER CALLS--- x			
Time	Calls Offered Night	Calls Offered Day	Num Calls Aband	Num Calls Handled	Avg Hold Time	Total Hold Time	Num Other Calls	Avg Hold Time	Total Hold Time	% All Lines Busy
7:00a	0	7	1	6	3:34	26m	0	0:00	0m	0%
8:00a	0	53	1	52	3:50	205m	0	0:00	0m	2%
9:00a	0	65	1	64	3:08	221m	1	3:20	3m	3%
10:00a	0	48	4	54	2:53	142m	0	0:00	0m	4%
11:00a	0	41	1	40	3:17	112m	0	0:00	0m	0%
12:00p	0	41	0	41	2:27	95m	0	0:00	0m	1%
1:00p	0	48	2	46	3:07	130m	0	0:00	0m	2%
2:00p	0	45	0	45	2:48	103m	0	0:00	0m	0%
3:00p	0	41	1	40	3:21	117m	0	0:00	0m	1%
4:00p	0	9	0	9	3:10	26m	0	0:00	0m	0%
	0	408	11	397	3:23	1177m	1	3:20	3m	1%

Busiest hours: 1- 9:00a. 2- 8:00a. 3- 10:00a

Note
1. Call statistics are counted in the hour and day in which they complete.

CALL MANAGEMENT SYSTEM FOR THE SYSTEM 25 PBX
Date Printed: 4/25/88/Time Printed: 2:16pm

Key to Daily Sub-Group Report Data

DAILY LINE SUB-GROUP REPORT

SUB-GROUP: PL Size: 4 Lines
LINE GROUP A: PUBLC
Date: 04/20/88

	ACD CALLS						OTHER CALLS			
(1) Time	(2) Calls Offered Night	(3) Day	(4) Num Calls Aband	(5) Num Calls Handled	(6) Avg Hold Time	(7) Total Hold Time	(8) Num Other Calls	(9) Avg Hold Time	(10) Total Hold Time	(11) % All Lines Busy
7:00a	0	3	1	2	2:39	7m	0	0:00	0m	0%
8:00a	0	12	0	12	4:02	49m	0	0:00	0m	1%
9:00a	0	21	1	20	3:05	68m	1	3:20	3m	3%
10:00a	0	12	0	12	3:59	51m	0	0:00	0m	0%
11:00a	0	11	0	11	3:51	43m	0	0:00	0m	0%
12:00p	0	11	0	11	3:01	30m	0	0:00	0m	0%
1:00p	0	19	1	18	3:16	61m	0	0:00	0m	2%
2:00p	0	17	0	17	3:03	50m	0	0:00	0m	0%
3:00p	0	16	1	15	3:51	61m	0	0:00	0m	1%
4:00p	0	4	0	4	3:32	14m	0	0:00	0m	0%
	0	126	3	122	3:26	434m	1	3:20	3m	1%

(12) Busiest hours: 1- 9:00a. 2- 1:00p. 3- 3:00p

Note
1. Call statistics are counted in the hour and day in which they complete.

CALL MANAGEMENT SYSTEM FOR THE SYSTEM 25 PBX
Date Printed: 4/21/88 Time Printed: 2:16pm

The numbers in the following list correspond with the circled numbers in the sample Daily Sub-Group Report above.

TIME

1 Time — The start time of the data collection hour.

ACD CALLS

2 Calls Offered Night — The number of ACD calls to the line sub-group during each hour the CMS was in Night Service mode. The figure does not include calls answered at non-agent stations.

3 Calls Offered Day — The number of ACD calls to the line sub-group during each hour the CMS was in Day Service mode. This total is equal to sum of the Num Calls Aband and the Num Calls Handled. The figure does not include calls answered at non-agent stations.

4 Num Calls Aband — The number of incoming calls to the line sub-group which were abandoned while the CMS was in Day Service mode.

	5 Num Calls Handled	The number of completed ACD calls (including intraflowed calls) to the line sub-group while the CMS was in Day Service mode. Calls still in progress at the end of the data collection hour are included in the next hour's data. Abandoned calls are not included.
	6 Avg Hold Time	The average amount of time (in minutes and seconds) each incoming call held a line in the sub-group. Avg Hold Time is determined by dividing the cumulative hold time (measured from time the call reaches System 25 to line disconnect, for both abandoned and completed calls) by the Num Calls Offered. The average does not include calls answered at non-agent stations. Calls still in progress at the end of the data collection hour are included in the next hour's data.
	7 Total Hold Time	The total amount of time (to the nearest minute) all lines in the sub-group were held (in use) by incoming calls. The total includes times for serviced and abandoned calls, and for calls placed during both Day and Night Service, but does not include times for calls answered at non-agent stations. Calls still in progress at the end of the data collection hour are reported with the statistics for the next hour.
OTHER CALLS	**8** Num Other Calls	The number of "other" calls on lines in the sub-group during the indicated hour. Outgoing calls made on CMS lines, incoming calls on CMS lines that are answered at non-agent voice terminals, and incoming calls on CMS lines that have been answered by an agent and then transferred to another voice terminal are included. Calls still in progress at the end of the hour are included in the next hour's data.
	9 Avg Hold Time	The average amount of time (in minutes and seconds) each "other" call completed during the reporting hour held a CMS line.
	10 Total Hold Time	The total amount of time (to the nearest minute) all lines in the sub-group were held (in use) by completed "other" calls.

ADDITIONAL DATA	**11** % All Lines Busy	The percentage of time in a given hour that all CMS and transfer-queue lines in the line sub-group were simultaneously busy.
	12 Busiest Hours	The three data collection hours with the largest ACD Calls Total Hold Time values appear, in descending order, under the totals line. Fewer than three hours will appear if there were fewer than three hours in which calls were handled.

Print All Reports

Press [F5] (labeled “All”) on the Print Reports Menu screen to print all four types of reports. A sample Print All Report screen appears below.

```
PRINT ALL REPORT                                    REPT CMS1.0 10:04a 04/20

                    F1 Print All Daily Reports
                    F2 Print All Cumulative Reports by Day
                    F3 Print All Cumulative Reports by Hour

                    F8 Return to Print Reports Menu

PRINT ALL REPORTS: (Agent Split Summary Not Computed by Hour)      F10 - Help
 F Daily   F Cunltive F Cumltive                                     F Reports
 1 Reports 2 Day Reps 3 Hour Rep                                     8 Menu
```

You can request either all daily or all cumulative reports from this screen.

ALL DAILY REPORTS

You can print all four types of daily reports by following this procedure:

1 Press [F1] (labeled “Daily Reports”) on the Print All Reports screen.

The following prompt appears:

PRINT ALL DAILY REPORTS: Select Report Date: ___/___/___

2 If the date next to “Select Report Date” is correct, press [F8] (labeled “Enter Data”).

If you want to select a different date than the one shown in the prompt, enter the new date and press [F8] (labeled “Enter Data“).

For the meaning of the data on individual reports, refer to the key to the specific report in this section.

ALL CUMULATIVE REPORTS

If you want to print all four types of cumulative reports, follow this procedure:

1 Press the function key that corresponds to the desired cumulative report, either [F2] (labeled “Cumltive Day Reps”) or [F3] (labeled “Cumltive Hour Rep”).

One of the following prompts appears:

PRINT CUMULATIVE REPORT BY DAY: Starting: ___/___/___ Ending:___/___/___

or

PRINT CUMULATIVE REPORT BY HOUR: Starting: ___/___/___ Ending:___/___/___

2 If the dates next to “Starting” and “Ending” are correct, press [F8] (labeled "Enter Data").

If you want to select a different starting and/or ending date, enter the new date(s) and press [F8] (labeled “Enter Data”).

For the meaning of the data on individual reports, refer to the key to the specific report in this section.

Events Log Report

The Events Log Report lists the 200 most recent exceptions and system messages, along with the date and time they occurred. Depending on how often exceptions and system messages occur in your system, this report may span several days or part of one day. Below is a portion of a sample Events Log Report.

```
                        EVENTS LOG REPORT                Page 1

 Time  Date                 Event
 ____________________________________________________________
8:11a05/19DayServiceNowIn Effect
9:15a05/19***Group C-  All Lines Busy > = 240 seconds
9:27a05/19***Split 1-  Agent JOEL - Refused Calls
10:03a05/19***Group A-  Line L3071 - Hold Time > = 8 minutes
10:21a05/19***Split 3-  Agent DON - Talk Time > = 480 seconds
11:20a05/19***Split 2-  # Abandoned Calls > = 3
11:32a05/19***Split 1-  Oldest Call Waiting > = 45 seconds
11:54a05/19***Split 1-  Agent JENNY - Refused Calls
12:04p05/19***Group A-  Line L3072 - Hold Time > = 8 minutes
12:33p05/19***Split 3-  Oldest Call Waiting > = 30 seconds
1:15p05/19***Split 2-  Agent BERNE - Refused Calls
1:17p05/19***Split 1-  # Abandoned Calls > = 4
1:24p05/19***Split 3-  Agent ALLAN - Talk Time > =480 seconds
1:56p05/19***Split 1-  Agent SCOTT - Refused Calls
2:12p05/19***Split 1-  Oldest Call Waiting > =45 seconds
2:16p05/19***Split 1-  Agent BILL - Refused Calls
2:19p05/19***Split 2-  # Calls Waiting > = 2
2:25p05/19***Split 1-  # Abandoned Calls > = 4
2:56p05/19***Split 1-  Agent Scott = Refused Calls
```

You can use information on the Events Log Report to spot problems such as these:

- Split staffing or configuration problems

  By monitoring the Abandoned Call, Average Speed of Answer and Oldest Call Waiting exceptions, you can determine if you need to add more agents or activate intraflow during peak hours.

- Exception thresholds that are set too low

  For instance, if you receive many exception messages for Talk Time, Agent Logout ACW, or time spent in the ACW state, exception thresholds you are using may not be realistic.

- Line problems

  For instance, frequent minimum holding time exceptions for a particular line may indicate the line is faulty. Frequent All Lines Busy exceptions may indicate that you need more lines *or* that agents need to handle calls faster.

You can also use this report to see how effectively dynamic reconfiguration was used during each shift. If many exceptions are listed for a single shift, the exception thresholds may be set too low or the information from the status screens may not have been used effectively.

Section 8: Archiving Data

Overview

Archiving is the process of copying historical data from the hard disk onto floppy diskettes. You need to archive data when the hard disk begins to run out of space and you want to save your old files. You should archive data once a month to keep the system running efficiently.

This section discusses how to archive data and contains information about the directories and files CMS uses. It includes procedures for copying the system tables and historical data files to a floppy diskette using the MS-DOS copy command, and for erasing these files from the hard disk using the MS-DOS erase command. This section also tells you how to restore archived data to the hard disk so that you can print historical reports.

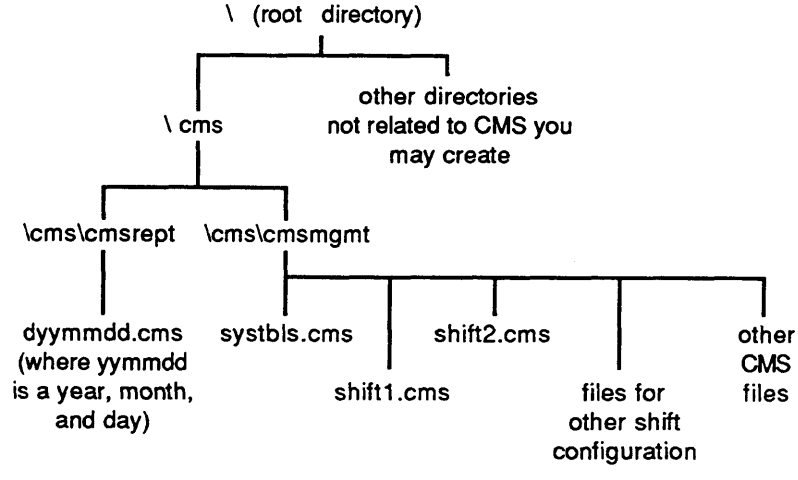
TRANSFERRING HISTORICAL DATA ONTO DISKETTES

To print historical reports from archived data, you need the system tables and historical data files for the days in which you're interested. The system tables file includes the information that identifies the lines, splits, and agents contained in historical data that have been saved. Up to four historical data files and one system tables file fit on a single 360K floppy diskette.

To clear space on the hard disk, you can simply erase your oldest files. However, if you want to save the data for possible future use, you should archive those files onto a floppy diskette first, and then erase them from the hard disk. Copy the four oldest data files and the oldest system table to the floppy diskette. After you verify that the files were copied, erase those files from the hard disk.

If you archive files on a regular schedule, such as once a week, you can avoid running out of space on the hard disk. Figure 8-1 shows the locations of the directories and files CMS uses.

FIGURE 8-1 Locations of the CMS Directories and Files.



Copying the System Tables File

To copy the system tables file, do as follows:

1. If you are in CMS, exit to MS-DOS by pressing [F8] (labeled Exit to DOS) on the CMS Menu.
2. Access the cmsmgmt directory on the hard disk by typing

   cd \ cms \ cmsmgmt

   and pressing [Enter].
3. To copy the system tables file for the current date, type

   copy c:systbls.cms a:syymmdd.cms

   where yymmdd is the date, and press [Enter]. For example, to copy the system tables file on 04/19/88, copy it to a file called s880419.cms.

   If you copy the system tables file only when a change affecting line, agent, or split assignments has been made, use the date the change became effective. For instance, if the change was made Monday morning before call management was started, use Monday's date. If the change was made after call management stopped on Monday, use Tuesday's date.

Copying Historical Data Files

To copy the historical data files, do the following:

1. If you are in CMS, exit to MS-DOS by pressing [F8] (labeled Exit to DOS) on the CMS Menu.
2. Access the cmsrept directory by typing

   cd \ cms \ cmsrept

   and pressing [Enter].
3. Type a series of commands in the form

   copy c:dyymmdd.cms a:

   where yymmdd is the date on which data were collected. Press [Enter] after each command. For example, if you want the historical data file for 04/19/88, you would copy the file d880419.cms.

   To copy 10 days' data at a time, for instance, files from 07/20/88 through 07/29/88, type a command in this format:

   copy c:d88072* .cms a:

   then press [Enter].

Erasing Files from the Hard Disk

To erase the archived files from the hard disk, do as follows:

Type a series of commands in the form

erase c:dyymmdd.cms

where dyymmdd.cms is the name of the file to be erased. Press [Enter] after each command.

GENERATING HISTORICAL REPORTS

If you have transferred old CMS data from the hard disk onto floppy diskettes, you may later want a report or a complete set of reports for a particular date. The procedures that follow explain how to copy the system tables and data files for the date from the floppy diskette onto the hard disk, so that you can then generate reports for that date.

Saving the Current System Tables

You have to save the current system tables file in a temporary file so that you don't lose it when you copy the historical system table file to the hard disk. To save the current system tables file, do as follows:

1. If you are in CMS, exit to MS-DOS by pressing [F8] (labeled Exit to DOS) on the CMS Menu.
2. Access the cmsmgmt directory on the hard disk by typing

   cd \cms \cmsmgmt

   and pressing [Enter].
3. To copy the current system tables file to a temporary file, type

   copy systbls.cms temp

   then press [Enter].

This copies (and saves) the current system tables file to a file called "temp." (You can choose another name for the file if you want.) Remember to copy the current system tables file back into systbls.cms in the cmsmgmt directory before you have CMS begin managing calls again.

Copying the Historical System Tables to the Hard Disk

You should still be in the cmsmgmt directory. To copy the system tables files for the date you want, type the following:

copy a:syymmdd.cms c:systbls.cms

where yymmdd is the date of the system tables file. Press [Enter].

Copying the Historical Data Files to the Hard Disk

You should still be in the cmsmgmt directory. To copy the historical data files from the floppy disk to the hard disk, do as follows:

1. Access the cmsrept directory by typing

   cd \cms \cmsmpt

   then press [Enter].
2. Type a series of commands in the form

   copy a:dyymmdd.cms c:

   where yymmdd is the date of the data you want. Press [Enter] after each command.
3. When you're finished copying data to the hard disk, type

   cd \cms

   then press [Enter].

Generating Reports

The system tables file and data for the date(s) you're interested in should now be in the correct locations on the hard disk. To generate the reports you want, follow the instructions in "Generating CMS Reports" in Section 7.

RESTORING DATA COLLECTION CONDITIONS

Now that you have the historical reports, you must restore the hard disk to its previous condition. Otherwise, CMS cannot effectively store new data when it resumes managing calls. To do this, erase the historical data from the hard disk-data remains saved on the floppy diskette-and restore the current system tables file to the proper file.

Erasing the Historical Data from the Hard Disk

To erase the historical data from the hard disk, do the following:

1 If you are in CMS, exit to MS-DOS by pressing [F8] (labeled Exit to DOS) on the CMS Menu.

2 To access the cmsrept directory, type

```
cd \cms \cmsrept
```

then press [Enter].

3 To erase a data file, type

```
erase c:dyymmdd.cms
```

where yymmdd is the date of the data file to be erased. Then press [Enter].

Restoring the Current System Tables File

To restore the current system tables file to its appropriate place in the cms directory, do the following:

1 To access the cmsmgmt directory, type

```
cd \cms \cmsmgmt
```

and then press [Enter].

2 To restore the system tables file, type

```
copy temp systbls.cms
```

and press [Enter].

You should now have the historical reports you wanted, and CMS should be ready to store new data.

Section 9: Troubleshooting

Overview

This section of the manual suggests corrective action for problems that may occur with your CMS. It is organized as follows:

Startup Problems

Suggests corrective action for problems the CMS program detects during call management startup.

Call Management Problems

Identifies problems that can cause CMS to stop managing calls and suggests corrective action.

Voice Announcement Unit Problems

Suggests corrective action for problems that effect voice announcement units.

Printer Problems

Identifies and suggests corrective action for problems that can prevent you from printing CMS screens and reports.

Agent problems

Anticipates and suggests solutions to problems you and your agents are most likely to encounter as you begin to use CMS.

System Errors

Explains messages beginning SYSERR that may appear on your status screens and/or Events Log screen during CMS operation.

Running CMS from a Floppy Diskette Backup

Tells you how to run CMS using the floppy diskette backups in the event that the PC's hard disk is damaged.

Managing Calls When CMS is Not Running

Tells you how to use your System 25 Direct Group Calling (DGC) Coverage feature to manage calls until CMS is running again.

Startup Problems

The following pages identify and suggest corrective action for problems that may occur when you start up CMS call management. The problems are grouped as follows, according to the kind of message they cause to appear in the information portion of the Initialization screen:

- Error messages
- Warning messages

Use these pages to find the message that identifies your problem, and take the corrective action(s) described.

Error Messages

Problems that generate *error* messages on the CMS Initialization screen always bring the call management startup procedure to a halt. Until you have corrected the problem, you have to manage incoming calls on CMS lines according to the instructions in “Managing Calls When CMS is Not Running” at the end of this section.

- **ERROR--NO Lines in CMS. Must ADMINISTER Lines/Groups.**

Effect on Call Management: Until this problem is corrected, CMS cannot manage calls. See “Managing Calls When CMS is Not Running“ at the end of this section of the manual.

Possible Cause	Corrective Action
You omitted one or more steps when you administered your CMS line groups.	**1** From the Initialization screen, in sequence, press [F8] (labeled “Exit Call Mgt”), [F4] (labeled "min CMS", and [F2] (labeled "Lines/LineGps") to get the Administer Line Groups screen. **2** Follow the instructions under the heading “Administering CMS Lines and Line Groups” in Section 4 to administer line groups. **3** Make sure you have completed at least *one* shift configuration as described in “Building or Editing Shift Configurations” in Section 4. **4** Restart call management from the CMS Menu by pressing [F1] (labeled “Start Call Mgt”).

• **ERROR--NO Configurations Found. Must ADMINISTER System.**

Effect on Call Management: Until this problem is corrected, CMS cannot manage calls. See “Managing Calls When CMS is Not Running” at the end of this section.

Possible Cause	Corrective Action
You omitted one or more steps when you built your shift configurations.	**1** From the Initialization screen, in sequence, press [F8] (labeled "Exit Call Mgt"), [F4] (labeled “Admin CMS”), and [F4] (labeled “Config List”) to get to the Configuration List screen. **2** Build at least one shift configuration according to the instructions in “Building or Editing Shift Configurations” in Section 4 of this manual. **3** Restart call management from the CMS Menu by pressing [F1] (labeled “Start Call Mgt”).

• **ERROR--CMS File Missing. Must ADMINISTER System.**

Effect on Call Management: Until this problem is corrected, CMS cannot manage calls. See “Managing Calls When CMS is Not Running” at the end of this section of the manual.

Possible Cause	Corrective Action
CMS was not administered or was administered incorrectly.	**1** From the Initialization screen, press [F8] (labeled "Exit Call Mgt"); then press [F4] (labeled "Admin CMS") to access the Administration Menu screen. **2** Administer CMS according to the instructions in Section 4 of this manual.

- **ERROR--CUX Faulty or Disconnected. CMS Can't Manage Calls**
  (X refers to PC jack CU1 or PC jack CU2).

Status Indicator: **CU1** or **CU2** (flashing)

Audible Signal: A beep from the CMS PC Interface Card.

Effect on Call Management: Until this problem is corrected, CMS cannot manage calls. See "Managing Calls When CMS is Not Running" at the end of this section.

Possible Cause	Corrective Action
There's a loose cable connection between the CU1 and/or CU2 jack and the System 25 wall jack.	Make sure one end of the cable is securely plugged into the CU1 (or CU2) jack at the back of the PC and the other end is securely plugged into the wall jack assigned to CU1 (or CU2). If this does not work, have the System 25 Administrator check the station interconnect panel (SIP) connections to the System 25 cabinet for CU1 and/or CU2.
The cable is faulty.	Try switching the two cables around (unplug the cable from the CU1 jack and plug it into CU2, and vice versa). If the CU1 indicator on the screen stops flashing and the CU2 indicator goes on (or vice versa), you know the problem is either a faulty cable or a faulty System 25 component.
The System 25 ATL port(s) assigned to CU1 and/or CU2 is faulty.	Have the System 25 Administrator check the ports on the ATL Line Circuit Pack.
The wrong cable type is being used.	The cable must be a *4-pair* modular cable, D8W-87, the type of cable that came with your CMS PC Interface Card.
The CU1 and/or CU2 jack on the CMS PC Interface Card is faulty.	If none of the previous actions corrects the problem, contact your equipment supplier for assistance.

• ERROR--CMS Card Not Found or Faulty. CMS Can't Manage Calls.

Effect on Call Management: Until this problem is corrected, CMS cannot manage calls. See "Managing Calls When CMS is Not Running" at the end of this section.

Possible Cause	Corrective Action
The CMS PC Interface Card is installed incorrectly.	**1** From the Initialization screen, press [F8] (labeled "Exit Call Mgt"), then press [F8] (labeled "Exit to DOS") to exit to MS-DOS. **2** Turn off the PC and unplug it from the power source. **3** Make sure the CMS PC Interface Card is installed as described in the *AT&T System 25 Call Management System Installation and Startup Guide.* **4** Reconnect and turn on the PC. **5** Restart call management from the CMS Menu.
The CMS PC Interface Card is faulty.	If the same message appears when you restart CMS call management, you may have a faulty CMS PC Interface Card. Contact your equipment supplier for assistance.

Problems that generate warning messages on the Initialization screen do not halt the CMS call management startup procedure. While these problems do not prevent CMS from managing calls, they do adversely affect call management in various ways as indicated, and should be corrected as quickly as possible.

- **WARNING--SYSTEM ACCESS Not Working (PC CUX Port's Button #7).** (where X refers to either PC jack CU1 or PC jack CU2).

Effect on Call Management: If the System Access feature has not been administered on CU1, CMS cannot transfer calls.

> **NOTE:** The System Access feature on buttons 7 of CU1 and CU2 is used to perform verification tests during call management startup. If these buttons are not correctly administered, other verification tests will fail, even if there are no other administration errors. Therefore, it is important to correct the administration of button(s) 7 and to restart call management before investigating other warning messages.

Possible Cause	Corrective Action
Button 7 on CU1 or CU2 (as indicated in the warning message) is not administered as a System Access button.	Check and correct the administration of the button.

• WARNING--EXCLUSION Not Working (PC CU1 Port's Button #8).

Effect on Call Management: Some CMS calls are disconnected before being connected to an agent station.

Possible Cause	Corrective Action
The modular cables connected to PC jacks CU1 and CU2 are reversed.	Reverse the cables connected to PC jacks CU1 and CU2. Then restart CMS call management from the CMS Menu.
PC jack CU1 is connected to the wrong System 25 ATL port.	Check that PC jack CUl is connected to the wall jack assigned to CU1. If this is not the problem, have the System 25 Administrator check the Station Interconnect Panel (SIP) connections to the System 25 cabinet for CU1.
System 25 feature administration of button number 8 on PC jack CU1 is incorrect.	Have the System 25 Administrator check System 25 administration of the CMS CU1 jack to see that button number 8 was administered with the Exclusion feature.

- **WARNING--PERS LINE Not Working (CU1's Button # NN for Trunk XXXXX)** (where NN is the button number on CU1 and XXXXX is the Line ID associated with the CMS or transfer-queue line).

Effect on Call Management: CMS does not recognize an incoming call, and therefore, does not answer the call.

Possible Cause	Corrective Action
The modular cables connected to PC jacks CU1 and CU2 are reversed.	Reverse the cables connected to PC jacks CU1 and CU2. Then restart CMS call management from the CMS Menu.
PC jack CU1 is connected to the wrong System 25 ATL port.	Check that PC jack CU1 is connected to the wall jack assigned to CU1. If this is not the problem, have the System 25 Administrator check the SIP connections to the System 25 cabinet for CU1.
System 25 feature administration of button number NN for PC jack CU1 is incorrect.	Have the System 25 Administrator check System 25 administration of PC jack CU1 to see that button number NN was administered as a Personal Line for trunk XXXX.
The trunk with Line ID XXXX is administered for Dial-in Only access. This causes the CMS test for this line to fail when there is not a problem	Have the System 25 Administrator change the Dial-in Only option to no. Then restart call management from the CMS Menu.

- **WARNING--DSS Not Working (CU1's Button # NN for VAU XXXXXX, PDC ZZZZ)** (where NN is the button number on PC jack CU1, XXXXXX is the voice announcement unit ID, and ZZZZ is the voice announcement unit's PDC).

Effect on Call Management: Calls cannot be transferred to the voice announcement unit.

Possible Cause	Corrective Action
The modular cables connected to PC jacks CU1 and CU2 are reversed.	Reverse the cables connected to PC jacks CU1 and CU2. Then restart call management from the CMS Menu.
PC jack CU1 is connected to the wrong System 25 ATL port.	Check that PC jack CU1 is connected to the wall jack assigned to CU1. If this is not the problem, have the System 25 Administrator check the SIP connections to the System 25 cabinet for CU1.
System 25 feature administration of button number NN on PC jack CU1 is incorrect.	Have the System 25 Administrator check System 25 administration of PC jack CU1 to see that button number NN was administered as a DSS button for PDC ZZZZ.

- **WARNING--AGENT STATUS Not Working (CU2'S Button # NN for PDC ZZZZ)** (where NN is the button number on PC jack CU2 and ZZZZ is the PDC of the agent's voice terminal).

Effect on Call Management: CMS agents do not receive CMS calls.

Possible Cause	Corrective Action
The modular cables connected to PC jacks CU1 and CU2 are reversed.	Reverse the cables connected to PC jacks CU1 and CU2. Then restart CMS call management from the CMS Menu.
PC jack CU2 is connected to the wrong System 25 ATL port.	Check that PC jack CU2 is connected to the wall jack assigned to CU2. If this is not the problem, have the System 25 Administrator check the SIP connections to the System 25 cabinet for CU2.
System 25 feature administration for button number NN on PC jack CU2 is incorrect.	Have the System 25 Administrator check System 25 administration of PC jack CU2 to see that button number NN was administered with the CMS Monitor feature.
System 25 feature administration of one or more of the agent status buttons on the agent voice terminal is incorrect.	Have the System 25 Administrator check System 25 administration of the three agent status buttons on the agent voice terminal.

• WARNING--One or More Line Groups Has No Lines.

Effect on Call Management: Calls cannot come into a line group with no lines.

Possible Cause	Corrective Action
You have at least one agent split assigned to a line group containing no lines.	**1** From the Initialization screen, press [F1] (labeled "Config Screen") to get to the Configuration screen. **2** By looking at the "Num" column in the Answer/Force Delay area and the "Main" and "Sec" columns in the Call Flow area, find the line group(s) (A-D) with no lines and a main and/or secondary split assigned to it (them). – If you want to assign lines to a line group with no lines, exit call management and follow the instructions in "Administering CMS Lines and Line Groups" in Section 4 of this manual. – If you want to remove an agent split assignment from an empty line group, then do so when call management begins by following the instructions in "Reconfiguring Call Flow" in Section 5.

- **WARNING--NO Agents Covering Line Group(s). Press CONFIG SCREEN.**

Effect on Call Management: If both the main and secondary splits assigned to a line group have no agents, calls coming in on that group of lines will not be answered. If the main split has agents but the secondary split does not, calls coming in on that group of lines cannot be intraflowed. If the main split has no agents but the secondary split does, and if intraflow is on, calls coming in on that group of lines will be connected to a delay message, then put on hold until they can be intraflowed to the secondary split.

Possible Cause	Corrective Action
You have at least one empty split assigned to at least one line group.	**1** From the Initialization screen, press [F1] (labeled "Config Screen") to get the Configuration screen. **2** Looking at the Agent Split and the Call Flow areas, find the split(s) with no agents. **3** Assign agents to the empty split(s) using the Configure Splits screen or remove the empty splits using the Call Flow screen according to the instructions in "Dynamic Reconfiguration" in Section 5 of this manual.

- **WARNING--NO Secondary Split Assigned to One or More Line Groups.**

Effect on Call Management: Calls coming in to a line group with no secondary split assigned to it cannot be intraflowed.

Possible Cause	Corrective Action
You have at least one line group with a main split assigned to it and intraflow turned on, but the line group has no secondary split assigned to it.	**1** From the Initialization screen, press [F1] (labeled "Config Screen") to get the Configuration screen. **2** In the Call Flow area, find the line group(s) with intraflow turned on but no secondary split assigned. **3** Following the instructions in "Reconfiguring Call Flow" in Section 5, either turn intraflow off or assign a secondary split to the line group.

• WARNING--NO Main Split Assigned to One or More Line Groups.

Effect on Call Management: Calls coming into a line group with no main split assigned to it will be answered only if intraflowed.

Possible Cause	Corrective Action
You have at least one line group with no main split assigned to it, but with a secondary split assigned to it.	**1** From the Initialization screen, press [F1] (labeled "Config Screen") to get to the Configuration screen. **2** Looking at the Call Flow area, find the line group(s) with no main split assigned. **3** Following the instructions in "Reconfiguring Call Flow" in Section 5, assign a main split to the line group(s).

• **WARNING--Only x Day's Space Left for Storing History Data.**

Status Indicator: **LoStorage**

Possible Cause	Corrective Action
This message appears when there is room for less than ten days of historical data.	**1** Exit to MS-DOS by pressing [F8] (labeled "Exit to DOS") on the CMS Menu. **2** Access the cmsrept directory by typing ***cd \cms \cmsrept*** then press [Enter]. **3** Type ***dir,*** then press [Enter] to display the names of all the files in the directory. Data files are in the form dyymmdd.cms (where yymmdd represents a year, a month, and a day. **4** If you plan to delete files, but want to transfer (save) data from these files onto a floppy diskette before deleting them, see Section 8, "Archiving Data" in this manual. **5** Delete files by typing ***erase c:dyymmdd.cms*** (where yymmdd represents the year, month and day of the file); then press [Enter]. **6** Repeat Step 5 for each file you want to delete.

• **WARNING--Out of Disk Space on Drive C:--No Storage of History Data.**

Status Indicator: **NoStorage**

Effect on Data Collection: CMS continues to manage calls, but all data collection stops until the problem is corrected.

Possible Cause	Corrective Action
There's no room on the hard disk for new data.	**1** Exit to MS-DOS by pressing [F8] (labeled "Exit to DOS") on the CMS Menu. **2** Access the cmsrept directory by typing ***cd \ cms \ cmsrept*** then press [Enter] **3** Type ***dir*** then press [Enter] to display the names of all the files in the directory. Data files are in the form dyymmdd.cms (where yymmdd represents a year, a month, and a day. **4** If you plan to delete files, but want to transfer (save) data from these files onto a floppy diskette before deleting them, see Section 8, "Archiving Data" in this manual. **5** Delete files by typing ***erase c:dyymmdd.cms*** (where yymmdd represents the year, month and day of the file); then press [Enter]. **6** Repeat Step 5 for each file you want to delete.

• **WARNING--Printer Not Ready. Using Prt Sc Key Will Halt CMS.**

Status Indicator: **Don't PrtSc**

Effect on Call Management: If you press [Shift] + [Print Scrn] when this message is displayed, CMS stops managing calls.

Effect on Data Collection: If you press [Shift] + [Print Scrn] when this message is displayed, all data collection stops, but resumes normally when the problem is corrected. Statistics for time logged in are not affected.

Possible Cause	Corrective Action
The printer is not receiving power.	Make sure the printer is plugged in and turned on, and that the Ready light is on.
There's no paper in the printer, or the paper is jammed.	**1** Make sure there's paper in the printer and the paper isn't jammed. **2** Make sure the paper is aligned properly. **3** Press the Form Feed button on the printer to make sure the paper feeds properly.
There's a loose cable connection between the printer and the PC.	Make sure the connections are secure at both ends of the cable running between the printer and the PC. If the problem is corrected, you will see the message **Printer Now Ready** on the error line. If you do not see this message, try correcting the problem again. If you still do not see the message, turn the PC off, then on, and restart CMS call management from the CMS Menu.
The printer is not ready.	Make sure the printer's Ready light is on. If not, press the button next to the Ready light.

- **WARNING-Annc #N, XXXXXXX, is Not Hanging Up. Check Unit.** (N represents the announcement unit number and XXXXXXX is the Announcement ID.)

Status Indicator: **ANNC**

Effect on Call Management: Until the problem is corrected, CMS cannot connect calls to the designated announcement unit. The Announcement Unit Status field on the System Status screen displays **BRKN** and the Annc Condtn field on the Select Announcement and Assign Announcement screens also shows **BROKN.**

Possible Cause	Corrective Action
The announcement unit is in the Continuous Play mode.	Turn off the Continuous Play switch. Bring the unit back into service following the directions in "Voice Announcement Unit Problems," later in this section.

The following pages identify and suggest corrective action for problems that may occur while CMS is managing calls. Scan the pages to locate the error message or problem description that identifies your problem. Then take the recommended corrective action.

> **IMPORTANT:** All the problems identified here bring call management to a halt. In most cases, CMS resumes managing calls as soon as the problem is corrected. Meanwhile, you have to manage incoming calls on CMS lines according to the instructions in "Managing Calls When CMS is Not Running" at the end of this section of the manual.

• ERROR--CMS Card Not Found or Faulty. CMS Can't Manage Calls.

Status Indicator: **CU1** (flashing) and **CU2** (flashing)

Audible Signal: A 30-second beep from the PC

Effect on Call Management: Until this problem is corrected, CMS cannot manage calls. See "Managing Calls When CMS is Not Running" at the end of this section of the manual.

Effect on Data Collection: When this problem occurs, data collection stops. Data on calls completed within the hour are saved if the problem is corrected within the same hour in which CMS became disabled. Data on calls in progress when CMS became disabled are lost. When the problem is corrected, data collection resumes.

Possible Cause	Corrective Action
The CMS PC Interface Card has become loose.	**1** Exit to MS-DOS bv pressing [F8] (labeled "Exit to DOS") on the CMS Menu. **2** Turn off the PC and unplug it from the power source. **3** Make sure the CMS PC Interface Card is installed as described in the *AT&T System 25 Call Management System Installation and Startup Guide.* **4** Reconnect and turn on the PC. **5** Restart CMS call management.
The CMS PC Interface Card is faulty.	If the same message appears on the screen when you try to restart CMS, contact your equipment supplier for assistance.

- **PROBLEM:** The PC stops functioning, and call management stops, but no message appears on the screen.

Audible Signal: The alarm on the CMS PC Interface Card comes on and stays on.

Effect on Call Management: Until this problem is corrected, CMS cannot manage calls. See "Managing Calls When CMS is Not Running" at the end of this section of the manual.

Effect on Data Collection: When this problem occurs, data collection stops, and all data from the current hour are lost.

Possible Cause	Corrective Action
The PC has failed.	Press the reset button below the disk drives on the front of the PC, and restart CMS call management from the CMS Menu. If you cannot restart the PC , see the user's guide that came with your PC.

- **PROBLEM:** The PC stops, restarts, and displays the MS-DOS **C>** prompt, or the CMS Menu.

Effect on Call Management: Call management stops, but should resume shortly after you restart call management.

Effect on Data Collection: Data for the current hour are lost.

Possible Cause	Corrective Action
Electrical power to the PC was interrupted, or someone pressed the reset button on the PC.	Restart call management from the CMS Menu. (Refer to "Startup Procedures" in Section 5 for details.)

- **ERROR--CU X Faulty or Disconnected. CMS Can't Manage Calls** (X refers to either PC jack CU1 or PC jack CU2).

Status Indicator: **CU1** or **CU2** (flashing)

Audible Signal: A single short beep from the PC and a longer beep from the CMS PC Interface Card

Effect on Call Management: Until this problem is corrected, CMS cannot manage calls. See "Managing Calls When CMS is Not Running" at the end of this section of the manual.

Effect on Data Collection: When this message appears, data collection stops. Data on completed calls are saved, but data on calls in progress when the problem occurred are lost. When the problem is corrected, data collection resumes.

Possible Cause	Corrective Action
There's a loose cable connection between the CU1 and/or CU2 jack and the System 25 wall jack.	Make sure one end of the cable is plugged securely into the CU1 (or CU2) jack at the back of the PC and the other end is plugged securely into the wall jack assigned to CU1 (or CU2). If this does not work, have the System 25 Administrator check that the station interconnect panel (SIP) connections to the System 25 cabinet for the CU1 and/or CU2 are in place.
The cable is faulty.	Try switching the cables around (unplug the cable from CU1 and plug it into CU2, and vice versa). If the CU1 indicator on the screen stops flashing and the CU2 indicator appears on the screen (or vice versa), you know the problem is either a faulty cable or a faulty System 25 component.
The ATL port(s) assigned to CU1 and/or CU2 is faulty.	Have the System 25 Administrator check the ATL Line Circuit Pack to which CU1 and CU2 are connected.
The wrong cable is being used.	The cable must be a 4-pair modular cable, D8W-87, the type of cable that came with your CMS PC Interface Card.
The CU1 and/or CU2 jacks on the CMS PC Interface Card are faulty.	If none of the above actions corrects the problem, contact your equipment supplier for assistance.

- **PROBLEM:** CMS stops managing calls. No error message appears on the screen, and the function keys don't work.

Effect on Call Management: No calls are processed.

Effect on Data Collection: Only statistics for time logged in are collected.

Possible Cause	Corrective Action
You pressed [Shift] + {Print Scrn] when the printer was not ready.	• See "Printer Not Ready" message under the heading, "Printer Problems" later in this section for a list of corrective actions. When the printer is fixed, CMS resumes call management. If it does not, reboot the PC (by pressing the reset button on the front of the PC or by turning the PC off and then on again), and then restart CMS call management from the CMS Menu.

Voice Announcement Unit Problems

After correcting a voice announcement unit problem, bring the unit back into service as follows:

1 From the System Status screen, press [F2] (labeled “Select Anncs”).
2 Press [F1] (labeled “Select Annc”).
3 Enter the number of the announcement unit; then press [F8] (labeled “Enter Data”).
4 Press [F3] (labeled “Change Condtn”) once to change the announcement unit condition from **BROKN** to **REMVD.**
5 Press [F3] again to change the condition to **AVAIL** .

CMS immediately attempts to test the unit.

- **WARNING--Annc #N, XXXXXXX, (PDC = YYYY) Not Responding. Check Unit** (where N represents the announcement unit number, XXXXXXX is the Announcement ID, and YYYY is the announcement unit's PDC).

Status Indicator: **ANNC**

Effect on Call Management: The voice announcement unit has failed the startup/back-in-service test. Until the problem is corrected, CMS cannot connect calls to the designated announcement unit. The Announcement Unit Status field on the System Status screen is updated to **BRKN** and the Annc Condtn field on the Select Announcement and Assign Announcement screens is updated to **BROKN.**

Possible Cause	Corrective Action
The voice announcement unit is not receiving power.	Make sure the voice announcement unit is plugged in and turned on. Using the Assign Announcement screen, bring the unit back into service.
There is a loose cable connection between the voice announcement unit and the System 25 wall jack.	Make sure the modular cable is plugged into the voice announcement unit and the System 25 wall jack. Using the Assign Announcement screen, bring the unit back into service.
There is no message recorded on the voice announcement unit.	Record a message. Using the Assign Announcement screen, bring the unit back into service.
System 25 and CMS administration do not match for the announcement unit.	Have the System 25 Administrator check System 25 administration for the PDC and port numbers associated with the announcement unit. The System 25 Administrator should also check the System 25 administration of the DSS button representing the announcement unit on PC jack CU1.. Using the Assign Announcement screen, bring the unit back into service.

- **WARNING--Annc #N, XXXXXXX, is Not Hanging Up. Check Unit.** (N represents the announcement unit number and XXXXXXX is the Announcement ID.)

Status Indicator: **ANNC**

Effect on Call Management: Until the problem is corrected, CMS cannot connect calls to the designated announcement unit. The Announcement Unit Status field on the System Status screen is updated to **BRKN** and the Annc Condtn field on the Select Announcement and Assign Announcement screens are updated to **BROKN.**

Possible Cause	Corrective Action
The delay message is longer than the number of seconds specified in the Maximum Message Length field on the Assign Announcement screen.	Listen to and time the delay message. Enter the correct number of seconds in the Maximum Message Length field on the Assign Announcement screen. Bring the unit back into service.
The announcement unit is in Continuous Play mode.	Turn off the Continuous Play switch. Using the Assign Announcement screen, bring the unit back into service.

- **WARNING--Annc # N, XXXXXXX, Not Answering. Check Unit.**
  (N represents the Announcement Number and XXXXXXX is the announcement ID.)

Status Indicator: **ANNC**

Effect on Call Management: Until the problem is corrected, CMS cannot connect calls to the designated voice announcement unit. The Announcement Unit Status field on the System Status screen is updated to **BRKN** and the Annc Condtn field on the Select Announcement and Assign Announcement screens is updated to **BROKN.**

Possible Cause	Corrective Action
The voice announcement unit is not receiving power.	Make sure the voice announcement unit is plugged in and turned on. Using the Assign Announcement screen, bring the unit back into service.
There is a loose cable connection between the voice announcement unit and the System 25 wall jack.	Make sure the modular cable is plugged into the voice announcement unit and the System 25 wall jack. Using the Assign Announcement screen, bring the unit back into service.

- **WARNING--Annc # N, XXXXXXX, Hung Up Too Soon. Check Unit.**

Status Indicator: **ANNC**

Effect on Call Management: Until the problem is corrected, CMS cannot connect calls to the designated voice announcement unit. The Announcement Unit Status field on the System Status screen is updated to **BRKN** and the Annc Condtn field on the Select Announcement and Assign Announcement screens is updated to **BROKN.**

Possible Cause	Corrective Action
Delay message is less than 5 seconds long.	Record new delay message that is at least 5 seconds long. Using the Assign Announcement screen, bring the unit back into service.

• WARNING--Printer Not Ready. Using Prt Sc Key Will Halt CMS.

Status Indicator: **Don't PrtSc**

Effect on Call Management: If you press [Shift] + [Print Scrn] when this message is displayed, CMS stops managing calls.

Effect on Data Collection: If you press [Shift] + [Print Scrn] when this message is displayed, all data collection stops, but resumes normally when the problem is corrected. Statistics for time logged in are not affected.

Possible Cause	Corrective Action
The printer is not receiving power.	Make sure that the printer is plugged in and turned on, and that the Ready light is on.
There's no paper in the printer, or the paper is jammed.	**1** Make sure there's paper in the printer and the paper isn't jammed. **2** Make sure the paper is aligned properly. **3** Press the Form Feed button on the printer to make sure the paper feeds properly.
There's a loose cable connection between the printer and the PC.	Make sure the connections are secure at both ends of the cable running between the printer and the PC. • If the problem is corrected, you will see the message **Printer Now Ready** on the error line. (If you do not see this message, try correcting the problem again.) • If, after a second attempt, you still do not see the message, turn the PC off, then turn it on, or reboot the PC by pressing the Reset button below the disk drive on the front of the PC. Then restart call management from the CMS Menu.
The printer is not ready.	Make sure the printer's Ready light is on. If not, press the button next to the Ready light.

• **Printer Not Ready. (When Ready, Select a Labeled Function Key.)**

Possible Cause	Corrective Action
The printer is not receiving power.	Make sure that the printer is plugged in and turned on, and that the Ready light is on.
There's no paper in the printer, or the paper is jammed.	**1** Make sure there's paper in the printer and the paper isn't jammed. **2** Make sure the paper is aligned properly. **3** Press the Form Feed button on the printer to make sure the paper feeds properly.
There's a loose cable connection between the printer and the PC.	Make sure the connections are secure at both ends of the cable running between the printer and the PC. If the problem is corrected, you will see the message **Printer Now Ready** on the error line. If you do not see this message, try correcting the problem again. If you still do not see the message, turn the PC off, then turn it back on, and restart call management from the CMS Menu.
The printer is not ready.	Make sure the Ready light on the printer is on. If not, press the button next to the Ready light.

- **REPORT ABORTED-Printer Not Ready.**

Possible Cause	Corrective Action
There's no paper in the printer, or the paper is jammed.	**1** Make sure there's paper in the printer and the paper isn't jammed. **2** Press the Form Feed button on the printer to make sure the paper feeds properly. **3** When the printer is ready, repeat your print request.

• **PROBLEM:** An agent is not receiving any CMS calls.

Possible Cause	Connective Action
The agent isn't using the Available, ACW, or Logged Out buttons correctly.	Refer the agent to "Using the Available, ACW, and Logged Out Buttons" in Section 6, "Handling CMS Calls" in this manual.
The agent has not been added to the shift configuration currently being used for call management.	Add the agent to the current shift configuration following the instructions in "Reconfiguring Splits" in Section 5 of this manual.
The agent used the System 25 Following or Forwarding feature.	Have the agent sign in at the CMS agent station using the PDC for that station.
One or more agents are not removed from their DGC group.	Have all the agents remove themselves from their DGC groups as follows: **1** Lift the handset. **2** Press [*] [4] and listen for the confirmation tone. **3** Hang Up.

• **PROBLEM:** An agent is receiving the wrong CMS calls. For example, an agent in the Public-Travel split is receiving calls for the Business Travel split.

Possible Cause	Corrective Action
The agent is assigned to the wrong split.	Reassign the agent to the correct split following the instructions in "Reconfiguring Splits" in Section 5 of this manual.
The agent used the System 25 Following or Forwarding feature.	Have the agent sign in at the CMS agent station using the PDC for that station.
One or more agents are not removed from their DGC group.	Have all the agents remove themselves from their DGC groups as follows: **1** Pick up the handset and listen for dial tone. **2** Press [*] [4] and listen for the confirmation tone. **3** Hang Up.

- **PROBLEM:** Agents continue to receive CMS calls when their Available lights are not lit.

Possible Cause	Corrective Action
The agents are pressing the ACW button after they hang up.	Remind the agents to press the ACW button before they hang up.
The agent is not removed from the DGC group. Therefore, System 25 (not CMS) is distributing calls to the agent. (A clue to this would be that the CMS calls distributed to agents by System 25 produce a double ring, while calls distributed by CMS produce a single ring.)	The agent must remove himself or herself from the DGC group, as follows: **1** Pick up the handset and listen for dial tone. **2** Press [*] [4]. **3** Listen for confirmation tone. **4** Hang up.

- **PROBLEM:** While on one CMS call, an agent receives another CMS call.

Possible Cause	Corrective Action
The agent put the first call on hold and hung up the handset.	Remind the agent to lay the handset on the desk after putting a call on hold. Hanging up while the light next to the Available button is on signals CMS that the agent is available for CMS calls.
The agent is not removed from the DGC group. Therefore, System 25 and CMS are distributing calls to the agent. (A clue to this would be that the CMS calls distributed to agents by System 25 produce a double ring, while calls distributed by CMS produce a single ring.)	The agent must remove himself or herself from the DGC group, as follows: **1** Pick up the handset and listen for dial tone. **2** Press [*] [4]. **3** Listen for confirmation tone. **4** Hang Up.

- **PROBLEM:** Agents sometimes find the light next to the Available button is off even though they did not turn it off.

Possible Cause	Corrective Action
CMS sent a call to the agent's voice terminal (perhaps when the agent was away from the desk) and it went unanswered.	Remind agents that any time CMS sends a call to a voice terminal and it goes unanswered, the voice terminal is automatically placed in the ACW state. Agents should press the Available button to make themselves available again.
The CMS Supervisor logged out the agent from the Split Status screen.	No corrective action is needed.
The Send All Calls feature was activated on the agent's voice terminal.	Deactivate the Send All Calls feature as follows: **1** Press the Send All Calls button on the agent's voice terminal. **2** Press the Available button to make the agent available. **3** Have the System 25 Administrator remove the Send All Calls feature from the agent's voice terminal to prevent the problem from recurring.
The agent used the System 25 Following or Forwarding feature.	Have the agent sign in at the CMS agent station using the PDC for that station.

- **PROBLEM:** The agent presses the Available, ACW, or Logged Out button, but can't change the status of the associated light.

Possible Cause	Corrective Action
The agent terminal switch is in Program Mode.	Take the voice terminal out of Program Mode by moving the top left hand switch on the agent's voice terminal to the midpoint (neutral) position. **NOTE:** Instruct agents that if they hear a single burst of ringing, repeating every 60 seconds, their voice terminals are in Program Mode, and need to be returned to operating mode.

While CMS is managing calls, messages beginning with **SYSERR** may appear on the error line of a status screen and also on the Events Log screen.

WHAT THEY MEAN

A **SYSERR** usually indicates that a CMS file has been damaged. (For example, a user may have accidentally deleted a CMS file, or a power surge may have damaged one.) A **SYSERR** does not necessarily mean that CMS has stopped managing calls. For example, if the only **SYSERR** you receive is

SYSERR-Possible Help File Damage. Reinstall CMS.

you will not be able to use the Help screens, but CMS is probably still managing calls correctly.

WHAT TO DO

If you receive a **SYSERR** message on a status screen or on the Events Log screen, try the following:

1 Study the CMS screens to determine if CMS is still managing calls correctly. If you are not sure, call one of your CMS lines.

— Does the System Status screen add your call to the Call Waiting column soon after you hear ringing?

— Is your call answered by an agent in the appropriate split?

— Does the System Status screen show an agent's status change from Available to ACD?

If CMS is stall managing calls correctly, you do not have to shut the system down. You should check CMS periodically, however, just in case other problems develop. If the Events Log screen shows additional system errors, make sure your printer is on (and the Ready light is lit), then print a copy of the Events-Log screen by pressing [Shift] + [Print Scrn].

2 If CMS has stopped managing calls, print the Events Log Report to see what sequence of error messages was generated.

3 Reboot the PC by pressing the reset button located below the disk drives on the front of the PC or by turning the PC off and then on again.

4 Try to restart CMS Call Management.

— If CMS restarts, check to see if it is managing calls correctly.

— If CMS is managing calls correctly, check CMS periodically for a recurrence of the problem.

5 If CMS does not restart, or if you get the same **SYSERR** again, you have to reinstall the CMS software. See "Installing the CMS Software" in Section 3 of this manual.

6 If CMS continues to have problems after you reinstall the software, call the CMS Hotline: **1-800-628-2888**

NOTE: Be sure to have a list of the system errors generated by the problem handy.

7 See "Managing Calls When CMS is Not Running" at the end of this section.

Running CMS from a Floppy Diskette Backup

If the PC's hard disk becomes damaged, you may still be able to manage calls with CMS by running the CMS program from the "SYSTEM 25 CMS SYSTEM WORKING COPY" diskette. In order to be able to do this, the diskette must contain the latest version of the CMS shift configurations and system tables. (The procedure for copying the needed files onto diskettes is described in Section 4, "Backing Up Shift Configurations.")

When CMS is run from a floppy diskette, you cannot store historical data, run reports, or administer CMS. You should only run from a floppy diskette temporarily while the hard disk problem is being corrected.

To run CMS from the floppy diskette:

1. Insert the "MS-DOS/GW BASIC System Diskette" into the PC's floppy disk drive.
2. Turn on the PC.
3. When the **A>** prompt appears, remove the "MS-DOS/GW BASIC System Diskette."
4. Insert the "SYSTEM 25 CMS SYSTEM WORKING COPY" diskette into the floppy disk drive.
5. At the **A>** prompt, type

   cd cms

   and press [Enter].
6. At the **A>** prompt, type ***cms,*** and press [Enter].
7. When the CMS Menu is displayed, press [F1] (labeled "Start Call Mgt").

Managing Calls When CMS is Not Running

If you need an alternate method of distributing calls to agents when CMS is not ruining, use the System 25 Direct Group Calling (DGC) Contingency Plan. This feature should have already been administered by the System 25 Administrator or CMS installer.

If this feature has not been administered, you can use the Alternative Contingent Plan described later in this section.

ABOUT THE DGC FEATURE

Agent stations are divided into DGC groups, with each agent station belonging to only one DGC group. Each line group is assigned a DGC group to cover its calls. A DGC group can be assigned to cover the calls for one or more line groups.

The CMS Planning Guide describes how to plan your DGC groups. The appropriate forms can be found behind the "Original Planning Forms" tab in the CMS binder.

> **NOTE:** You should plan your DGC groups when you first start using CMS so this feature will be available whenever you need it.

MANAGING CALLS WITH DGC

When CMS is managing calls, all agents must be logged out of their DGC groups (as described below). Failure to do so may disrupt CMS call management. When it becomes necessary to use the DGC feature, agents can simply return to their DGC groups.

> **NOTE:** If it becomes necessary for agents to leave their stations unattended or to otherwise make themselves unavailable for CMS calls *while* the DGC contingency plan is being used to manage calls, they should remove themselves from their DGC group.

To log out of a DGC group, agents should:

1. Lift the handset.
2. Listen for dial tone.
3. Dial [*] [4].
4. Listen for confirmation tone (three short tones).
5. Hang up.

When CMS is again managing calls, or when agents need to leave their DGC groups temporarily, they should use the procedure above to remove themselves from their DGC group.

To return to their DGC groups so System 25 can distribute calls to them, agents should:

1. Lift the handset.
2. Listen for dial tone.
3. Dial [*] [4].
4. Listen for confirmation tone (three short tones).
5. Hang up.

ALTERNATIVE TO CONTINGENCY PLAN

If you have not set up a DGC contingency plan, you can still distribute your calls manually, as follows:

1 Unplug the cord connected to PC jack CU1.

2 Plug the cord into a 34-Button Deluxe voice terminal.

3 Answer the calls and transfer them to the appropriate agents.

> **NOTE:** If you have Personal Line buttons administered on your supervisor voice terminal for all the CMS and transfer-queue lines, then you can use that voice terminal to answer CMS calls (instead of unplugging the cord from PC jack CU1 and connecting it to a 34-Button Deluxe voice terminal).

Section 10: Ongoing System Administration

Overview

Once the System 25/CMS installer has installed and administered CMS and System 25, you can begin CMS operation. However, as the needs of your business change, you may find that you need to add or remove lines, stations or voice announcement units. If this happens, you can make the necessary CMS administration changes and then request a Partial Print of System 25 administration instructions. The Partial Print will show only those System 25 administration changes needed as a result of changes to CMS administration since the last System 25 File Update or last Full Print of System 25 administration instructions.

The page(s) of the Partial Print have the same format as those in the initial administration instructions. However, the words “CMS PARTIAL PRINTOUT” appear on each page as a reminder that these administration instructions reflect only changes in System 25 administration made since the last System 25 File Update or Full Print of System 25 administration instructions. (The changes shown in the System 25 administration instructions printout represent System 25 administration needed to support changes in CMS administration.)

Below, a page from a Partial Print showing PC jack CU1 button feature assignment changes is illustrated.

12/17/88 CMS-PORT #1 (for PC Jack CU1) BUTTON LAYOUT 12:48a Page 1
PORT# 11003 34 BUTTON -- PARTIAL PRINT PDC# 600

7	12	17	29
8	13	18	30
9	14	19	31
10	15	20	32
11	16	21	33
22			34
23			35 PERS LINE [3] (a, b, c)
			5532 0/0
24			36
25			37 DSS [14]
			613
26			38 DELETE BTN[0]
27			39
28			40

TO ADMINISTER BUTTONS:
Action=100
Data=button number
Action=101 (Button Feature Code?)

for EXCLUSION (Button #8 only):
Data=4 (Exclusion)

for PERS LINE:
Data=3 (Personal Line)
Action=102 (Trunk number?)
Data=trunk number
Action=103 (Principal owner?)
Data=0 (no)
Action=104 (Allow ring?)
Data=0 (no)

for DSS:
Data=14 (Direct Sta Select)
Action=102 (Called PDC?)
Data=ANNC's PDC

The voice terminal buttons that are labeled on a Partial Print Button Layout page reflect the button features that need to be added, changed, or deleted. As in the illustration, the numbers and labels across the top of the buttons indicate the following:

a The button number

b The System 25 button feature

c The button feature code.

In this example, Buttons 35 and 37 show button features that need to be added because of the addition of a line and a voice announcement unit, respectively. The label on button 38 means that the feature previously administered on that button needs to be removed. It's your responsibility, as CMS Supervisor, to inform the System 25 Administrator what equipment and facilities are no longer needed for CMS.

On Partial Print Implementation forms, the following conventions have been followed:

- If a value appears in ( ), it is strongly recommended that this value *not* be changed to ensure optimal CMS functioning.
- A System 25 default value, shown in { }, may be left as is, or changed, if necessary. It will not affect CMS operation.
- When a value has been filled in for you, and does not have either a ( ) or { } around it, the value must *not* be changed since it is required for proper CMS functioning.

For more information about administering System 25 from the the computer-generated administration printouts, see "Performing Software Translations for CMS" in the CMS Installation and Startup Guide.

> **NOTE:** It is recommended that after you have administered CMS with the changes and have generated a Partial Print of System 25 administration instructions that you update the System 25 File by pressing [F3] (labeled "Update S25 File") on the Print System25 Instruct screen.

In general, when adding lines, agent stations, supervisor stations or voice announcement units to CMS, update the CMS Planning Forms with the new information, and complete the necessary System 25/CMS implementation forms. (Refer to the CMS Planning Guide for instructions.) Then administer CMS to reflect these additions, and generate a Partial Print.

Give the hand-completed System 25/CMS implementation forms and the computer-generated forms to the System 25 Administrator so that System 25 can be administered to reflect these additions. (Instructions for coordinating the information on these forms and using these forms to administer System 25 can be found in the CMS Installation and Startup Guide.)

CMS LINES

When adding a line (that is, a Central Office trunk) to CMS, you need to obtain the trunk number, trunk type, and System 25 port assignment from the System 25 Administrator. Update the Line Groups Planning Form, and complete a System 25/CMS Central Office Trunks implementation form.

Referring to the Line Groups Planning Form, administer the trunk on the CMS Administer Line Groups screen. Then generate a Partial Print of System 25 administration instructions.

> **NOTE:** Add a Personal Line button for the trunk on the appropriate "Ghost" Voice Terminal for the CMS Contingency Plan form. If Service Monitoring is desired, add a Personal Line button for the trunk on on the CMS Supervisor Voice Terminal implementation form.

Give the hand-completed System 25/CMS implementation forms and the computer-generated forms to the System 25 Administrator so that System 25 can be administered to reflect these additions.

CMS AGENT AND SUPERVISOR STATIONS

When adding an agent or supervisor station, obtain the PDC and port number from the System 25 Administrator. Update the Station Assignments Planning Form and complete a System 25/CMS voice terminal implementation form for the voice terminal. Enter the new information from the Station Assignments Planning Form onto the CMS Administer Stations screen. Then generate a Partial Print of System 25 administration instructions.

If you're adding an agent station, remember to assign that agent to a DGC Group so the agent station will be included in the Contingency Plan. Enter the agent station on the appropriate System 25/CMS Direct Group Calling List for the CMS Contingency Plan implementation form. Also, if you want to use the Assist feature, remember to add a Station-to-Station Message Waiting (Assist) button on both the agent and supervisor voice terminals.

> **NOTE:** The addition of a supervisor station does not appear on the Partial (or Full) printout. Be sure to complete a System 25/CMS implementation form if you are adding a supervisor station.

Give the hand-completed System 25/CMS implementation forms and the computer-generated forms to the System 25 Administrator so that System 25 can be administered to reflect these additions.

TRANSFER-QUEUE LINES

To add a transfer-queue line, obtain a trunk number and System 25 port assignment for the transfer-queue line's Loop Start Trunk port and a PDC and System 25 port assignment for single-line port from the System 25 Administrator. Update the Transfer-into-Queue Planning Form with the new information.

Referring to the Transfer-into-Queue Planning Form, administer the transfer-queue line on the CMS Admin Queued Transfer screen. Then generate a Partial Print of System 25 administration instructions.

> **NOTE:** On the appropriate "Ghost" Voice Terminal for the CMS Contingency Plan implementation form, add a Personal Line button for the Loop Start Trunk associated with the transfer-queue line. If Service Monitoring is desired, add a Personal Line button for the associated Loop Start Trunk on the CMS Supervisor Voice Terminal implementation form.

Give the hand-completed System 25/CMS implementation forms and the computer-generated forms to the System 25 Administrator so that System 25 can be administered to reflect these additions.

VOICE ANNOUNCEMENT UNITS

When adding a Voice Announcement Unit (VAU), obtain a PDC and port number from the System 25 Administrator. Update the Voice Announcement Unit Planning Form, and enter the new information on the Administer Announcement and Assign Announcement screens. Then generate a Partial Print of System 25 administration instructions. Give the computer-generated form to the System 25 Administrator so that System 25 can be administered to reflect this addition.

Changing Station, Line, PC Jack, or VAU Information

When making changes in PDCs or port numbers of CMS equipment or facilities, obtain the completed System 25/CMS implementation forms from the Administration Records binder and make the desired changes on these forms. Update the appropriate CMS Planning Forms with this information, and administer the changes on the appropriate CMS screens. Then generate a Partial Print of System 25 administration instructions. Any changes you've made that require System 25 administration will appear on the computer-generated printouts. Give the hand-completed implementation forms and any computer-generated printouts to the System 25 Administrator for administration.

Record changes to System 25 voice terminal or trunk features and options on the hand-completed implementation forms (stored in the Administration Records binder) and have these changes administered by the System 25 Administrator. (Consult the CMS Planning Guide for voice terminal and trunk feature restrictions.)

Changes made to the supervisor station(s) do not appear on the System 25 administration instructions printouts. Therefore, these changes should be recorded on the hand-completed forms (stored in the Administration Records binder) and given to the System 25 Administrator for administration.

Removing Lines, Stations, or Voice Announcement Units

If there are lines, stations or voice announcement units that are no longer needed for CMS, update the CMS Planning Forms with this information and administer those changes on the appropriate CMS screens. Then generate a Partial Print of System 25 administration instructions and give it to the System 25 Administrator for administration.

AGENT STATIONS

If there is an agent station that is no longer needed for CMS, update the Station Assignments Planning Form and delete the station from the CMS Administer Stations screen. There will be no System 25 administration instructions printout for this change, so you must be sure to remove the three CMS Agent Status buttons (Available, ACW and Logged Out) from the voice terminal implementation form (stored in the Administration Records binder) and have the System 25 Administrator administer the change.

If the agent station was part of a DGC Group used for the CMS Contingency Plan, delete the voice terminal from the System 25/CMS Direct Group Calling List implementation form and have the System 25 Administrator administer the change. If the agent station has an Assist (Station-to-Station Message Waiting) button, you may want to remove it and the corresponding Assist button on the supervisor voice terminal.

REMOVING CMS LINES

If there is a Central Office trunk that is no longer needed for CMS, update the Line Groups Planning Form and remove the line from the CMS Administer Line Groups screen.

Remove the Personal Line button for the trunk from the appropriate “Ghost” Voice Terminal for the CMS Contingency Plan implementation form. If you have Service Monitoring administered for this line, update the System 25/CMS Supervisor Voice Terminal implementation form by removing the Personal Line button administered for that line.

Generate a Partial Print of System 25 administration instructions and give the computer-generated form and any updated hand-completed System 25/CMS implementation forms to the System 25 Administrator for administration.

REMOVING TRANSFER-QUEUE LINES

If there is a transfer-queue line that is no longer needed for CMS, update the Transfer-into-Queue Planning Form and remove the line from the CMS Admin Queued Transfer screen.

Remove the Personal Line button for the associated Loop Start Trunk from the appropriate “Ghost” Voice Terminal for the CMS Contingency Plan implementation form. If you have Service Monitoring administered for this line, update the System 25/CMS Supervisor Voice Terminal implementation form by removing the Personal Line button administered for that line.

Generate a Partial Print of System 25 administration instructions and give the computer-generated form and any updated hand-completed System 25/CMS implementation forms to the System 25 Administrator for administration.

Glossary

Overview

This glossary defines key terms used to describe the setup and operation of CMS. The list also includes System 25 terminology related to CMS.

For an explanation of the various statistics presented in the System Status, Split Status, and Line Status screens, see Section 5, “Supervising CMS.” The terms used to identify the information contained in the CMS reports are explained in Section 7, “Generating Reports.”

Abandoned call	A call that came into CMS and was either disconnected by the caller before being serviced by an agent, or was connected, but the talk time was less than the Abandoned vs. Incoming Call Threshold.
Abandoned vs. Incoming Call Threshold	The minimum number of seconds an agent must be connected to a call for it to be considered a serviced call. Calls that are disconnected before reaching this threshold are considered abandoned calls.
Automatic Call Distributor (ACD)	The abbreviation for Automatic Call Distributor. ACD is the general term for systems like CMS that automatically answer incoming calls and distribute them to available agents.
ACD Call	An incoming call that is distributed to an agent by CMS.
ACW Button	A button administered on agents' voice terminals that they use to turn on their After-Call-Work (ACW) light. When the ACW light is on, the agent will not receive CMS calls.
ACW (After-Call-Work) State	An agent-activated or CMS-activated state in which the agent receives no ACD calls. Agents usually put their voice terminals into this state when they need to finish work associated with a previous call. CMS puts an agent voice terminal in this state when the agent fails to answer an ACD call. When an agent is in the ACW state, the ACW light on the agent's voice terminal is on.
Administer	To access and change the parameters associated with the services or features of System 25 or CMS.
Agent Split	A team of agents who handle the same types of incoming calls.
Agent Station	The voice terminal assigned to an agent.
Answer Delay	The amount of time an incoming ACD call is administered to ring before being connected to a voice announcement unit if no agents are available to answer the call.

Assist Button	A button administered on an agent's voice terminal that, when pressed, turns on the light beside a corresponding button on the CMS Supervisor's voice terminal. This optional feature enables an agent on an ACD call to signal the supervisor for help without interrupting the call. The System 25 Station-to-Station Message Waiting feature is used to implement this feature.
ATL	Analog Terminal Line.
Available Button	A button administered on agents' voice terminals that they use to turn on their Available light. If the Available light is on, and the agent's voice terminal is on-hook, the agent is available to receive ACD calls.
Available State	An agent-activated state in which the Available light on the agent voice terminal is on, and the agent is idle and available to handle ACD calls. The CMS Supervisor can place an agent who is in the Logged Out state into the Available state.
Central Office	The location housing telephone switching equipment that provides local service and access to toll facilities for long distance calling.
CMS Hold Time	The time period beginning when an ACD call reaches System 25 and ending when the call is disconnected from System 25. CMS Hold Time often includes delay messages.
Completed Call	A call on a CMS or transfer-queue line that was answered by an agent, serviced, and disconnected.
Configuration, Shift	An arrangement of CMS line groups and agent splits that, when activated, determines how CMS calls are routed to agents. CMS allows you to define as many as six different shift configurations.
Direct Station Selection (DSS)	A System 25 feature that allows one-button access to another voice terminal, a paging zone, or a DGC group. For instance, the System 25 Administrator could program the CMS Supervisor's PDC onto a DSS button on each agent's voice terminal. The agents could then press the DSS button to call the supervisor.

Direct Group Calling (DGC)	A System 25 feature that allows incoming calls to be directed to a specific group of voice terminals. The DGC Group Coverage feature, if administered, can be used to manage CMS calls when CMS call management is not running.
Dynamic Reconfiguration	The process of making changes to the CMS configuration currently being used to manage calls.
Exception	An indication that a particular performance threshold for an agent, split, or line group has been reached or exceeded and an unusual or undesirable situation may be occurring. Exception messages appear on the screen of the CMS PC.
Exception Threshold	The point at which the CMS exception message will be displayed indicating that an exception has occurred.
Exclusion	A System 25 feature that allows multiline voice terminal users to keep other users who have a Personal Line appearance of the line being used from listening in on their call. This feature should not be administered on agent voice terminals because agents invoking Exclusion prevent the CMS Supervisor from monitoring their CMS calls using the Service Monitoring feature.
External Call	A connection between a System 25 user and a person on the public telephone network or on a tie trunk.
Flexible DSS	A Flexible Direct Station Selection button enables a user to dial a PDC, by pressing just one button, a Flex DSS button. The System 25 Administrator must administer a particular button as a Flex DSS button (unless the button is assigned this feature by default). The user then programs the PDC on the button.
Force Delay	An answering option that forces incoming ACD calls to be connected to a delay message and forces callers to hear the entire delay message before being transferred to an available agent. If Force Delay is off, calls are transferred to an agent as soon as one becomes available, even if the message has not finished playing.
Foreign Exchange (FX) Trunk	A trunk that directly connects System 25 to a central office other than the *local* central office.

Initial Setting	The factory-set (default) value for a system option which allows CMS to operate immediately after installation. The CMS Supervisor may later fine tune system performance by replacing some initial settings with values more appropriate to the needs of the business.
Internal Call	A connection between two System 25 users.
Intraflow	The automatic transfer of a call waiting in the main split's queue to an agent in the secondary split. This occurs when no agents are available in the main split and the call has waited a predetermined number of seconds.
Intraflow Threshold	The number of seconds the oldest call waits in the main split's queue before it is eligible to be intraflowed (transferred) to an available agent in the secondary split.
Line Group	A group of telephone lines assigned to CMS that can be answered by the same team of agents (agent split).
Logged Out Button	A button administered on agents' voice terminals that they use to turn on the Logged Out light to indicate they are not doing CMS work. When the Logged Out light is on, an agent will not receive ACD Calls.
Logged Out State	A state in which the agent receives no ACD calls and is not counted as logged in for reporting purposes. Agents are placed in this state when call management is started, when a new shift configuration is selected, when an agent is moved or added to a configuration, or when an agent has remained in the After-Call-Work state longer than the specified Agent Logout ACW exception threshold (if the threshold is enabled). Agents place themselves in the Logged Out state when they are not doing CMS work. The CMS Supervisor can also place an agent in the Available or ACW state into the Logged Out state. When the agent is in the Logged Out state, the Logged Out light on the agent's voice terminal is on.
Main Split	The agent split with primary responsibility for answering calls that come in on a particular line group.

Night Service Mode	A mode of CMS operation in which the system answers calls, connects them to a voice announcement unit, and then disconnects the calls when the message is over.
Other Calls	Non-ACD calls, such as outgoing calls, non-ACD incoming calls, internal calls, and calls transferred to an agent by another person (except Transfer-into-Queue calls).
Personal Dial Code (PDC)	A number with up to four digits assigned to each System 25 ATL port or single-line port. Voice terminals, PC jacks CU1 and CU2, voice announcement units, and the single-line station associated with each transfer-queue line have a unique PDC. People within System 25 can call each other by dialing a PDC.
Personal Line	A dedicated outside line which can be accessed through a dedicated feature button on a multiline voice terminal. Each CMS and transfer-queue line has a Personal Line button appearance on CMS PC jack CU1. For Service Monitoring, the CMS Supervisor's voice terminal must have a Personal Line button for each CMS and transfer-queue line to be monitored.
Port	A physical address on a System 25 circuit pack. Each CMS line, transfer-queue line, voice terminal, voice announcement unit, and PC jack is connected to a port with a specific number, such as 20608. The two connections (PC jacks) from the CMS PC Interface Card in the PC (labeled CU1 and CU2) are also called ports.
Priority Line	A line that has a special status in CMS. Incoming calls on a priority line are answered before older calls on nonpriority lines.
Queue	An ordered sequence of calls waiting to be answered.
Refused Call	A call that rings at an available agent's station and is not answered before the Transfer Return Threshold is reached. When a call is refused, the agent's station is automatically put into the ACW state.

Repertory Dialing	A feature that allows multiline voice terminal users to store a frequently dialed number in System 25's memory and associate that number with a particular Rep Dial button. The user can then dial the stored number by pressing the Rep Dial button.
Ringing	Two types of ringing are of importance to CMS: initial ringing occurs during the answer delay, from the time the line is seized by an incoming call until CMS answers the call; *transfer* ringing occurs at an agent voice terminal, from the time CMS transfers the call to an available agent until the agent lifts the handset.
Secondary Split	The agent split assigned to answer calls on a particular line group if all of the agents in the main split are busy or unavailable. After a preset number of seconds, calls that haven't been answered are intraflowed (routed automatically) to available agents in the secondary split.
Service Level	The percentage of calls that go from initial ringing to answered within a specified length of time, called the Service Level Limit.
Service Level Limit	A performance goal for answering incoming calls. It represents the maximum number of seconds it should take for an incoming call to be answered by an agent.
Serviced Call	An ACD call that has been connected to an agent for longer than the Abandoned vs. Incoming Call Threshold.
Service Monitoring	A CMS feature that enables the CMS Supervisor to join or listen to calls on CMS or transfer-queue lines. This feature can be used in agent training.
Shift Configuration	*See* **Configuration, Shift.**
Speaker Button	A button on the lower right corner of multiline voice terminals which the CMS Supervisor can use to monitor CMS calls without lifting the handset.
Split, Agent	*See* **Agent Split.**
Station-to-Station Message Waiting	A System 25 feature that allows a multiline voice terminal user to turn on or off a pre-designated light located on another multiline voice terminal. Both voice terminals must have a Station-to-Station Message Waiting button. CMS uses this System 25 feature to implement the CMS Assist feature.

Status LED	The green light on a voice terminal that shows the status of a call appearance or a feature button by the state of the light (on, off, flashing, winking, or broken flutter).
System Access Buttons	System 25 users can place and receive internal and external calls using System Access buttons. All ACD calls appear on agent System Access buttons.
System Administrator	A person responsible for specifying and administering features and services for System 25.
System 25	An advanced digital switching system which integrates voice and data communications.
Tape Save	A System 25 administration procedure used to create a backup tape of System 25 translations. This tape can later be used to restore System 25 after a problem that resulted in a loss of translations.
Transfer-into-Queue	A CMS feature that allows an agent to transfer a call into another line group's queue of waiting calls. The call will be treated as a new incoming ACD call to that line group.
Transfer Return Threshold	A limit on the number of times an ACD call rings at an agent station before returning to CMS. A call not answered within the Transfer Return Threshold is recorded as being refused by the agent. The CMS Supervisor can select from one to nine rings as the Transfer Return Threshold.
Translations	System 25 specific information assigned to a voice terminal or to the system and customized for the user. Examples are port numbers, Personal Dial Codes (PDCs), and features assigned to voice terminal buttons.
Trunk	A phone line between the central office and System 25.
Voice Announcement Unit (VAU)	The machine used to provide a delay announcement to callers. CMS can support up to four VAUs.

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