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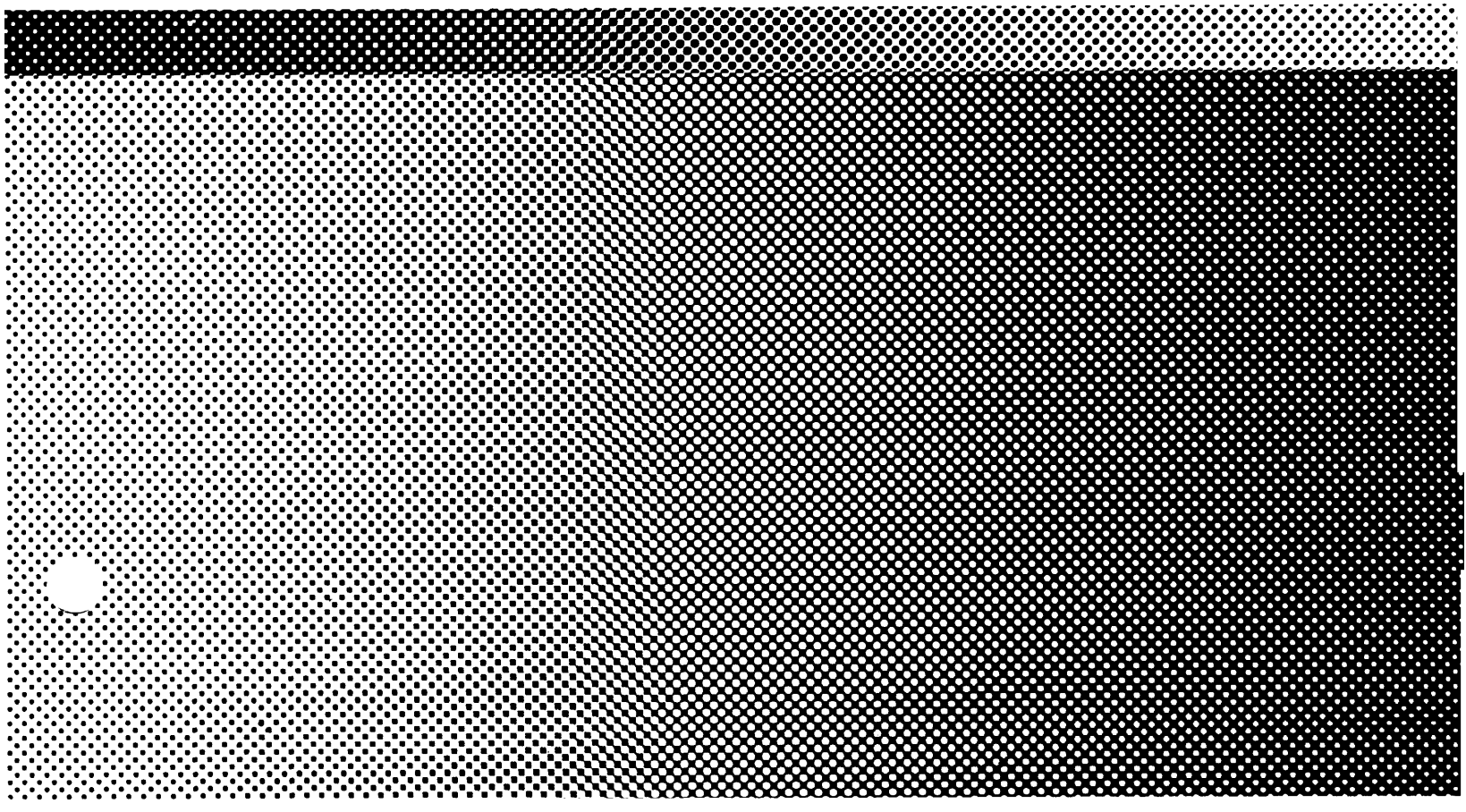
MERLIN II®
COMMUNICATIONS SYSTEM

Feature Module 2
Call Management System
System Manual



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How to Use the CMS Documents

The Call Management System (CMS) is the automatic call distributor (ACD) for the MERLIN® II Communications System with Feature Module 2. The CMS component of the MERLIN II system 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 and then places the call on hold until an agent becomes available.

It's important that your MERLIN II system be administered to work smoothly with CMS and that the CMS options and parameters are set to meet your call management needs. The explanations and instructions in each of the documents discussed in the following paragraphs can contribute to a fully integrated CMS/MERLIN II system. Take a few minutes now to review these documents and plan how to use them to get your system up and running quickly and efficiently.

Then, as you observe how CMS manages your incoming call traffic day to day, you can use the documents to fine-tune the system for more efficient call management and more useful call-management reports.

CMS PLANNING GUIDE

You should have received The *MERLIN II Communications System Planning Guide for the Call Management System* when you ordered your CMS. This guide, used in conjunction with the *MERLIN II System Planning Guide*, shows you how to plan a fully integrated CMS/MERLIN II system oriented to the way your business operates.

The CMS Planning Guide includes forms for recording the decisions you make during planning. A complete set of CMS and MERLIN II system planning forms will help insure a trouble-free system installation and administration.

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 GETTING STARTED GUIDE

The *MERLIN II Communications System Installation and Getting Started Guide for the Call Management System* comes packaged with the system manual. For the CMS supervisor with a fully installed CMS/MERLIN II system and a set of completed planning forms, this guide is the place to begin. It moves rapidly through checklists of planning, hardware installation, and the operating system that must be installed on the hard disk of either the AT&T Personal Computer 6300 or AT&T Personal Computer 6300 WGS (Work Group Station) that runs the CMS software. Then it tells you how to install the CMS program on the hard disk and get a shift configuration up and running. It shows you how to enter and edit data in response to prompts on the screens. It also shows you how to monitor the system as you decide how to fine-tune it to meet your call management needs.

Once you have a shift configuration up and running, keep the Installation and Getting Started Guide in the CMS binder for future reference.

CMS USER'S CARD

Copies of *MERLIN II Communications System User's Card* for *the Call Management System* comes packaged with the system manual. The User's Card is a handy reference for programming and using the MERLIN II system features you'll use most often with CMS. Each CMS supervisor and agent should have one of these cards.

CMS SYSTEM MANUAL

This is the manual you're reading now. It contains information on every aspect of the CMS operation and administration, from understanding CMS to troubleshooting. " What's in This Manual" previews the structure and contents of the system manual, and offers suggestions on the best ways to use it.

What's in This Manual

The *MERLIN II Communications System Manual for the Call Management System* is intended for the supervisor or administrator who oversees the setup and operation of CMS. Here you'll find an overall description of the system — all the concepts, procedures, and other information you'll need to make the most of CMS in your business. This information is organized as follows:

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

2 **Understanding CMS.** This section of the manual describes key CMS concepts such as line groups, agent splits, intraflow, and call management. You'll also find a description of how Bon Voyage Travel, a hypothetical business, uses CMS.

3 **Your 6300 WGS and CMS.** This section provides instructions on how to make a duplicate of the CMS diskette and install the CMS software, depending on whether you are using the 3 1/2 inch disk for the 6300 WGS or the two 5 1/4 inch disks for either the 6300 WGS or the PC 6300. (If you have not already installed the hardware, do so according to the instructions in the *MERLIN II Communications System Installation and Getting Started Guide for the Call Management System.)*

4 **Administering CMS.** This section tells you how to use your personal computer (PC) to perform the administration activities that get CMS up and running. These include identifying agents, identifying CMS lines, and building at least one shift configuration (an arrangement of line groups and agent splits for call management).

This section also describes other administration tasks that can be done at any time. These include setting options and exception thresholds to alert you of unusual and undesirable situations, and making a backup copy of your shift configuration(s). A menu map shows you the relationship of the administration screens.

5 **Supervising CMS.** This section discusses the administrator's responsibilities with regard to CMS, such as setting up the attendant console.

From the information in this section, you'll also learn how to activate a 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. A menu map shows you the screens you'll be using.

6 **Handling CMS Calls.** This section helps you make decisions about which size voice terminal your agents need, and which features they'll use to handle CMS calls. It also includes information on programming and using these features.

7 **Generating Reports.** This section describes the types of reports available from CMS, and how to select and print these reports.

8 **Archiving Data.** The information in this section tells you how to archive historical data on floppy diskettes for storage and analysis.

9 **Troubleshooting.** This section helps you identify system problems quickly and tells you how to correct them.

10 **Quick Reference Guides.** The guides that make up this section provide easy access to frequently used procedures and information.

Glossary. The Glossary defines CMS terms and describes how CMS statistics are calculated.

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] (function key F1), or like this: [↑] + [⇆] (press both of these keys simultaneously to print a screen).

These typefaces are used to distinguish information you type from information that appears on your PC screen:

This *ita/ic* typeface represents information that you type on the PC screen.

This bold typeface represents information that the system displays, such as prompts.

This italic typeface represents a MERLIN II system response.

In some instances, prompts that take up only one line on the display are represented in the text on two lines.

Overview

The Call Management System for the MERLIN II Communications System with Feature Module 2 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 data on call traffic and call handling performance.

This section includes information that is basic to understanding CMS and using this manual effectively. It is organized as follows:

- **Key Concepts** explains important CMS terms.
- **A Typical CMS** Application describes how Bon Voyage Travel, a hypothetical business, uses CMS to manage its incoming call traffic. This example reappears elsewhere in this manual and other CMS documents to illustrate CMS concepts.
- **Key Facts and Considerations** provides a checklist for referencing important information regarding CMS installation, administration, and operation.

To administer and use CMS, you should be familiar with the following terms, which are briefly defined:

- Automatic call distributor (ACD)
- Line groups
- Agents
- Agent splits
- Shift configurations
- Main and secondary splits
- Intraflow
- Intraflow threshold
- Logged out state
- Available state
- After-call-work (ACW) state
- Automatic after-call-work state (Auto ACW)
- Supervisory Login/Logout
- Call management
- Answer delay
- Force delay
- Priority lines

CMS is the *automatic call distributor (ACD)* for the MERLIN II system. As an automated attendant, CMS distributes calls that come in on the MERLIN II system telephone lines assigned to CMS.

The MERLIN II system telephone lines assigned to CMS are organized into *line groups.* Usually the incoming calls for a line group are of the same type. For instance, the lines for incoming sales calls are in one line group and the lines for service calls in another. Up to 28 lines may be assigned to up to four line groups.

Incoming calls are answered by *agents* who are divided into *agent splits,* A split is a team of agents who handle the same type of incoming calls. Each split is assigned to answer calls for one or more line groups. You can have up to six splits, with a maximum of 28 agents in a split. However, no more than 28 agents can be active in CMS at any one time.

A *shift configuration* is an arrangement of line groups and agent splits for managing calls. You can create up to six different configurations to handle different calling patterns in your business. However, only one shift configuration can be active at a time, and no more than 28 agents can be in that configuration.

In a configuration, some 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 answers calls for a line group only if the main split for that group is overloaded. Sending calls to agents in a secondary split is called *intraflow.* The number of seconds that the call waits in the main split before it is sent to the secondary split is called the *intraflow threshold.* Intraflow can be turned on and off.

When call management begins for a shift, the agents in the shift configuration are in the *logged out state.* CMS neither sends calls to nor keeps statistics on agents who are logged out, so the agents have to signal CMS that they are now ready to receive calls. They do so by touching the programmed button labeled Available on their voice terminals (MERLIN II system telephones) to enter the *available state.*

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 programmed button labeled ACW on their voice terminals. CMS does not send calls to agents who are in the after-call-work state, but it does keep statistics on them. To return to the available state from the after-call-work state, agents simply touch their Available button.

The *automatic after-call-work (Auto ACW)* feature allows you to administer a specific amount of time for the after-call-work state. Auto ACW automatically places agents into after-call-work upon completion of an ACD call. During that time, agents receive no calls as they complete their work, When the time specified in the Auto ACW parameters elapses, agents are automatically made available. Agents can make themselves available before the specified time elapses by touching their Available button.

In addition to using the Available and ACW buttons on their phones to move from work state to work state, agents in an active shift configuration always know what state they're in by the status of the lights next to the buttons.

Available light on = available state

ACW light *on* = after-call-work state

Both lights *off* = logged out state

(To have both lights *on* is not possible.)

When agents touch the Available button to enter the available state, the light next to the Available button goes on. When they touch the ACW button to move from the available state to the after-call-work state, the light next to the Available button goes off, and the light next to the ACW button goes on. Agents who plan to be away from their phones for an extended period or who are doing work unrelated to CMS can also log themselves out of CMS. They move from the available state to the logged out state by touching the Available button and thus turning off its light. Likewise, they move from the after-call-work state to the logged out state by touching the ACW button and turning off its light.

A CMS supervisor can change an agent's work state from the CMS PC by using the *Supervisory Login/Logout* feature. From the Split Status Information screen, a supervisor can simply enter the agent's ID at the appropriate prompt and enter the new status (Logged out / Available / ACW).

Call management is the automatic distribution of calls within a shift configuration. When a call comes into CMS, the system goes through this basic sequence of steps:

- CMS looks for an available agent in the main split assigned to the line group for the incoming call.
- If an agent is available, CMS answers the call and transfers it to the agent who has been available the longest.

- If no agent is available, CMS waits a certain number of seconds, then answers the call and connects it to a delay message. The length of time CMS waits before answering the call is known as the *answer delay*. If an agent becomes available at any time during the answer delay interval or during the delay message, the call is immediately transferred to the agent.
- If no agent has become available and the delay message is finished, CMS puts the call on hold. If your MERLIN II system has Music-on-Hold, the caller hears music.
- As soon as an agent is available, CMS transfers the longest waiting call to the agent.
- If the call has waited a certain amount of time (the intraflow threshold), it may be sent (intraflowed) to an available agent in the secondary split (if intraflow is on).

You can modify this basic sequence by using the CMS *answer delay* and *force delay* options, and by making one or more CMS lines *priority lines.* When no agent is available to answer the call, the answer delay setting determines how long a call rings before CMS answers and connects it to the delay message. With force delay active, all calls are connected to the delay message whether or not there are available agents, and callers are forced to hear the entire message before being connected to an agent. Calls coming in on lines that have been designated priority are answered before any other waiting calls.

More information about each of these aspects of CMS is included in the relevant sections of this manual. Additional CMS terms are included in the Glossary.

A Typical CMS Application

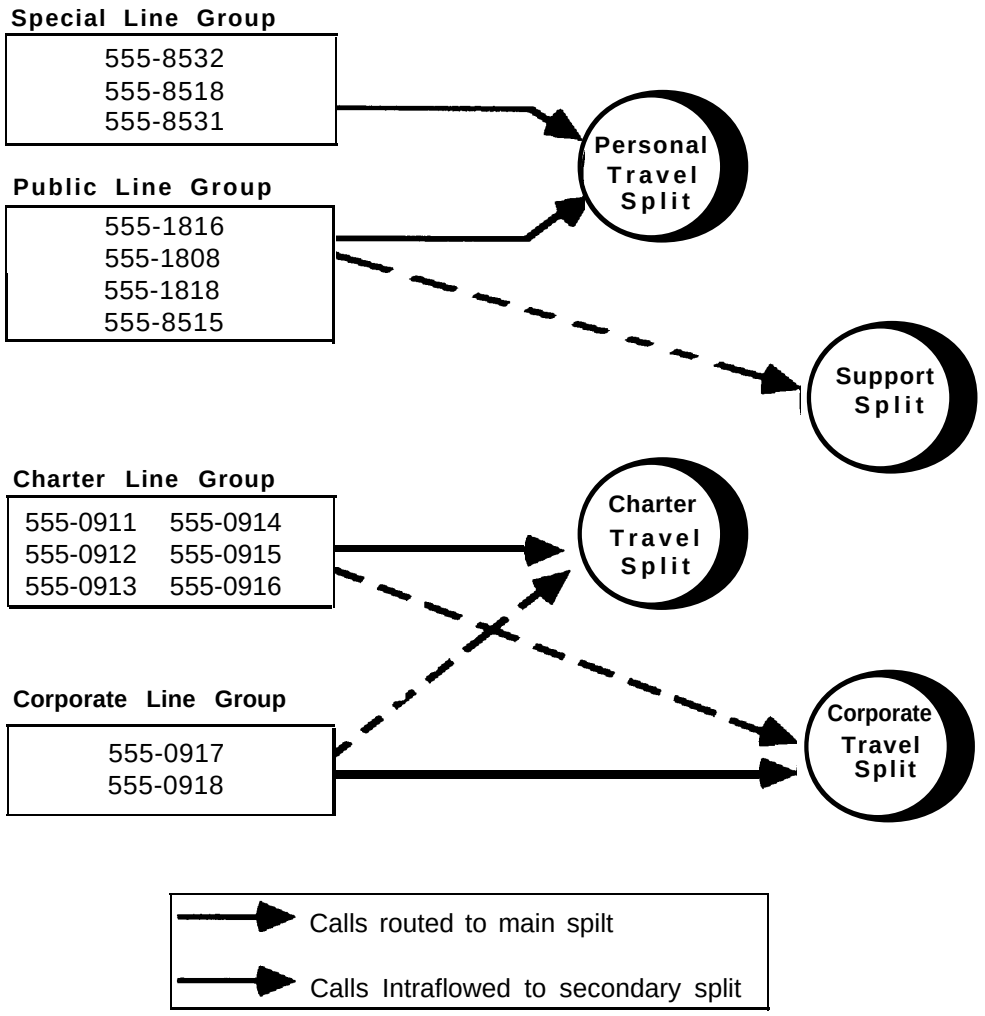
The following example shows how Bon Voyage Travel Agency, a hypothetical business, uses CMS.

CMS AND BON VOYAGE TRAVEL

At Bon Voyage Travel, agents plan and book trips for several types of customers. Most of the travel agency's orders are placed by phone, so CMS is an important part of 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's CMS administrator has divided the telephone lines customers use into four line groups and organized the travel agents into four splits. Figure 2-1 shows a diagram of Bon Voyage Travel's CMS.

FIGURE 2-1 Bon Voyage Travel's CMS.



- The *Personal Travel split* handles calls from customers wanting to plan and book their personal vacations. There are seven agents in this split.

  Calls come into this split on two line groups: the Public line group and the Special line group. In this example, the Public line group consists of four lines (555-1816, 555-1808, 555-1818, and 555-8515), which are advertised in the Yellow Pages, local newspapers, and national travel magazines.

  The Special line group has three lines (555-8532, 555-8518, and 555-8531), which are reserved for valued repeat customers who may book several trips with Bon Voyage Travel each year.

- The agents in the *Charter Travel split* arrange trips for groups and frequently book trips for local and national holiday clubs. There are seven agents in this split.

  Calls to this split come in on one group of lines, the Charter line group, which consists of six numbers: 555-0911, 555-0912, 555-0913, 555-0914, 555-0915, and 555-0916. Occasionally a customer who has previously made travel arrangements through a holiday club will call one of these numbers to make personal travel arrangements. In such cases the agent in the Charter split who receives the call transfers it to an agent in the Personal Travel split. (This feature, called Transfer-to-Split, is explained in detail later in this guide and in the CMS System Manual.)

- The *Corporate Travel split* handles business trips for large corporations. This split, consisting of two agents, is the main split for the Corporate line group. The telephone numbers for the Corporate line group are 555-0917 and 555-0918.

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

- The number of agents available for CMS calls in Bon Voyage Travel's fourth split, the *Support split,* varies according to the incoming call traffic. The employees who staff this split have primary responsibilities that do not involve CMS—such as bookkeeping, advertising, and trip packaging. But since these people have some experience as travel agents, they are often asked to back up the Personal Travel split when call traffic is heavy on the lines in the Public line group. That is, the Support split becomes a *secondary* split covering the Public line group.

  People assigned to the Support split are often away from their desks, so calls coming into the Support split on the Public lines ring at all phones in the split. Then the Support person who is free to answer the call can pick up the nearest voice terminal. (This feature, called All-Ring operation, is explained in more detail later in this guide and in the CMS System Manual.)

BON VOYAGE TRAVEL'S OTHER CALL TRAFFIC

All of Bon Voyage Travel's phones and outside telephone lines are part of the agency's MERLIN II Communications System, but some phones and outside lines are *not* assigned to the Call Management System. They operate outside of CMS.

Agents *and* nonagents use lines not assigned to CMS for all outgoing calls and nonrevenue producing incoming calls. Because this guide focuses on planning CMS, it refers to the components of Bon Voyage Travel's MERLIN II system that are not assigned to CMS only when necessary to clarify some point about CMS planning and operation.

CMS AND OTHER BUSINESSES

Bon Voyage Travel's line groups and agent splits are typical for a travel agency. Other 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 (credit card and billing inquiries). A brokerage firm may have line groups and splits for stock quotes and customer orders.

Key Facts and Considerations

Key facts and considerations concerning proper CMS installation, administration, and operation are emphasized throughout this guide. However, as a quick reference, the most fundamental CMS requirements are listed below. You may need to refer to either the CMS Planning Guide or the CMS Installation and Getting Started Guide for more information on some items presented in the checklist.

SYSTEM CONSIDERATIONS

- This version of CMS is designed to work solely with the MERLIN II Communications System with Feature Module 2.
- CMS will work on either the AT&T PC 6300 or the AT&T PC 6300 WGS, operating under MS-DOS® version 3.2 or later. (The PC 6300 can also use MS-DOS version 3.1). It is not designed to work on any other personal computer.
- The PC must have at least 512K RAM.
- The CU1 and CU2 ports on the CMS PC must be attached to two attendant ports on the same module on the MERLIN 11 system. This module must be either a 408 or 008 analog circuit pack module.

  On both of these modules, the first attendant port is the bottom jack, the second attendant port is the fifth jack from the bottom. Both of these jacks must be designated as attendant jacks during MERLIN II system administration.
- The CU1 and CU2 ports must have lines administered in the same order to insure proper operation of the Voice Announcement unit.
- The MERLIN II system must always be set to “large” in order for CMS to work.
- The MERLIN II system cannot be in Behind-switch mode during CMS operation. (It can, however, operate behind a switch in standard mode).
- Do not use the MERLIN II system flexible numbering feature with CMS.

SUPERVISOR’S CONSOLE AND AGENT VOICE TERMINALS

- The CMS supervisor can use only one type of administrator/attendant console: the MERLIN II System Display Console.
- The CMS supervisor’s MERLIN II System Display Console must be plugged into a station attendant port on a MERLIN II system analog circuit pack module.
- Agents can use any of the MERLIN II system analog or digital voice terminals; they cannot use the basic voice terminals.

LINE ASSIGNMENTS

- You can assign up to 28 lines to CMS, using any block of line ports on the MERLIN II system from 1 to 56. If you want all of the lines to have line button appearances, use only line 1 through 32.
- Do not mix CMS line or line pool assignments in with non-CMS line or line pool assignments.
- The line assignments for the CMS PC and the order in which they are assigned at both CU1 and CU2 attendant ports, must be exactly the same.
- Do not mix CMS lines covered by different splits in the same pool.

- All CMS lines must have the MERLIN II system ringing option feature set for No Ring (at the main attendant console).
- Each line of a line group assigned to an agent must be assigned to the agent's voice terminal.

STATION ASSIGNMENTS

- CMS agent stations can be assigned any block of stations on the MERLIN II system from 10 through 69. Keep in-mind that only 28 stations can be operational at one time.
- CMS uses only the default intercom numbers assigned to the MERLIN II system (10 through 69).

LINE GROUP AND AGENT SPLIT CONSIDERATIONS

- CMS can have up to six shift configurations.
- Each shift configuration can have up to four line groups and up to six agent splits.
- Each line group may have one and only one main split assigned to it.
- Line groups do not require secondary splits.
- An agent split may be designated the main split for one, more than one, or all line groups.
- An agent split may be designated the secondary split for one, more than one, or all line groups.
- An agent split assigned as the main split to one or more line groups can also be assigned as the secondary split to one or more additional line groups.

EXTERNAL ALERTS

- Up to four wall-mounted alerts can be used with CMS. They are connected to line jacks on the MERLIN II system control unit, and administered to light up when thresholds set by the administrator are exceeded. The line jacks used for alerts are *in addition* to the maximum of 28 lines that can be assigned to CMS. (For example, if all 28 outside lines were assigned, the line button numbers for four alerts would be 29, 30, 31 and 32).

OTHER CONSIDERATIONS

- Do not use flexible numbering with CMS.

  If you are going to use flexible numbering with non-CMS portions of your MERLIN II system, do not press [InitSp] (initialize space) when administering the MERLIN II system. Instead, use block or single renumbering. (For more information, see "Perform Flexible Numbering" in Section 4 of the *MERLIN II System Installation and Administration Manual).*

If you are already familiar with this information from reading the *MERLIN* II *Communications System Installation and Getting Started Guide for the Call Management System,* skip over this section of the manual, and continue with Section 4, "Administering CMS."

The personal computer is an integral part of CMS. Two types of personal computers work with CMS: The 6300 WGS (Work Group Station) and the PC 6300. By using the CMS menus and screens and entering data into your computer, you can ensure that your CMS is working smoothly and that your statistics are accurate. The instructions in this manual refer to the 6300 WGS and its keyboard. This section of the manual helps you to use your computer to begin CMS operation.

The information in this section is organized as follows:

- **Duplicating the CMS Diskette.** Describes how to make a working copy of the CMS diskette.
- **Installing the CMS Software.** Describes how to copy the CMS program onto the PC hard disk, start up the CMS program automatically, and set the time and date on your PC.
- **Your PC with CMS.** Describes how to use CMS screens, enter and edit data, and access help screens.

UPGRADE INFORMATION

This version of CMS is designed to work with both the AT&T PC 6300 and AT&T 6300 WCS, operating under MS-DOS version 3.2 or later. (The PC 6300 can also use MS-DOS version 3.1). It is not designed to work with any other personal computer.

CMS Enhancements

Some of enhancements to the previous CMS release include:

- Assigning up to 28 agents into one split
- Administering an automatic after-call-work state (Auto ACW)
- Changing agents' work states from the PC (Supervisory Login/Logout)
- Generating cumulative reports
- Generating reports while CMS is managing calls
- Using updated and improved help screens
- Viewing color screens (if you have a color monitor)
- Using headset adapters for hands-free operation
- Utilizing external alerts to help you keep the system functioning efficiently

You are making a new beginning when you install CMS to work with the MERLIN II Communications System with Feature Module 2. Earlier CMS versions are not designed to work with this latest MERLIN II system, nor can the administered information in them be transferred to the new CMS. (For more information, see the CMS Planning Guide for the MERLIN II Communications System with Feature Module 2.)

Software Considerations

This CMS release is available on both a single 3 and 1/2 inch disk (to be used with the 6300 WGS) and on two 5 1/4 inch disks (to be used with either the 6300 WGS or the PC 6300). Previous releases of CMS were on a single 5 1/4 inch disk.

New copy and installation procedures for both types of disks are described in this section.

> **IMPORTANT:** Before installing the new Call Management System, you must delete all existing files from the **CMSMGMT** and **CMSREPT** directories of your earlier version of CMS. See "Step 4. Installing Your Software" in the Installation and Getting Started Guide for more information.

Once CMS is installed, the agent directories, line and station number assignments, thresholds, exceptions and other information must be entered into the new CMS from the keyboard.

Hardware Considerations

If you have been using an AT&T PC 6300 to manage CMS (or have purchased an AT&T 6300 WGS) and you have MERLIN II System Console to be used as an administrator attendant, you don't require any more hardware. If using the PC 6300, make sure it has at least 512K RAM. If using the 6300 WGS, make sure it has the VDC 400 installed (not the VDC 750).

If you have an older version of CMS and have used a PC 6300 PLUS with it, you can remove the CMS expansion card and put it in the PC you will use with the new system.

You can use the same the voice announcement unit with the new CMS that you were using with your earlier version of CMS. You should, however, use the AT&T 473 printer.

The instructions in this manual refer to the 6300 WGS keyboard. However, the function, tab, shift, cursor directional, backspace, and enter keys function the same way on the PC 6300 keyboard. Only the key locations are different for each keyboard.

You can find keyboard illustrations in the Quick Reference Guide to Your PC Keyboard in Section 10 of this manual. You may want to make a copy the Quick Reference Guide to Your PC Keyboard and keep it handy.

Duplicating the CMS Diskette Duplicate

To protect your original CMS diskettes from damage or wear, make duplicates on the blank diskettes packaged with your software. Then you can store the originals in a safe place in case you need them later.

You'll need the following to make the duplicate:

- Your PC
- The original CMS diskettes, labeled "Call Management System for the MERLIN II CS," and stored in the cardboard sleeve at the back of the manual. These are either:
  - 3 1/2 inch diskette

    or

  - Two 5 1/4 inch floppy diskettes (labeled "1 of 2" and "2 of 2")
- Blank diskettes appropriate for your PC:
  - One blank 3 1/2 inch diskette (on which to copy the 6300 WGS CMS diskette)

    or

  - Two 5 1/4 inch diskettes (on which to copy the PC 63005 1/4 inch diskettes)

    NOTE: Be certain that the diskettes you will use to duplicate the CMS diskettes do not have files on them that you want to keep. All files on the duplicate diskettes will be overwritten when you copy the CMS diskettes.

In order to make a duplicate of the CMS diskettes, the MS-DOS® system program (including the "diskcopy" command) should be on your hard disk. If you need to install the MS-DOS system program, use the MS-DOS diskette labeled "MS-DOS/GW BASIC System Diskette" and follow the directions in the guide that comes with that diskette.

Also you should set your PC for the correct date and time. For directions, see the user's guide for the 6300 WGS or follow the instructions under "Setting the Time and Date" later in this section.

DUPLICATING THE CMS DISKETTE

To make a duplicate copy of the original CMS diskette, do as follows:

1 Turn on the PC.

2 When the C> prompt appears, type:

diskcopy a: a:

and press [↵] .

This message then appears:

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 the MS-DOS program that you are using.

3 Insert the original CMS diskette, labeled "Call Management System for the MERLIN II CS," into drive A. This diskette is the "source" diskette, the diskette that contains the information being copied.

When inserting the diskette, the label of the diskette should face upwards, and the notch in the side of the diskette (5 1/4 inch diskette) should be 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.

NOTE: The procedure is essentially the same whether you are using the 5 1/4 inch floppies or the 3 1/2 inch diskette. However, if you are using the 5 1/4 inch floppies, insert the diskette labeled "1 of 2" at this first step.

4 When you are ready, press any key.

The red 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 red in-use light is on.

When the system has read the first part of the diskette, this message is displayed:

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

5 When the red in-use light on drive A is off, remove the source diskette, insert the 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 source diskette 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 If you are using the 3 1/2 inch diskette, type *n*. You don't need to press [↵] .

If you are copying the 5 1/4 inch diskettes, type *y*. Then insert the second diskette (labeled "2 of 2"). (After it has been completely copied, type n and go on to the next step).

7 When the C> prompt appears, remove the duplicate diskette, prepare an appropriate label, such as "CMS Duplicate Copy," and apply the label to the diskette.

NOTE: Label the 5 1/4 inch diskettes "CMS Duplicate Copy 1" and "CMS Duplicate Copy 2," respectively.

8 Store each original diskette in a safe place.

You are now ready to install the CMS software.

Perform the following software installation procedures the first time you install the CMS software or if errors occur that you cannot fix and you need to begin again. When you are finished, the system has copied the programs required for CMS operations onto the PC hard disk.

INSTALLING THE SOFTWARE

To install the software do the following:

1 If the A> prompt does not appear on your screen, type

a:

and press [↵] .

The A> prompt should then appear on your screen.

2 Insert the duplicate copy of the CMS software into drive A. (If using the 5 1/4 inch floppies, use the diskette you've labeled "1 of 2")

3 Type

cmsinstall

and then press [↵] .

The following message appears in the upper portion of the screen:

Call Management System for the MERLIN CS

Installation Procedure

This message remains on the screen throughout the installation procedure. Additional messages appear in the lower area of the screen.

If the system has less then 51X RAM (memory), the following error message appears:

Insufficient System Memory for CMS
A Minimum of 512K System Memory is Required
Increase System Memory and Repeat Installation

If this message appears, you must upgrade your system by increasing its RAM to a minimum of 512K before you can continue the installation procedure.

4 While the installation procedure is in progress, the following message usually appears on your screen:

Installation Now In Progress. Please Wait...

If you are using the first of the two 5 1/4 inch diskettes and the installation is error-free, the installation procedure will stop when the first diskette has been completely copied onto the system. When this happens, the following request for the second diskette will be displayed:

Insert Floppy #2. Press Enter to Continue.

Remove the first diskette, insert the second disk, and press [↵] to continue with the installation.

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

- If there are errors on your CMS duplicate copy that prevent the installation program from continuing, the following message appears on your screen:

  ```
  ****Error on Installation Floppy Disk
      Try Installation from another Floppy
  ```

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

- Also, there may be insufficient storage space on the hard disk for new information. In that case you will see the following message on your screen:

  ```
  ****Insufficient Disk Space for CMS.
      An additional xxxK is required.
      Delete Old Files and Try Installation Again.
  ```

  Your PC should be dedicated entirely to CMS operation; non-CMS files should be cleared from the hard disk. If you need directions on using the MS-DOS "del" (delete) and "dir" (directory) commands to delete files, see the user's guide that comes with the MS-DOS diskette.

5 Once the installation program has copied all the CMS programs and files onto the hard disk, the final installation message appears on your screen:

```
****Call Management System Successfully Installed
```

When this message appears, the program returns control to MS-DOS and the A> prompt appears.

6 Return to the C> prompt by typing

```
c:
```

and press [↵] .

7 Remove the CMS duplicate copy from the disk drive and store it in a safe place.

Starting the CMS Program Automatically

If you are using your PC exclusively for CMS, you may want the CMS program to start automatically each time you turn on the PC. For this purpose, you must have an AUTOEXEC.BAT file that includes the appropriate commands. Then, whenever you turn on your PC, the CMS Menu will appear.

For information on setting up or adding to an AUTOEXEC.BAT file, see the user's guide that comes with the MS-DOS diskette.

In order to set up or add to this file on your PC you need to use a text editor. Use either EDLIN, the MS-DOS line editor, or another text editor you are familiar with.

The following are the commands you need in your AUTOEXEC.BAT file to start CMS automatically:

```
cd cms
cms
```

If your hard disk does not have an AUTOEXEC.BAT file, you can use EDLIN (the MS-DOS line editor) to create one for the cms commands as follows:

1 At the C> prompt, type *cd* , then press [↵] .

2 Type *edlin autoexec.bat* , then press [↵] .

3 At the * prompt, type *i* , then press [↵] .

4 At the 1:* prompt, type *cd cms* , then press [↵] .

5 At the 2:* prompt, type *cms* , then press [↵] .

6 At the 3:* prompt, hold down the [Ctrl] and [z] keys together, then press [↵] .

7 At the * prompt, type *e* , then press [↵] .

You should now be at the C> .

Setting the Time and Date

The date and time are important parts of your daily CMS statistics and must be represented correctly on your PC screen. When you have set up your PC and copied the MS-DOS program onto the hard disk, the system prompts you to check the date and the time to be displayed on the screen. If either is not correct, follow the procedures below. (When in CMS, you can check the time and date by looking at the right-hand corner of any CMS Menu screen).

> **NOTE:** The date *must* be changed at the beginning of each year, and the time *must* be adjusted for daylight savings time.

SET THE DATE

To check or change the date on your PC, do as follows:

1 When the C> prompt appears, type

```
date
```

and press [↵] .

The following message appears on your screen:

```
Current date is Wed 4-07-1987
Enter new date: (mm-dd-yy)
```

2 If the date is correct, press [↵] .

If the date is incorrect, type in the correct date (for example, 4-08-1987) and press [↵] .

SET THE TIME

To check or change the time on your PC, do as follows:

1 When the C> prompt appears, type

time

and press [↵] . The following message appears on your screen:

```
Current time is 0:01:30.00
Enter new time:
```

2 If the time is correct, press [↵] .

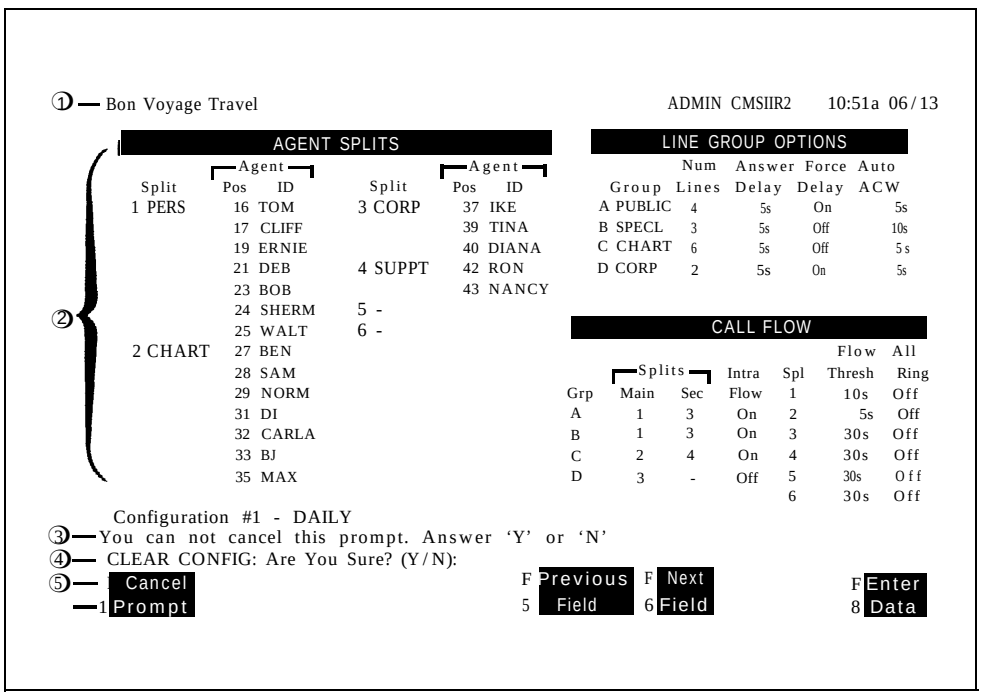
If the time is incorrect, type in the correct hour and minute (for example, 9:03) and press [↵] . MS-DOS works on the basis of a 24-hour clock, so if you want to enter the time as 2:30 p.m. you must type 14:30.

MS-DOS keeps track of the seconds and hundredths of seconds for you.

This section describes the format of CMS screens, entering and editing data, and accessing help screens. If you have questions about MS-DOS, the layout of your keyboard, or other information about your 6300 WGS, refer to the manuals that accompanied it.

SCREEN FORMATS

The following screen shows a typical CMS screen format:



The following types of information may appear in each area of the screen. Each number below corresponds to a number to the left of the screen.

1 ID line. The ID line contains:

- Business name.
- Status indicators concerning problems with the PC hard disk, the connections between CMS and the MERLIN II system control unit, or the connections between CMS and the voice announcement unit and/or printer. For information on resolving problems, see Section 9, "Troubleshooting."
- Current CMS mode: **CMS** appears when the system is first started. **DAY** or **NIGHT** indicates calls are being managed using Day Service or Night Service mode (explained later in this manual). **ADMIN** indicates CMS is being used for administration instead of call management. **REPT** appears when you use the Print Reports screen.
- CMS Release number (for example, CMSIIR2)
- Time and date.

2 Information area. This area contains screen names, menus, or status information for a particular screen.

3 **Error line.** Three types of messages can appear in the error line:

- *Error messages* indicate you made an invalid entry, such as entering a number in a field where only letters are valid.
- *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),

In many cases, the PC beeps when a message appears in the error line. Exception messages and system messages remain on the screen until another message overwrites them or until you move to another screen. Error messages remain on the screen until you correct the error.

4 **Prompt line.** This line contains requests for your input. Prompts appear after you press most function keys or in response to certain error conditions.

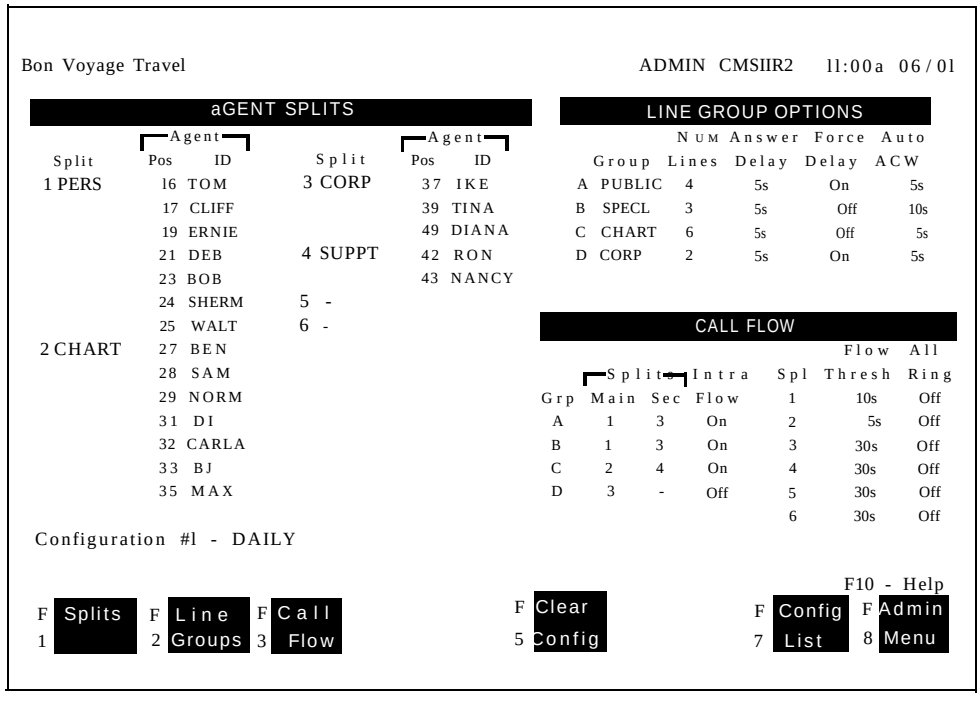
When no prompt appears, the words [F10] **- Help** appear to the far right in the prompt line to remind you that pressing [F10] lets you access the help screens.

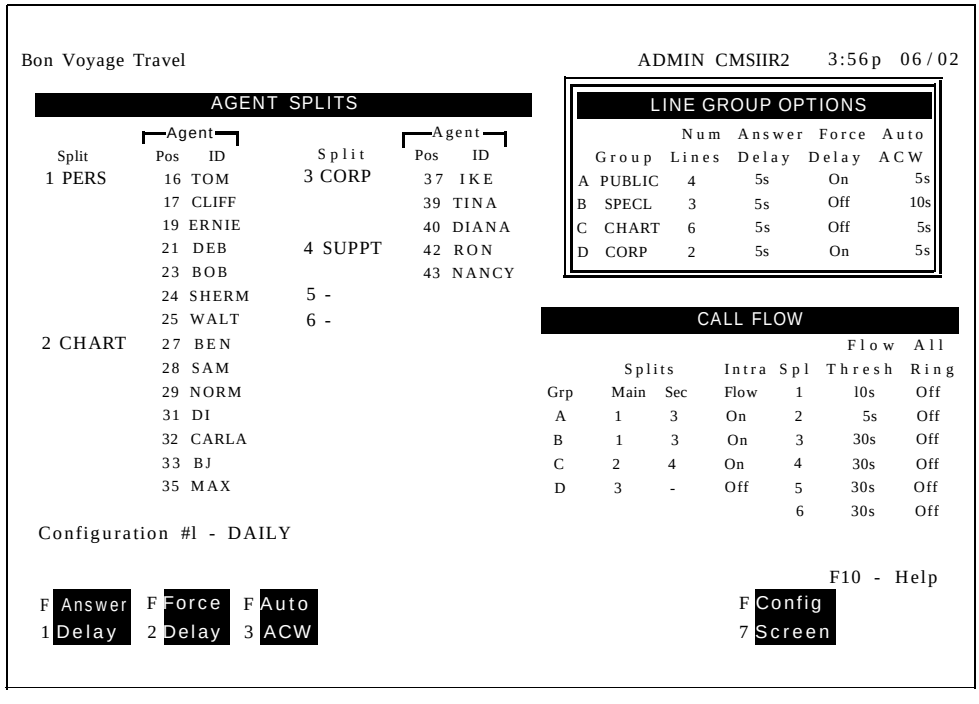
For more information, see "Entering and Editing Data," in this section.

5 **Function keys.** The labels in this area of the screen tell you the current meaning of the function keys on your keyboard. The function key labels depend on the screen you are viewing (except [F10], which is always access to 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

Entering and editing data with CMS is easy. You enter data by pressing function keys and responding to the prompts that appear on your screen. Whenever a prompt appears, the function keys are relabeled. For example, compare the next two screens. If you press [F2] (labeled "Line Groups") on the first screen, it changes as shown on the second screen, In addition to highlighting the Line Group area, the function keys provide the options listed for the line groups. If you were to choose one, the prompt line would display the fields for entering and editing data for that option, and the data entry keys would replace the Configuration screen's function keys,





ENTERING DATA AT PROMPTS

Instructions on entering data in prompts are usually presented as follows:

Prompt: The CMS prompt on your screen appears here in a special typeface. For instance:

SELECT CONFIGURATION Config #_

Action: Your instructions for entering data in response to the prompt appear here. For instance:

1 Enter a configuration number.

2 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 these keys to move the cursor within a prompt:

Press	To move
[F5] (labeled Previous Field) or [SHIFT] - [⇆] (both keys at once)	To the beginning of the previous field.
[F6] (labeled Next Field on your screen) or [⇆] (the tab key)	To the beginning of the next 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.
[←] (the backspace key) or [←] (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 may use uppercase or lowercase letters in your entries. In the examples in this manual, entries are usually shown lowercase. On your screen, almost all entries appear as uppercase, even if you typed lowercase letters.
- Some field entries can be numbers or special characters. In some fields, such as the Business Name, you indicate spaces with an underscore.
- Press [F8] (labeled Enter Data) or [↵] 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 [↵] . The instructions in this manual usually tell you to press [F8] after your last entry in a prompt. You may press either [F8] or [↵] , however.

- Your PC beeps and an error message appears if you skip a required field in a prompt and press [F8] or [↵] .

  Important: To cancel any prompt, press [F1] (labeled Cancel Prompt) or [DELETE] . Any data you entered in the prompt fields is ignored, the prompt disappears, and the function key labels change from editing 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 entire entry from that character onward. You cannot use [INSERT] to insert a character between other characters.

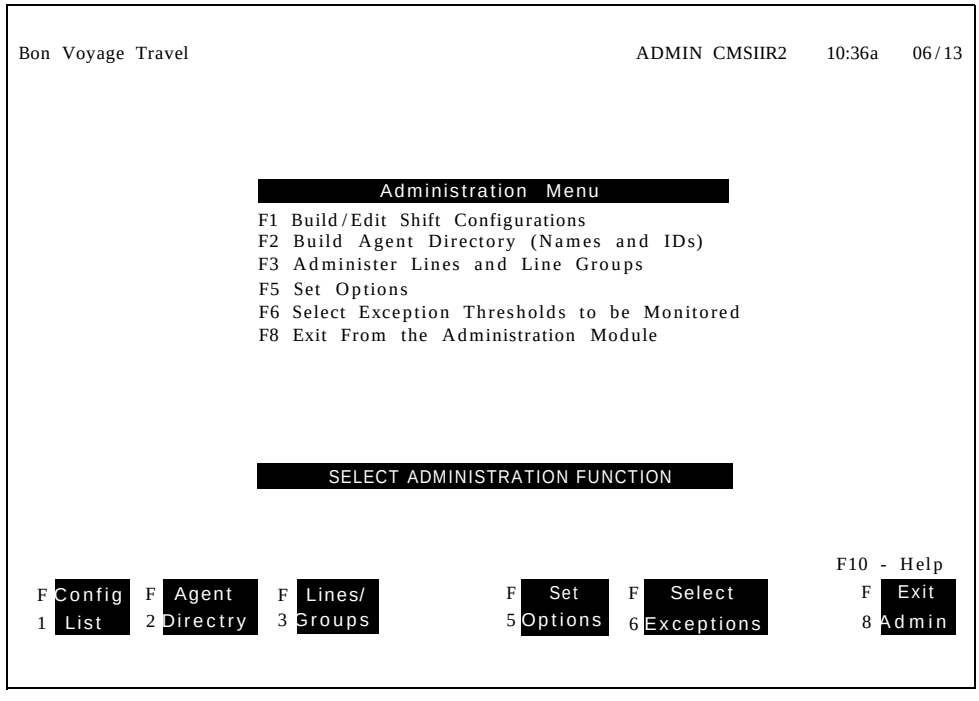
To replace a long entry with a shorter one:

- Type over any characters you want to change, then Press [SPACE] (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.

USING THE HELP SCREENS

You can press [F10] on any screen to receive more information about that screen and its prompts. To exit a help screen and return to your previous place, press any key. If you press a function key to exit a help screen, you will exit help and then perform the function of that particular function key.

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.



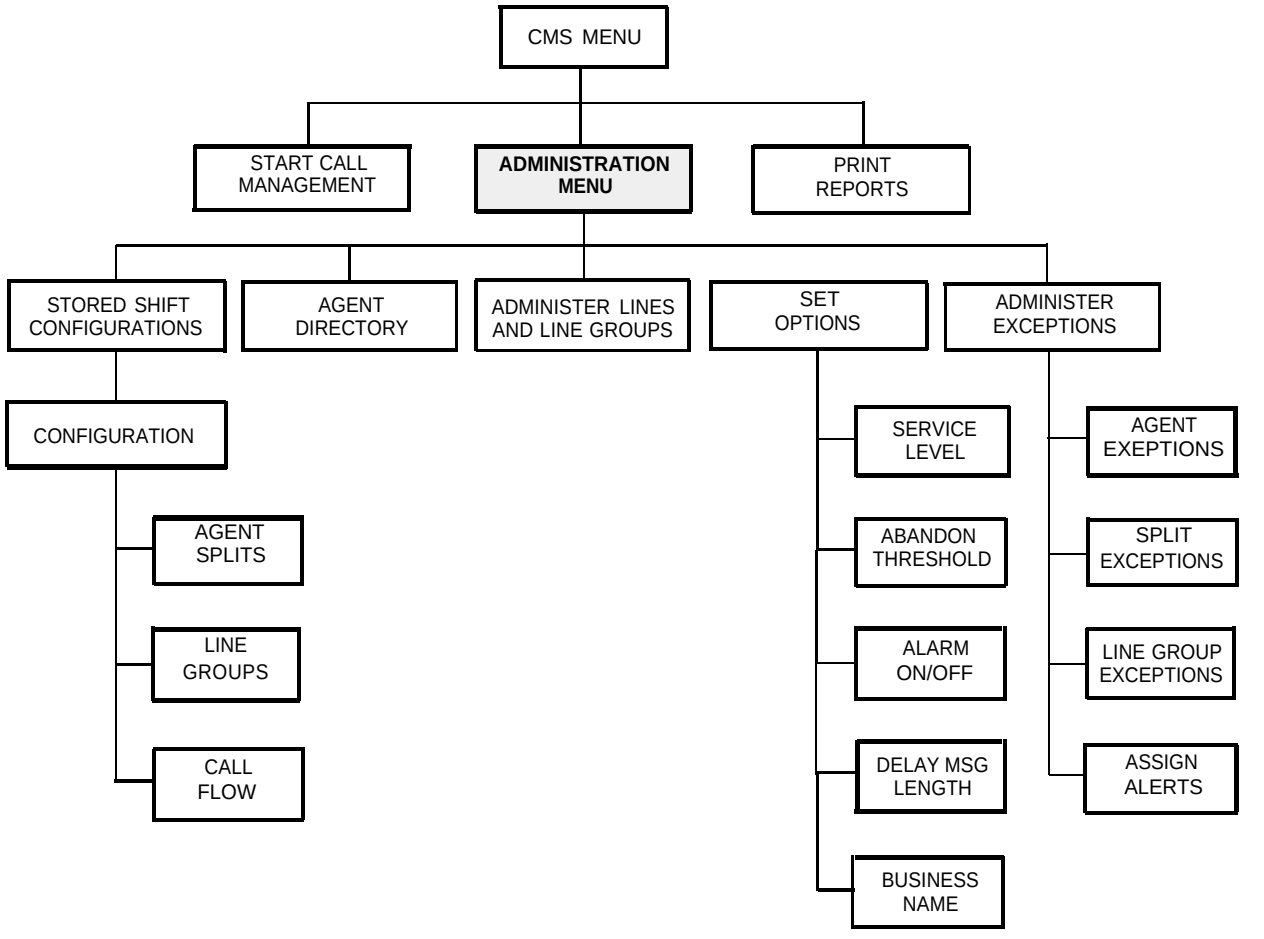
As the list in the information area of the screen suggests, administration involves a variety of tasks. A brief explanation follows:

- **Building crediting Shift Configurations.** Assign CMS agents to agent splits and assign agent splits to cover line groups.
- **Assigning Agent IDs.** Identify the CMS agents in your business.
- Administering Lines and Line Groups. Identify your CMS telephone lines and assign them to line groups.
- **Setting Options.** Tailor CMS for your business by defining your business name, service threshold, abandoned call threshold, and message length. You can also set your PC to beep whenever an unusual or undesirable situation occurs.
- **Selecting Exceptions.** Select the exceptions (such as talk time and refused calls) that are appropriate for your business.
- Backing Up Shift Configurations. Make a backup copy of your shift configurations in case you need to restore your system. (See "Backing Up Shift Configurations" near the end of this section).

If you are administering a newly installed CMS that as yet has no shift configurations, go to the CMS Installation and Getting Started Guide that came with this manual, and follow the procedures for building an initial shift configuration to begin managing calls. If you are building additional configurations or changing established configurations, review " Key Facts and Considerations" at the end of Section 2, then go on to the next heading in this section, "Getting Started."

Figure 4-1, "A map for CMS administration screens," shows the interrelationships among the administration screens you'll be using.

FIGURE 4-1 A map of CMS administration screens.



These procedures describe turning on the PC and selecting an administration activity from the Administration Menu. You may want to review "Key Facts and Considerations" at the end of Section 2 before administering CMS.

START ADMINISTERING CMS

To start administering CMS follow these steps:

1 Turn on your PC.

If you use an AUTOEXEC.BAT file to automatically start the CMS program, the CMS Menu appears. Go to step 4. (For information on creating an AUTOEXEC.BAT file, refer to "Starting the CMS Program Automatically" in Section 3.)

If the A> prompt appears instead of the C> prompt, type *c:* and press [↵] to change to disk drive C.

2 When the c> prompt appears, type

cd cms

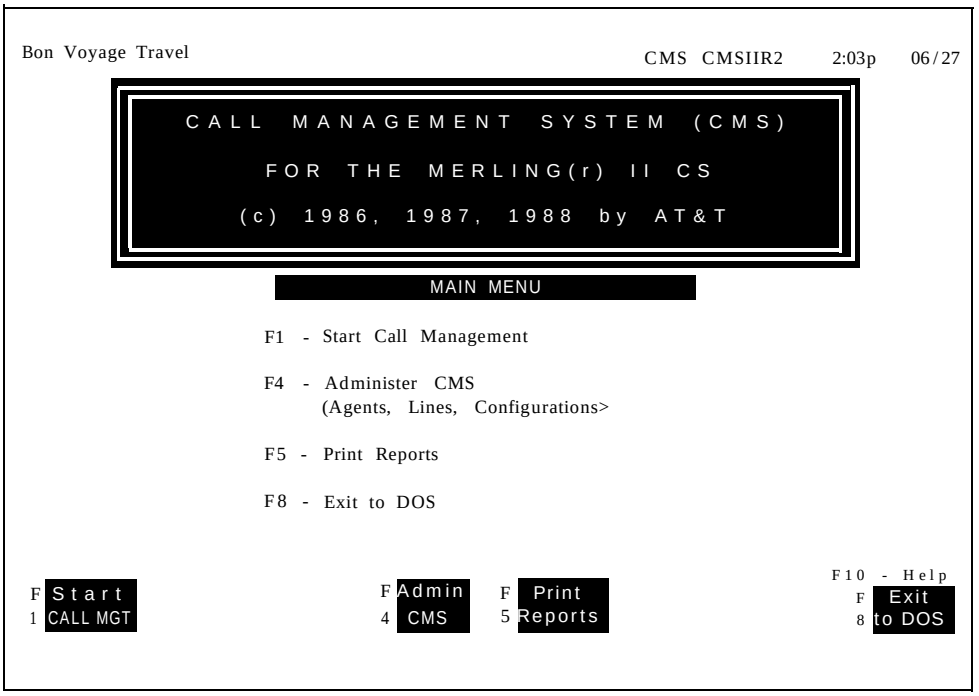
and press [↵] .

3 When C> reappears, type

cms

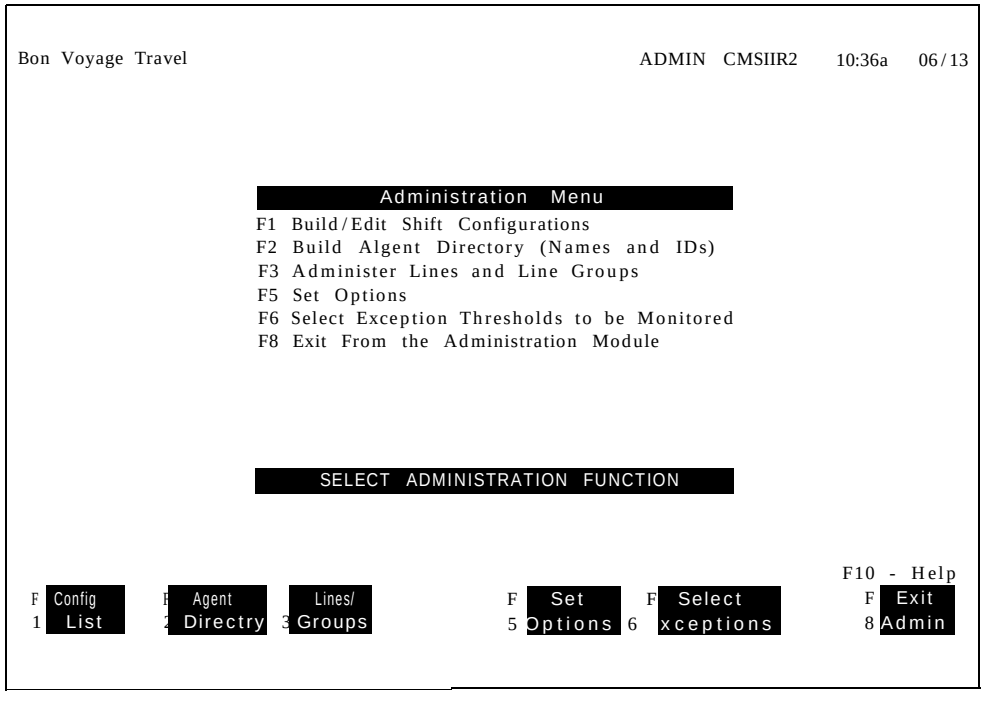
and press [↵] , This starts the CMS program.

The CMS Main Menu, shown below, appears.



4 Press [F4] (labeled "Admin CMS") to begin administering CMS.

The Administration Menu screen, shown below, appears.



5 Press the function key for the administration activity you want to perform.

6 Turn to the corresponding instructions in this part of the manual.

Building or Editing Shift Configurations

A shift configuration is an arrangement of line groups and agent splits for managing calls. Before CMS can operate, you must build at least one shift configuration. You can build as many as six configurations to handle different calling patterns in your business. If you do not name the configurations when you begin to build them, the system supplies the default name of "Configx," where x is the number of the configuration (1 - 6). We recommend, however, that you name the configurations so that their identity is meaningful for your business.

For instance, a business may require these configurations:

- Shift 1
- Shift 2
- Night
- Weekend

In this example shift 1 and shift 2 configurations are for the two weekday shifts of agents. The night configuration is for calls after business hours that are answered at a central answering position, such as a guard's desk. The weekend configuration is for weekends and holidays.

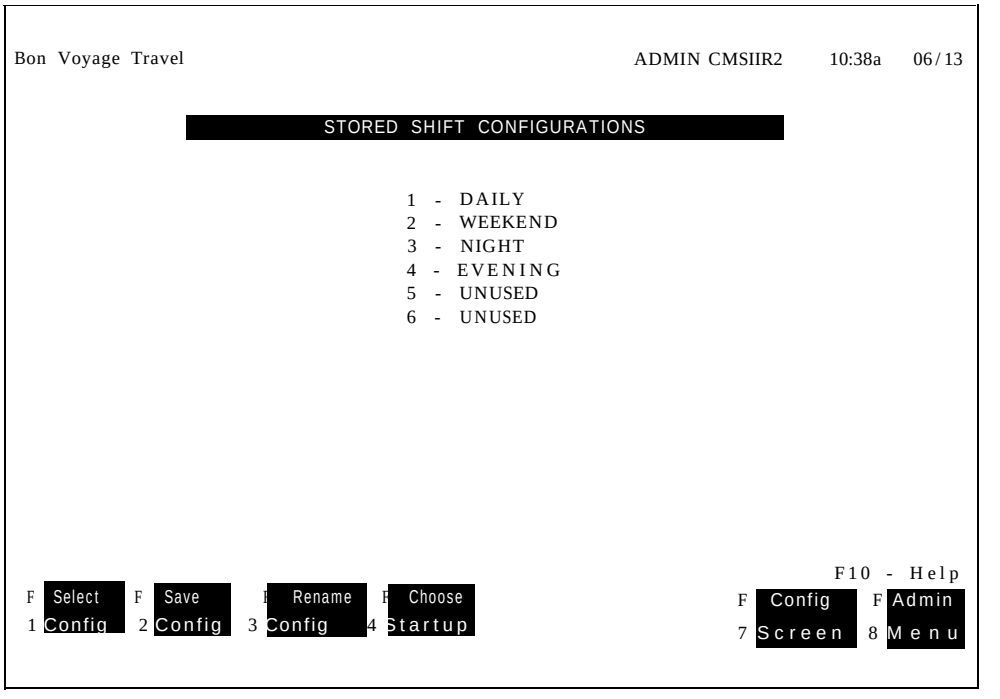
> **NOTE:** Night Service mode is different from a night configuration. During Night Service, CMS connects all incoming calls to a message and automatically disconnects the calls when the message is over. For more information, see "Selecting Day or Night Service" in Section 5.

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 for a line group only if the main split for that line group has no available agents. This is called *intraflow*. (Intraflow is described in more detail in "Administering Call Flow.")

In the shift 1 configuration for Bon Voyage Travel, main splits and secondary splits are assigned like this:

Line group	Main split	Secondary split
Public line group	Personal Travel split	Support split
Special line group	Personal Travel split	None
Charter line group	Charter Travel split	Corporate Travel split
Corporate line group	Corporate Travel split	Charter Travel Split

Administering shift configurations begins with the Stored Shift Configurations screen shown below. Pressing [F1] (labeled "Config List") from the Administration Menu screen selects this screen.



This section describes the following activities you can perform from the Stored Shift Configurations screen:

- **Edit a Shift Configuration.** Create a new shift configuration or change an existing one.
- **Save an Edited Configuration.** Store the shift configuration that was last edited.
- **Rename a Shift Configuration.** Name or rename a shift configuration.
- Select a Startup Configuration. Select one of your shift configurations to be invoked automatically during the startup procedure.
- **Return to Other Screens.** If you press [F7] (labeled "Config Screen"), you return to the Configuration Screen, which displays the configuration you last selected. (That configuration name is shown in reverse video on the Stored Shift Configurations screen.) If you press [F8] , (labeled "Admin Menu" on a shift configuration screen) you return to the Administration Menu.

USE THE STORED SHIFT CONFIGURATIONS SCREEN

To use the Stored Shift Configurations screen, do the following:

- Press the function key for the activity you want to perform.
- Perform the activity using the instructions on the following pages.
- Press [F8] (labeled "Admin Menu") to return to the Admin Menu when you are through administering configurations.

Editing a Shift Configuration

This section describes how to build a new shift configuration or change an existing one. Your CMS will not manage calls while you are using these procedures. To edit an active shift configuration, follow the instructions in "Dynamic Reconfiguration" in Section 5.

Building a shift configuration involves these activities:

- Assigning agents to splits
- Administering call flow (assigning main and secondary splits, administering intraflow, and if you want, designating All-Ring operation for some splits)
- Administering line group options: Answer Delay (the number of seconds a call rings before CMS answers it), Force Delay (forces all calls in the line group to hear the entire recorded message before being connected to an agent), and Auto ACW (the number of seconds after a completed call that an agent is automatically in the after-call-work state)

Before you can create or change a shift configuration, you have to identify your lines and line groups using the procedures under the heading "Administering Lines and Line Groups" later in this section of the manual. Turn to those instructions now if you have not already completed that part of administration.

Refer to the CMS Agent Split Planning Form you created in the *MERLIN Communications System Planning Guide for the (Call Management System* to see how you planned to assign your splits to your line groups.

BUILD OR EDIT A SHIFT CONFIGURATION

To build or edit a shift configuration follow these steps:

1 Press [F1] (labeled "Select Config") on the Stored Shift Configurations screen.

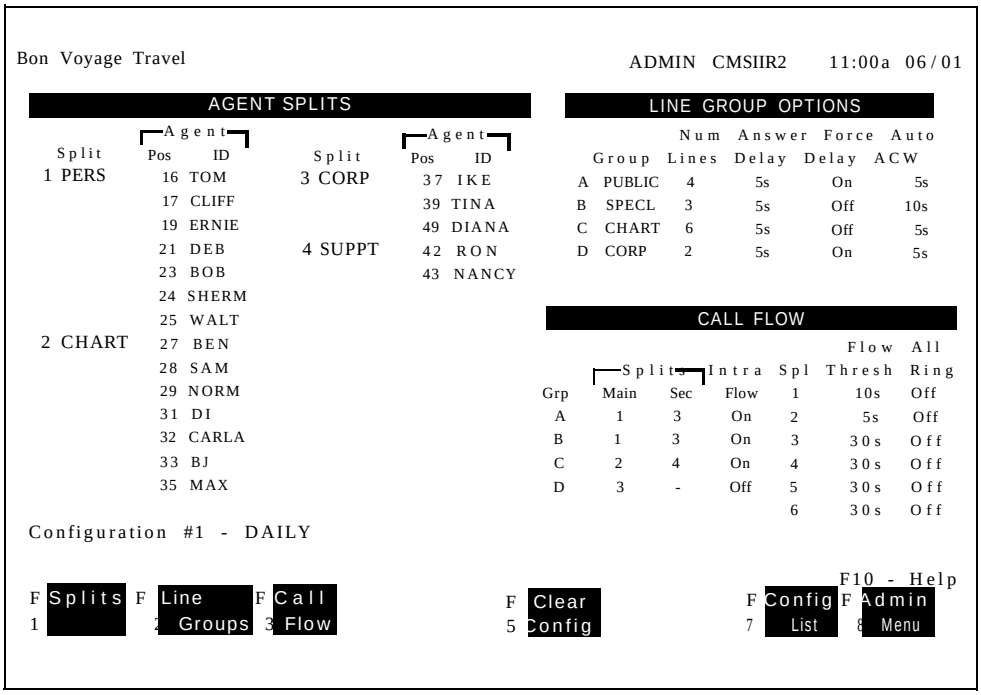
2 Respond to the prompt

SELECT CONFIGURATION: Config #: _

by entering a configuration number 1 through 6.

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

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



If you are editing a configuration that you built earlier, go to step4.

If you are building a new configuration, note that all areas on the screen involving splits are either blank or display hyphens. The defaults for the system are also displayed.

Study the following initial settings that are supplied for a new configuration and determine which, if any, you want to change.

- Answer delay is set to 5 seconds.
- Force delay is turned off.
- Automatic after-call-work is set to O seconds (off).
- Split numbers 1 through 6 are displayed in the Agent Splits area.
- Intraflow thresholds are set to 30 seconds.
- Intraflow is turned off.
- Main and secondary splits are unassigned (indicated by hyphens).
- All-Ring is turned off.

4 Select the activity you want to perform from the following list and turn to the instructions. If you are building your first configuration, your *must* perform the first *two* activities.

► **Administering Splits.** Add, move, or remove agents in the splits in a configuration.

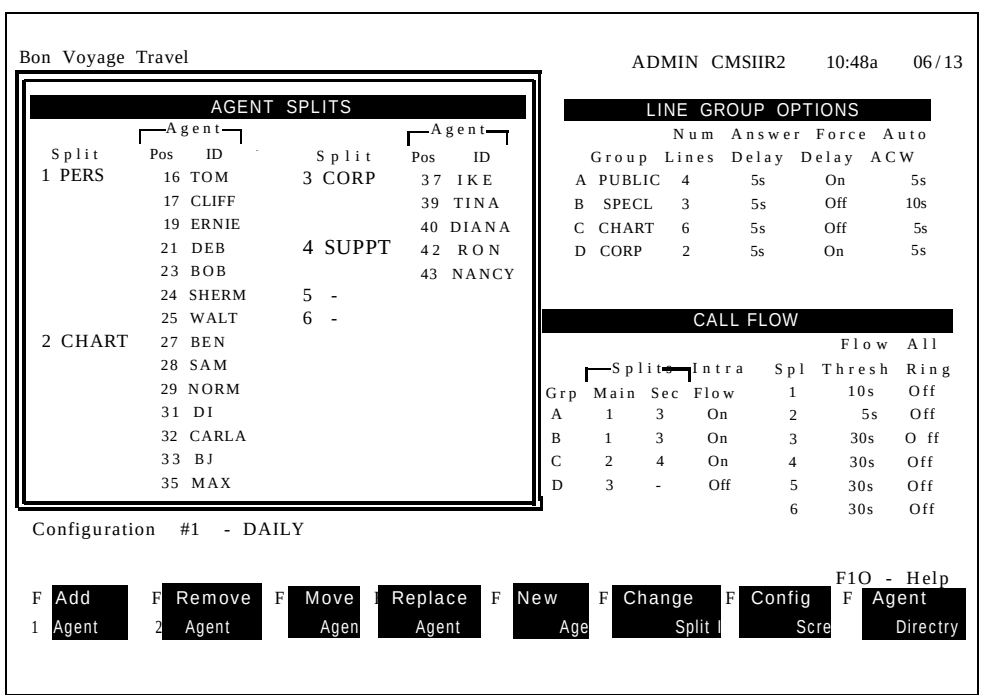
► **Administering Call Flow.** Assign splits to groups, set intraflow thresholds, turn intraflow on or off, and designate splits for Ail-Ring Operation (optional).

- **Administering Line Group Options.** Program how you want CMS to control answering calls.
- **Clearing a Configuration.** Delete the contents of a configuration.
- **Returning to Other Screens.** Return to the Stored Shift Configurations screen and save the configuration you just built or edited, Return to the Admin Menu and select another administration activity.

Administering Splits

The list of agents you created on the Agent Directory screen is your *master list* of agents. Any of the agents on the master list can be assigned to splits,

Pressing [F1] (labeled "Splits") from the Configuration screen selects the Configure Splits screen, shown below. If you are building a new configuration, first use [F1] (labeled "Add Agent") to identify which of the agents listed in the agent directory will be active in this configuration. Then use [F6] (labeled "Change Split ID") to assign an ID to each split,



ADMINISTER SPLITS

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

[F1] **Add Agent.** Use this function key to assign an agent to a split. The agent must already be listed on the Agent Directory screen. A split may have up to 28 agents.

Prompt: **ADD AGENT: ID: _____ Pos # : ___ Split #:___**

Action:

1 Enter an agent ID.

2 Enter a position number (a MERLIN II system default intercom number), 10 through 69.

NOTES: If administered, attendant numbers are 10, 14, 18, 22, 26, 30, 34, and 38. Two of these have been connected to the PC; and another will be used by the console during CMS administration as the CMS administration port.

Most likely, there are other circuit pack modules in the control unit, such as the 008D (digital circuit pack) or the 012 (basic voice terminal circuit pack). These circuit packs reduce the number of attendant ports available for CMS.

The most probable MERLIN II system configuration would allow for the following:

- The attendant port for the MERLIN II system administrator would be port number 10;
- The attendant port for the CMS administrator would be port number 14;
- The attendant ports for CU1 and CU2 would be port numbers 18 and 22.
- Subsequent analog modules would allow for additional attendant ports to be administered.

3 Enter a split number (1 through 6).

4 Press [F8] (labeled "Enter Data") to save your data and return you to the Configure Splits screen.

HINT: Press [F8] (labeled "Agent Directry") again to return to the Agent Directory if you need to refer to or change agent information. Press [F7] (labeled " Config Splits") on the Agent Directory screen to return to the Configure Splits screen.

[F2] **Remove Agent.** Use this function key to remove an agent from a split. (The agent entry will still be listed on the Agent Directory screen.)

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

Action: Enter an agent ID and press [F8] (labeled "Enter Data").

You are prompted to enter *Y* or *N* to confirm your request.

[F3] **Move Agent.** Use this function key to shift an agent from one split to another or from one position to another.

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

Action:

1 Enter an agent ID.

2 Enter a new position number, or press [F6] (labeled "Next Field") to skip this field. If you skip this field, the agent keeps the same position number.

3 Enter the number of the agent's new split,

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

[F4] **Replace Agent.** Use this function key to substitute one agent for another at a particular position.

Prompt: **REPLACE AGENT: Pos # : _ New Agent ID: _____**

Action: Enter the position number and the ID of the agent you want to substitute at that position. Press [F8] (labeled "Enter Data").

The agent originally assigned to that position is removed.

[F5] **New Agent.** Use this function key to add an agent who is not already listed on the Agent Directory screen. The agent is simultaneously added to a split and to the Agent Directory screen.

Prompt: **NEW AGENT: Last Name: _____**
First: _____ ID: _____ Pos: _ Split #: _

Action:

1 Make entries in these fields as follows:

Last name: up to 12 letters, numbers, or special characters

First: up to 8 letters, numbers, or special characters

ID: up to 5 letters, numbers or special characters

Position: a 2-digit MERLIN II system intercom number (10 - 69)

Split: a number from 1 through 6

Remember, IDs must be unique.

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

[F6] **Change Split ID.** Use this function key to assignor change the ID for a split. Split IDs 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 #: _ New Split ID: _____**

Action:

1 Enter a split number from 1 through 6.

2 Enter a split ID (up to 5 letters, numbers, or special characters).

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

[F7] **Config Screen.** Use this function key to return to the Configuration screen.

[F8] **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] (labeled "Config Splits") on the Agent Directory screen to return to the Configure Splits screen.

Administering Line Group Options

You can administer your CMS to use any, some, or all of the following line group options when handling incoming calls:

- Answer Delay
- Force Delay
- Automatic after-call-work (ACW)

ANSWER DELAY

If an agent is not available when a call first rings, CMS lets the call continue to ring for a certain number of seconds before it answers the call and connects it to the voice announcement unit. The number of seconds calls ring before CMS answers them is called the answer delay. You should use CMS for a few days before you change the answer delay from its initial setting of five 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:

- Someone begins paying for a call as soon as CMS answers it. If calls are likely to wait on hold before an agent is available, increasing the answer delay value will decrease time on hold and the cost of the call.
- You can increase the answer delay if you know callers 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.

To administer Answer Delay, do the following:

1. From the Configuration screen, press [F2] (labeled "Line Groups"), A box appears around the Line Group Options portion of the screen and the Line Group Options function keys are displayed.
2. Press [F1] (labeled "Answer Delay") and the editing function keys appear with this prompt: **ANSWER DELAY: Group Letter: _ How Many Seconds: —**
3. Enter a group letter (A-D).

4 Enter a number from 0 through 99 for the number of seconds a call is to be delayed for that group.

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

5 Press [F8] (labeled "Enter Data"). The Configuration will reappear and the answer delay for the specified line group will be updated.

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 group will not be transferred to an agent until callers have heard the entire message, even if an agent is free. If it is off, they will be transferred to an agent as soon as one becomes available. If answer delay is set to zero and force delay is on, all incoming calls will connect directly to the voice announcement. This means that calls may be waiting to hear the delay message even when agents are available.

To administer Force Delay, do the following:

1 From the Configuration screen, press [F2] (labeled "Line Groups"). A box appears around the Line Group Options portion of the screen and the Line Group Options function keys are displayed.

2 Press [F2] (labeled "Force Delay") and the Force Delay editing keys appear with this prompt: **FORCE DELAY: Group Letter:** _

3 Type in the group letter for the line group you want to administer.

4 Press [F8] (labeled "Enter Data"). The setting will toggle automatically to *on* or *off*, depending on the setting before you made the change. (The initial setting is *off.)*

AUTOMATIC AFTER-CALL-WORK (ACW)

This feature provides hands-free operation and allows an agent to use an automatic answer headset adapter. After an agent completes a call, the automatic after-call-work option automatically puts that agent into the ACW state for an administered period of time. When that time has elapsed, Auto ACW automatically makes an agent available to receive calls.

The agent remains in the ACW state for the number of seconds administered for that line group (l-999). During the ACW period, the agent can complete the necessary paper work related to that call and does not have to worry about pressing the ACW or Available buttons on the voice terminal. An agent does not need to wait for the administered time period to pass before being available to receive the next call. An agent can manually override the automatic ACW state by pressing the Available button on the voice terminal.

To administer for Auto ACW, do the following:

1 Press [F2] (labeled "Line Groups") on the Configuration screen which produces a box around the line group options portion of the screen.

2 Press [F3] (labeled "Auto ACW") to display the following prompt near the bottom portion of the screen:

Prompt: **AUTOMATIC ACW: Group Letter : _ Seconds: _**

3 Enter a group letter (A through D) for the group to be administered.

4 Enter the number of seconds (O through 999), for the number of seconds agents are to be in the ACW state.

NOTE: "0" means the Auto ACW feature is not in effect.

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

Administering Call Flow

The activities in administering call flow do the following:

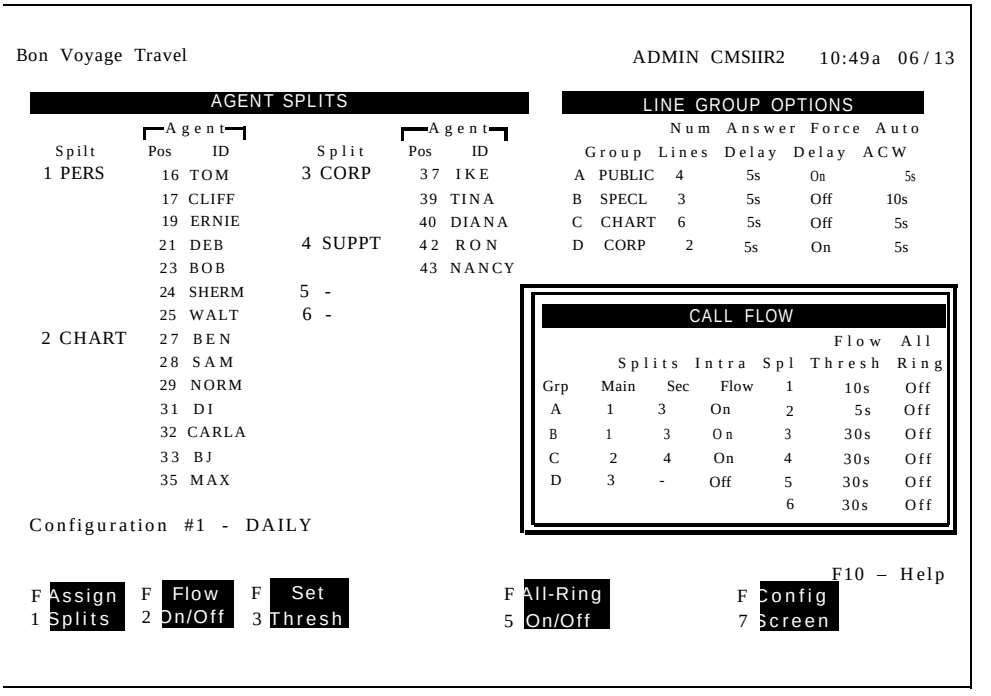
- Assign a main split and an optional secondary split for each line group
- Turn intraflow on or off
- Set an intraflow threshold for each split
- Designate splits for AlI-Ring operation (optional)

A *main split* has primary responsibility for answering calls for a line group (or groups). A *secondary spit* covers calls to a line group only if no agent in the main split is available. *lntraflow* is the process of transferring waiting calls from a main split to an available agent in the secondary split.

The *intraflow threshold* is the number of seconds a call in a main split 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. If calls already in the secondary split have exceeded the intraflow threshold, however, the secondary split will not accept intraflowed calls until the calls waiting have been answered. For a detailed description of how and when calls are intraflowed, see "How Intraflow Works" in this section of the manual. Consider these points when establishing your intrafiow threshold(s):

- How long do you want your customers to wait for an agent in the main split if there are agents available in your secondary split? Remember, 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 Configure Call Flow screen shown below. All-Ring operation can also be administered from this 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 becomes available at any step, CMS immediately transfers the canto that agent.

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.

3 The call is put on hold (or connected to Music-on-Hold) and is added to the waiting calls in the main split.

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

- The call is the oldest call eligible for intraflow into 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 waiting call in the secondary split 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 remains waiting in the main split. 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).

> **HINT:** If your only consideration in building a shift configuration is to have every call answered as quickly as possible by any available agent, you can assign all of your agents to one split and make that split the main split for all of your line groups.
>
> You cannot have more than 28 agents in a split, If you assign all 28 to one split, there will be no agents in other splits to receive intraflow calls. Therefore, there are no secondary splits and you would not need to administer for intraflow in that shift configuration.

ADMINISTER CALL FLOW OR ALL-RING OPERATION

To administer Call Flow or All-Ring, press the key for the task you want to perform:

[F1] **Assign Splits.** Use this function key to assign main splits and secondary splits to line groups. Initially, all splits are unassigned; you choose which split answers calls for each line group. If you do not want to assign a secondary split, leave that field blank. To remove a secondary split already assigned to the line group, type a hyphen in that field.

Prompt: **ASSIGN SPLITS: Line Group Letter: _ Main Split #: _ Secondary Split #: _**

Action:

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

2 Enter the number of the main split (1 through 6) that will answer calls for the line group. (Leaving the field blank leaves it unchanged,)

3 Enter a secondary split number, or enter a hyphen if you do not want to assign a secondary split for intraflow. (Leaving the field blank leaves it unchanged.)

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

[F2] **Flow On/Off.** Use 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 Letter: _**

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 **Off** to **On** or vice versa.

[F3] **Set Thresh.** Use this function key to set the intraflow threshold for each split. This threshold is based on the number of seconds the oldest call has been waiting in a split. The initial setting is 30 seconds.

Prompt: **SET INTRAFLOW THRESHOLD: Split #: _ Threshold (seconds): _____**

Action:

1 Enter a split number (1 through 6).

2 Enter the number of seconds from O through 999.

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

[F5] **AlI-Ring On/Off.** All-Ring operation is useful for splits in which agents are not always near their voice terminals. Each call rings at all the agents' voice terminals, and an available agent closest to a voice terminal can answer the call. (In normal CMS operation, a call rings at only one agent's voice terminal.)

All-Ring operation is dependent on both your CMS configuration *and* your MERLIN II system administration. To make an All-Ring split, you must assign a "ghost" agent as the only member of the split. Your MERLIN II system administrator must give you an unused intercom (position) number for your "ghost" agent.

Your "real" agents must have Cover buttons on their voice terminals that correspond to (cover) the "ghost agent's" intercom number.

The real agents do not need to be assigned to a split. If you *do* assign them to a split, they *cannot* be in the same split as the "ghost" agent. Consult your CMS Agent Splits Planning Form to see which of your splits, if any, should be All-Ring.

> **NOTE:** For more information on setting up an All-Ring split, see the discussion of this topic in "Agent Splits" under the general heading "Planning Your Call Management System" in the *MERLIN Communications System Planning Guide for the Call Management System.* For more detailed information on how "real" agents use a Cover button to pick up calls to a "ghost" agent in an All-Ring split, see "All-Ring Operation" and "Answering Calls in All-Ring Operation" in Section 6, "Handling CMS Calls," in this manual.

Use [F5] (labeled "All-Ring On/Off") to change a split from All-Ring operation to normal automatic call distributor (ACD) operation, or vice versa. In the All-Ring column of the Call Flow area of the screen, *On* indicates that a split has All-Ring operation, and *Off* indicates normal ACD operation.

Prompt: **CHANGE ALL-RING OPERATION: Split #: _**

Action: Enter a split number (1 through 6) and press [F8] (labeled "Enter Data").

NOTE: If you turn on All-Ring operation for a split, you must assign a "ghost" agent as the only member of the split. If you change a split from All-Ring operation to normal operation, remove the "ghost" agent and add the real agents to the split.

[F7] **Config Screen.** Use this function key to return to the Configuration screen after you have finished administering call flow.

Clearing a Configuration

Pressing [F5] (labeled "Clear Config") on the Configuration screen "clears" the contents of a shift configuration. (The contents of the shift configuration are not deleted, just emptied so that a "clean" configuration exists.) You might want to do this if you have made several configuration mistakes and want to begin again instead of making changes.

Prompt: **CLEAR CONFIG: Are you sure? (Y/N): _**

Action: Type *y* or *n* and press [F8] (labeled "Enter Data"). If you delete the contents of the configuration, the Configuration screen returns to its default information.

If you accidentally clear a configuration, you can restore it by pressing [F7] (labeled "Config List"), which selects the Stored Shift Configurations screen. On this screen, press [F1] (labeled "Select Config"). A prompt asks if you want to save your previous editing changes (which include clearing the configuration). If you type *n* , the cleared configuration will be restored.

Returning to Other Screens

You can select two other screens from the Configuration screen. If you have just created or edited a configuration, the word **(changed)** appears next to the configuration name on the screen. You may want to go to the Stored Shift Configurations screen to save your new configuration or the old one you have edited. Pressing [F7] (labeled "Config List") selects the Stored Shift Configurations screen, from which you can:

- Edit a configuration
- Save your editing changes (or save a new configuration you've just built)
- Rename a configuration
- Select a startup configuration

Pressing [F8] (labeled "Admin Menu") selects the administration menu. It lists the main CMS administration activities.

Saving an Edited (Changed) Configuration

When you build a new shift configuration or make changes in an existing one, the word **(changed)** appears on the configuration list to the left of that 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 (shift 1 in our example) and replace the original with the updated copy. If you want to keep the original shift 1 configuration as well as the edited copy, store the copy in an unused configuration number.

Pressing [F2] (labeled "Save Config") on the Stored Shift Configurations screen selects this activity. The word **(changed)** appears next to the configuration you last edited.

Prompt: **SAVE CONFIGURATION: Into 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 and press [F8] (labeled "Enter Data") to save the edited configuration under a different configuration number.

2 A second prompt appears:

SAVE CONFIGURATION: Replace Contents of Config X NAME? (Y/N):_

The number and name of the configuration you edited appear in this prompt. Type *y* to confirm your request or *n* to deny it. Press [F8] (labeled "Enter Data").

Renaming a Shift Configuration

To name or rename a configuration, press [F3] (labeled "Rename Config") on the Stored Shift Configurations screen. Configuration names can contain as many as 10 letters, numbers, or special characters. Spaces are not allowed, so you may want to use underscores instead.

Prompt: **RENAME CONFIGURATION: Config #: _ New Name: _**

Action:

1 Enter the configuration number (1 through 6)

2 Enter the new name (up to 10 letters, numbers, or special characters).

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 startup procedure. Don't select a startup configuration, however, if you want to choose a configuration each time you begin managing calls,

Press [F4] (labeled "Choose Startup") on the Stored Shift Configurations screen to choose this activity.

Prompt: **CHOOSE STARTUP CONFIGURATION: (Enter '-' for none) Config #: _**

Action:

1 Enter the number of the configuration you want to use as the startup configuration, or enter a hyphen if you do not want a startup configuration.

2 Press [F8] (labeled "Enter Data"). The words (startup default) appear next to the configuration you selected.

Assigning Agent IDs

The first step in administering agents is creating a "master list" of agents on the Agent Directory screen. Later on, you assign these agents to splits (teams of agents) that answer calls that come in on lines assigned to line groups.

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

Pressing [F2] (labeled "Agent Directry") from the Administration Menu screen selects the Agent Directory screen, shown below. It lists all CMS agents alphabetical] y by last name. Use this screen to add agents, remove agents, or edit agent information.

```
Bon Voyage Travel                                  ADMIN CMSI IR2  10:54a 06/13

                              AGENT DIRECTORY

  Last Name     First     ID          Last Name     First     ID
  Anders        Harry     HARRY       Middon        Beth      BETH
  Bakerson      Tom       TOM         0'Rourke      Walter    WALT
  Chanleys      Diane     DI          Pantilly      Ernie     ERNIE
  Chapman       Charlie   CHUCK       Patrick       Bob       BOB
  Claren        Clifford  CLIFF       Peters        Norman    NORM
  Clover        Ward      WARD        Piers         Benjamin  BEN
  Easttree      Clive     CLINT       Price         Sherman   SHERM
  Fielding      Sally     SALLY       Reynolds      Nancy     NANCY
  Fielding      William   BILL        Rice          Ronald    RON
  Hall          Benny     BENNY       Rice          Diana     DIANA
  Honelly       BillyJoe  BJ          Turner        Carla     CARLA
  Kiley         Gene      GENE        Turton        Ike       IKE
  Kloner        Maxwell   MAX         Turton        Tina      TINA
  Mailer        Sam       SAM         Weiss         Debra     DEB

                                                              F10 - Help
F1 Add Agent   F2 Remove Agent   F3 Change Agt Info   F7 Config Splits   F8 Admin Menu
```

USING THE AGENT DIRECTORY SCREEN

To use the Agent Directory screen:

- Press the function key for the activity you want to perform.
- Perform the activity using the instructions on the following pages.
- Press [F8] (labeled "Admin Menu") to return to the Administration Menu when you are finished.

[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, give that agent a different ID for each split. Then use the appropriate ID when you add the agent to a configuration. The different IDs permit separate tracking of the agent's statistics in each split. For example, Tom works in split 1 sometimes and in split 4 other times. Tom's supervisor added him to the directory once with the ID TOM1 and again as T0M4.

Prompt: **Add AGENT: Last Name: _____**
First: _____ ID: _____

Action: **1** Make entries in these fields as follows:

Last name: up to 12 letters, numbers, or special characters such as * o r #

First: up to 8 letters, numbers, or special characters

ID: up to 5 letters, numbers, or special characters

Remember, each ID must be unique. The IDs appear on the screen in uppercase letters, even if you enter lowercase ones.

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

[F2] **Remove Agent.** Use this function key to delete an agent from the Agent Directory. To help you avoid removing an agent by accident, CMS prompts you to confirm your request.

If you have been managing calls and recording historical data for an agent, removing the agent may delete the agent's historical data. If you have any historical reports that have not yet been printed, print them *before* you remove the agent. Otherwise, you may lose the data for that agent. 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 When the confirmation prompt appears, type *y* to confirm your request or *n* to deny it.

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

[F3] **Change Agt Info.** Use this function key to change an agent's last name or first name. (To change an agent's ID, remove the agent and then add the agent with a different ID.)

Prompt: **CHANGE AGENT INFO: ID: _____**
Last Name: _____ First: _____

Action: **1** Enter an agent ID.

2 Move to the field(s) you want to change. Leaving either name field blank means that information won't be changed in the Agent Directory.

3 When you finish editing, press [F8] (labeled "Enter Data").

[F5] **Next/Prev Page.** If the Agent Directory contains more than 30 agents, [F5] is labeled "Next Page". Pressing this key allows you to look at the second page of agent information. When the second page of agent information is being displayed, [F5] is labeled "Previous Page", and pressing it accesses the first page of the Agent Directory. This key appears only if there are two pages (more than 30 agents) in the Agent Directory.

[F7] **Config Splits.** Press this function key to select the Configure Splits screen. This function key only works if you have already selected a particular configuration to build or edit.

[F8] **Admin Menu.** Press this function key to return to the Administration Menu screen.

Administering Lines and Line Groups

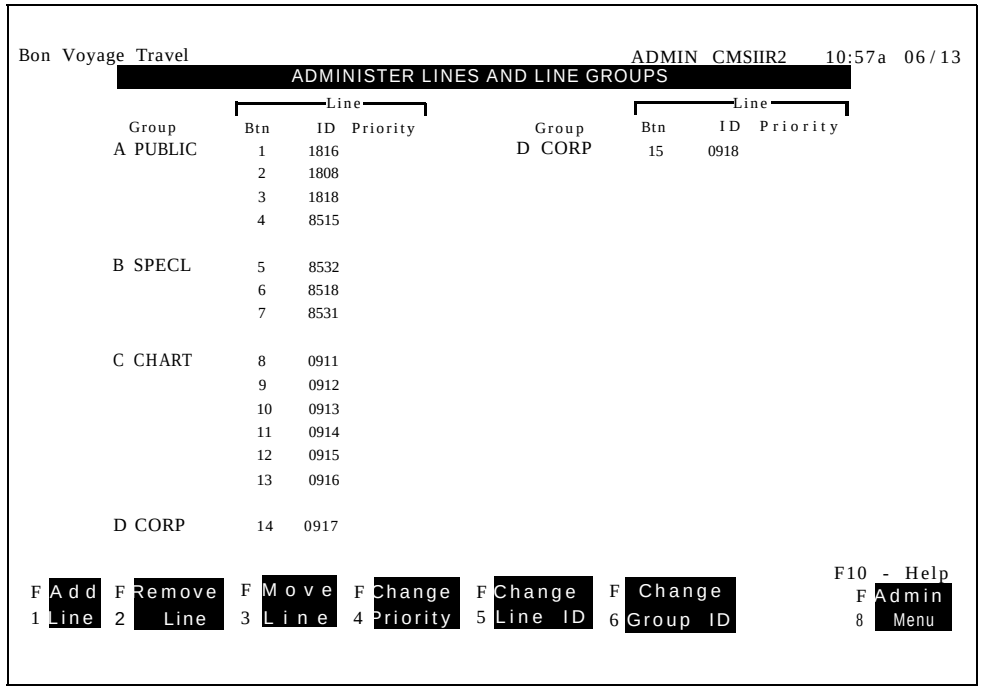
Your CMS supports up to 28 telephone lines. You can arrange your lines in up to four line groups. If you want, you can assign all your lines to a single line group. YOU should have determined the following information when you filled out the Line Groups Planning Form in the *MERLIN II Communications System Planning Guide for the Call Management System:*

- How many departments or predefine groups of agents will need CMS lines.
  - The number of line groups you need depends, in part, on the number of departments or groups of agents requiring CMS lines.
  - All lines whose telephone numbers are published for a particular department or product, or that are part of a hunt group, should belong to the same line group.
- How you want summary statistics organized.
  - If you want to keep statistics for certain lines together, assign those lines to their own line groups. For example, if the Sales Department handles four local lines and two WATS lines, you may want to place the local lines in one group and the WATS line in another in order to get separate summary reports on each type of line.

You should have also determined which lines should have priority status. If you have lines that should be answered before other lines in a line group, such as 800 numbers that you pay for or a line for special customers, you can assign priority status to those lines. Remember, though, that true priority decreases in proportion to the number of lines to which you assign it.

Pressing [F3] (labeled "Lines/Groups") on the Administration Menu screen selects the Administer Lines and Line Groups screen. Use the following screen to do any of the following:

- Identify the MERLIN II system lines that are part of CMS.
- Identify priority lines (lines that are answered first).
- Assign lines to line groups.
- Change line IDs.
- Assign or change line group IDs.



ADMINISTER LINES AND GROUPS

To administer lines and groups, do as follows:

- Keep your CMS Planning forms and your MERLIN II System Configuration Form handy. They list your voice terminal button numbers, CMS line numbers, and line groups.
- Press the function key for the activity you want to perform. If you are administering line groups for the first time, you should first add lines, then assign line group IDs (with [F6], labeled "Change Group ID"), then possibly designate certain lines as priority lines (with [F4], labeled "Change Priority").
- Perform the activity using the instructions on the following pages.
- Press [F8] (labeled "Admin Menu") to return to the Administration Menu.

> **NOTE:** When you add, move, or remove a line, you may cause inaccuracies in the historical data for that line. So if you have been managing calls with CMS and decide to add, move, or remove lines, print any outstanding historical reports *before* you make changes to the Administer Lines and Line Groups screen. If you archive the data, be sure to copy the old system tables, too. For more information, see Section 8, "Archiving Data."

[F1] **Add Line.** Use this function key to add a line to CMS and assign it to a line group.

> **IMPORTANT:** Before adding a line to CMS, you *must first* assign the line to the PC. For information on how to do this, see "Assign Lines to the CMS PC" in the *MERLIN II Communications System Getting Started Guide for the Call Management System.*
>
> This procedure also affects the CU1 and CU2 port assignments to the CMS PC. Have the MERLIN II system administrator check that both CU1 and CU2 attendant port assignments are exactly the same and assigned in the same order.

Prompt: **ADD LINE: Button #: _ Line ID: _____ Group Letter: _**

Action:

1 Enter the button number you want to assign to the line. It must be a number from 1 to 32 that is not already assigned to another CMS line.

2 In the Line ID field, enter the last four digits of the telephone number or some other identifier (up to 5 letters or numbers) such as WATS1 or WATS2.

3 Enter. the letter (A through D) for the line group to which you are assigning a line.

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

[F2] **Remove Line.** Use this function key to remove a line from CMS. To help you avoid removing a line by accident, CMS prompts you to confirm your request.

> **NOTE:** When removing lines from the CMS PC, make sure you update your CMS Line Button Planning Form and your MERLIN II System Configuration Form, so you know which line buttons are available for future use.

Prompt: **REMOVE LINE: Line ID: _____**

Action:

1 Enter a line ID and press [F8] (labeled "Enter Data").

2 When the confirmation prompt appears, type *y* to confirm your request or *n* to deny it, and press [F8] (labeled "Enter Data").

[F3] **Move Line.** Use this key to shift a line from one line group to another.

Prompt: **MOVE LINE: Line ID: _____ New Group Letter:_**

Action:

1 Enter a line ID.

2 Enter a line group letter.

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

[F4] **Change Priority.** Use this function key to assign priority to a line or to change a priority line to a nonpriority line. The priority of a line determines its position among the calls waiting to be answered by an agent. Priority lines are answered first and are indicated by a "+" in the Priority column of the Administer Lines and Line Groups screen.

Prompt: **CHANGE PRIORITY: Line ID: _____**

Action: Enter a line ID and press [F8] (labeled "Enter Data").

[F5] **Change Line ID.** Use this function key to rename a line.

Prompt: **CHANGE LINE ID: Old Line ID: _____ New Line ID: _____**

Action:
1 In the first field, enter the line ID you want to change.
2 Type a new line ID (up to 5 letters or numbers).
3 Press [F8] (labeled "Enter Data").

[F6] **Change Group ID.** Use this function key to assign or change the ID for a line group. The 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: **CHANGE GROUP ID: Group Letter: _ New Group ID: _____**

Action:
1 Enter a line group letter (A through D).
2 Enter a line ID (up to 5 letters or numbers).
3 Press [F8] (labeled "Enter Data").

[F8] **Admin Menu.** Press this function key to return to the Administration Menu screen.

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

- Service Level Limit
- Abandoned Call Threshold
- Adible Alarm
- Delay Message Length
- Business Name

> **NOTE:** You may want to enter new values for the delay message length and the business name right away.

SERVICE LEVEL LIMIT

The *service level* is a measure of how quickly your customers' calls are answered. 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, 20 seconds equals about four rings.

The service level is displayed on the System Status screen and is continually updated while CMS is managing calls. If the service level drops below an acceptable level, it may indicate the need to activate intraflow or to add more agents to a split.

The service level limit you choose depends on your particular business. The service level limit is measured from the time a call first rings until the call is connected to an agent. This can include answer delay time (if any), time connected to the voice announcement unit (if any), and time on hold (if any). You need to decide how quickly you want the majority of your calls answered.

ABANDONED CALL THRESHOLD

One 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 purpose of the abandoned versus incoming call threshold is to discriminate between those abandoned calls that are connected to agents and calls that are actually 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 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 each customer, then you can assume that most calls that took less than 15 seconds were probably abandoned calls. However, if your agents often receive calls that take only a few seconds to handle, you will

want to set a low abandoned call threshold, and know that the possibility of mistaking an abandoned call for a "real" call, or vice versa will increase. The initial value for the abandoned call threshold is 10 seconds.

AUDIBLE ALARM

You can have your PC beep every time an exception message, a system message, or an error message appears. An exception occurs when a service or performance threshold you set has been exceeded. Turning on the alarm is helpful since it will alert you to potential problems, should you not be looking at your PC screen. Initially, the alarm is on.

DELAY MESSAGE LENGTH

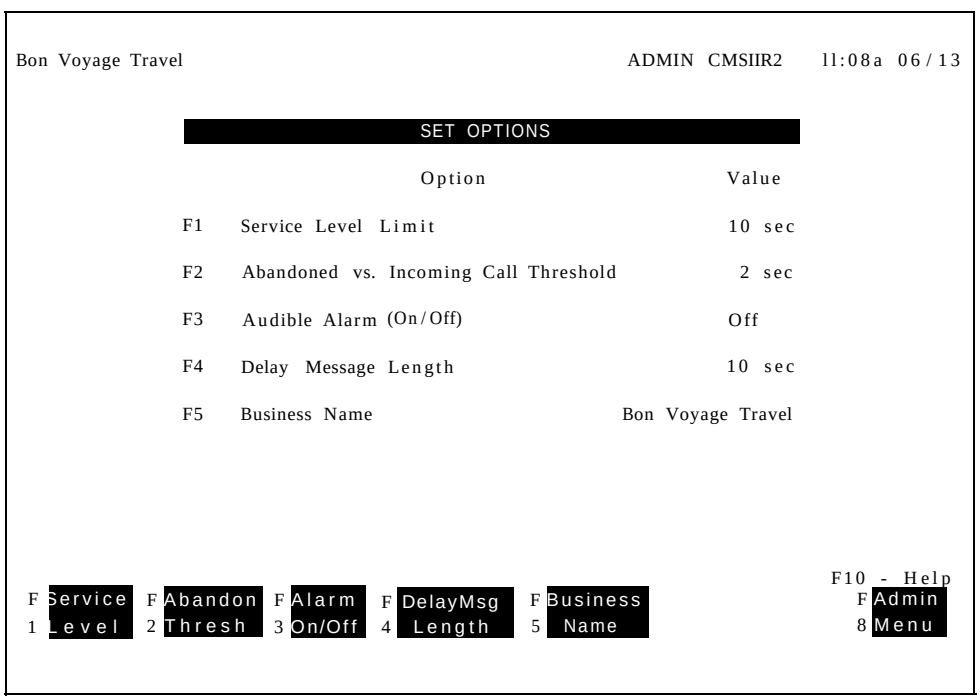
You can set the delay message length so that CMS can check for errors in the delay message unit. The message length must be properly set for your call traffic because of its effect on the number of calls CMS cart manage within a given period of time. For this reason you will want to keep the message as short as possible.

When the message starts playing to a caller, a timer is started. If the message has not ended within five seconds of the delay message length you specify on the options screen, the following warning message appears on your screen:

WARNING - Message Unit Problem. Check Message Length.

The initial value of the message length option is 10 seconds.

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



zET OPTIONS

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

[F1] **Service Level.** The service level is the percentage of calls connected to agents within a specified number of seconds (the service level limit).

Prompt: **SERVICE LEVEL: Percent of Calls Answered within n seconds. n: _**

Action: **1** Enter a number 1 through 999.

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

[F2] **Abandon Thresh.** Sometimes a call is transferred to an agent even though the caller has disconnected (abandoned the call). This threshold sets the limit for the shortest amount of time that a call must be handled in order for it to be counted as processed call. Calls that do not last as long as the time specified are counted as abandoned, assuming the caller disconnected before the call reached the agent.

Prompt: **ABANDON THRESHOLD: Seconds: _**

Action: **1** Enter a number 1 through 99.

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

[F3] **Alarm On/Off.** You can choose to have your PC beep every time an exception message, system message, or error message appears. Press [F3] (labeled "Alarm On/Off") to change the setting that appears in the Audible Alarm field on your screen. In this field, **On** means the PC beeps, and **Off** means the PC doesn't beep. Initially, the alarm is on.

[F4] **DelayMsg Length.** Each time you record a new delay message, you should time the message and enter the number of seconds in this field.

Prompt: **SET DELAY MESSAGE LENGTH: Seconds:_**

Action: **1** Enter a number 1 through 99.

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

[F5] **Business Name.** You can enter the name of your business (up to 20 characters) in this field and it will appear on all CMS screens and reports. You can use both upper and lower case letters. The system does not, however, accept the space character. Use the underscore character ("_") to designate a space.

Prompt: **ENTER BUSINESS NAME_____**

Action: **1** Enter a business name, maximum of 20 characters.

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

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

When you turn on an exception, you receive an exception message on your PC screen whenever a threshold for that exception has been reached or exceeded. 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. If you want your PC to beep when an exception occurs, turn on the audible alarm option described in "Setting Captions."

External lamps can also be used as alerts to visually notify agents when an exception is occurring.

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 that there are 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 after-call-work state may be the most important exceptions to monitor.

Instructions for Selecting Exceptions

Pressing [F6] (labeled "Select Exceptns") on the Administration Menu screen selects the Administer Exceptions screen shown below.

```
Bon Voyage Travel                                ADMIN CMSI IR2   11:12a   06/13
                          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         Off     -      -      -      -      -      -
Agent Logout ACW >= xxx min        Off     -      -      -      -      -      -
Refused Call                       Off
      SPLITS
# Abandon Calls >= xx              Off     -      -      -      -      -      -
# Calls Waiting >= xx              Off     3/1    -/-    -/-    -/-    -/-    -/-
Oldest Call Wait >= xxx sec        Off     10s/2  -/-    -/-    -/-    -/-    -/-
Avg Speed Answer >= xxx sec        Off     12s/3  -/-    -/-    -/-    -/-    -/-
      LINE GROUPS
All Lines Busy >= xxx sec          Off     5s/4   -/-    -/-    -/-
Line Hold Time >= xx min           Off     -      -      -      -
Line Hold Time <= xx sec           Off     -      -      -      -

      ALERTS
Alert Line Button Numbers                  1: 29  2: 30  3: 31  4: 32

                                                                  F10 - Help
F1 Agent Exceptions   F2 Split Exceptions   F3 Group Exceptions   F4 Assign Alert   F8 Admin Menu
```

Use this screen to turn exceptions on or off and set exception thresholds for each split or line group. From this screen you may assign line button numbers to external wall-mountable lamps to be used as external alerts. The external alerts can be associated with those exceptions that are displayed with the dividing slash (-/-). When assigned, the external alert lamp will light when the corresponding exception occurs.

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 and assigning external alerts to them are listed below. After you familiarize yourself with the procedures, turn to the descriptions of the type of exceptions you want to administer.

ADMINISTER EXCEPTIONS

To administer exceptions, do as follows:

1 Press the function key for the type of exceptions you want to administer—agents, splits, or groups.

A box appears around the corresponding area of the Exception Settings screen, and the 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 some splits or groups, but not all of them.
- To delete a threshold value, type a hyphen (-) over the value you want to erase.
- 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.
- Skip over fields that you don't want to change.

5 Assign an alert number for an external alert at this point, if desired.

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

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

8 Press [F8] (labeled "Admin Exceptns") to return to the Administer Exceptions screen when you finish administering exceptions.

Assigning External Alerts to Exceptions

External alerts are small incandescent lamps that are designed to be mounted on a wall in full view of the CMS supervisor and, possibly, the agents. They provide a visual alert by lighting up whenever an exception to which they are assigned is occurring.

These alerts, like most other equipment compatible with the MERLIN II system, must be installed, connected to the appropriate ports in the MERLIN II system, and administered.

External alerts are connected to line jacks on the MERLIN II System control unit either directly or through building wiring. CMS will support up to four external wall-mountable visual alerts connected to one control unit. Each alert must be clearly marked as to whether it is alert number 1, 2, 3, or 4.

During *MERLIN II system administration,* the alerts must be assigned to lines that *are not* assigned to CMS. During *CMS Administration,* the alerts must be assigned to the line button numbers that correspond to the outside lines to which the alerts are connected.

> **IMPORTANT:** The line ports for the external alerts must first be assigned during MERLIN II System administration at intercom 10 by the MERLIN II system Display Console. The line button numbers for the external alerts must correspond to those line ports and the alerts must be connected to those line ports.
>
> If a line port is not properly associated with the alert you assign during CMS administration, the alert will not light up when an exception threshold has been met or exceeded.

External exception alerts provide a signal that alerts you to unusual or undesirable situations affecting splits or line groups. For instance, the All Lines Busy exception notifies you when all lines in a line group have been busy more than a certain number of seconds. An alert may be triggered for any or all of the following exceptions:

- Number of Calls Waiting
- Oldest Call Waiting
- Average Speed of Answer
- All Lines Busy

An alert can be assigned to one or more splits or groups for one or more of these exceptions. If a single external alert is assigned to more than one exception, the alert will be activated as long as at least one exception is triggered.

Pressing [F4] (labeled "Assign Alert") from the Exception Settings screen selects the Exception Alerts prompt shown below.

```
Bon Voyage Travel                                ADMIN CMSIIRZ    11:29a   06/13
                          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         Off      -       -       -       -       -     -
Agent Logout ACW >= xxx min        Off      -       -       -       -       -     -
Refused Call                       Off
      SPLITS
# Abandon Calls >= xx              Off      -       -       -       -       -     -
# Calls Waiting >= xx              Off      3/1     -/-     -/-     -/-     -/-   -/-
Oldest Call Wait >= xxx sec        Off      10s/2   -/-     -/-     -/-     -/-   -/-
Avg Speed Answer >= xxx sec        Off      10s/3   -/-     -/-     -/-     -/-   -/-
      LINE GROUPS
All Lines Busy >= xxx sec          Off      5s/4    -/-     -/-     -/-
Line Hold Time >= xx min           Off      -       -       -       -
Line Hold Time <= xx sec           Off      -       -       -       -

      ALERTS
Alert Line Button Numbers                   1: 29   2: 30   3: 31   4: 32

ALERT LINE BUTTON NUMBER: 1: 29 2: 30 3: 31 4: 32
F1 Cancel Prompt   F5 Previous Field   F6 Next Field   F8 Enter Data
```

Notice the "Alert Line Button Number" prompt near the bottom of the Exceptions Setting screen. In this example, the first alert number field has been assigned to line button number 29. Whether an alert is assigned to one or more exceptions or to one or more lines or splits, an alert must be assigned to a line button in order to function.

CONDITIONS FOR ASSIGNING ALERTS

Generally, assigning alerts to line button numbers is the first step in administering alerts. An exception may have an alert assigned only under the following conditions:

- A line button number must be assigned to the alert number being used and it can only be assigned through CMS Administration (CMS is not managing calls).
- The external alert itself must be assigned to a line button number before it can be assigned to an exception.
- The alert number can be assigned to an exception while CMS is managing calls. However, the actual external alert cannot be assigned a line number while CMS is managing calls; that can only be done during administration.
- The appropriate exception setting parameters to which the alert(s) will be assigned has been entered in the "SPLITS" and "LINE GROUPS" screen fields.
- The exception threshold is set.

If you need more information on administering exceptions, see "Administer Exceptions" under the heading, "Instructions for Selecting Exceptions," earlier in this section.

ASSIGNING EXTERNAL ALERTS TO LINE BUTTONS

To assign an external alert to an exception, follow these steps:

1 Press either [F5] (labeled "Previous Field") or [F6] (labeled "Next Field") to select the alert number field (1, 2, 3, or 4) to which you are assigning a line button number.

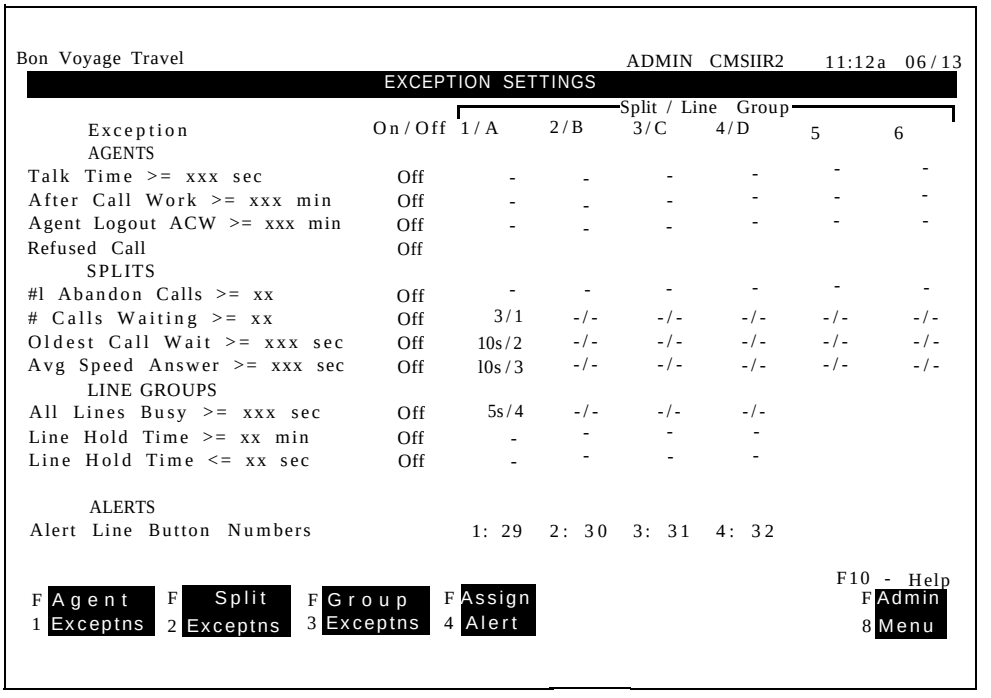
2 Enter the line number (1 through 32) in the appropriate alert number field.

You can enter a line number in each of the four alert number fields or enter a hyphen in any field that will not be used.

NOTE: Alerts cannot be marked unused if the alert has been assigned to an exception.

3 When you are finished assigning line button numbers (or entering hyphens), press [F8] (labeled "Enter Data") to enter the data.

The alert number to which the exception line button number has been assigned is automatically posted in the appropriate fields when the Exceptions Settings screens are displayed. The following screen shows line button number 29 posted for the first alert number and the first alert number posted in the appropriate "SPLITS" field.



NOTE: You must be sure that the alert is physically connected at the specified line port. No message can tell you that the alert is or isnot actually connected to the MERLIN II system control unit.

Changing or Removing Line Button Assignments

You shouldn't remove a line button assignment unless you are sure of the following:

- The alert is not assigned to an exception,
- The alert number field shouldn't have a number assigned and instead should have a hyphen.

To remove a line button number from an alert, do as follows:

1 Press either [F5] (labeled “Previous Field”) or [F6] (labeled “Next Field”) to select the alert number field (1, 2, 3, or 4) from which you are removing a line button number.

2 Enter a hyphen in the appropriate alert number field.

3 When you are finished, press [F8] (labeled “Enter Data”) to enter the data.

Changing a line button number assignment requires all the care you would undertake when initially assigning one—you must be sure that the all the conditions for assigning alerts have been met (see “Conditions for Assigning Alerts,” above). To change an alert line button number, do as follows:

1 Press either [F5] (labeled “Previous Field”) or [F6] (labeled “Next Field”) to select the alert number field (1, 2, 3, or 4) to which you are assigning a new line button number.

2 Enter the line number in the appropriate alert number field (1 through 32).

You can simply type over the previous line number.

3 When you are finished changing line button numbers, press [F8] (labeled "Enter Data") to enter the data.

ASSIGNING EXCEPTIONS AND EXTERNAL ALERTS SIMULTANEOUSLY

simultaneously" You can assign some of the exception thresholds at the same time you assign external alerts to the exceptions. The prompts for Calls Waiting, Oldest Call, Avg Speed Ans, and All Lines Busy provide two fields, separated by a "/" character, for each split or line group. For example:

OLDEST CALL: ON/OFF? _____ (s/a) 1: _/_ 2; _/_ 3; _/_ 4: _/_ 5: _/_ 6: _/_

To enter threshold values and assign alerts at the same time, proceed as follows :

1 For the first portion of the prompt (ON/OFF?), type *ON* or *OFF* to set the threshold on or off.

(Press [F6] to keep the current value).

2 To activate an exception, enter a threshold value into the first field (left of slash) for each split or group-either 1-999 seconds or 1-99 calls, depending on the exception type.

NOTE: If the threshold value is too low, the exception and alert will be triggered each time a call comes in for that split or group.

3 Enter a hyphen into each field where you do not want to activate an exception.

4 To have that exception trigger an external alert, enter into the second field (right of slash) for each split or group an alert number (1 - 4).

NOTE: Alerts cannot be assigned if a threshold for that split or group has not been set. Also, alerts cannot be assigned if a line button has not been assigned to the alert.

5 Enter a hyphen into each field where you are not assigning an external alert.

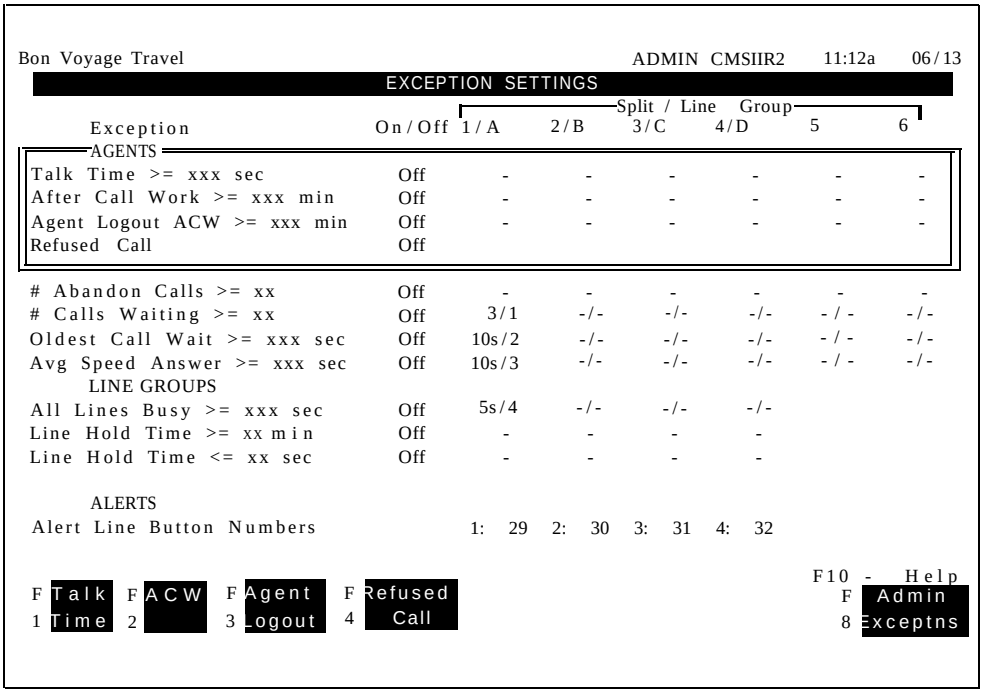
6 After you have entered the desired exception thresholds and their corresponding alert numbers, press [F8] (labeled "Enter Data") to enter the data into the system.

For more information on assigning thresholds and alerts, see the specific agent, split, or line group procedures below.

Selecting Agent Exceptions

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 see where extra training is 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 after-call-work time than others.

Pressing [F1] (labeled "Agent Exceptns") from the Administer 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 logged out, and refused calls.



ADMINISTER AGENT EXCEPTIONS

To administer an agent exception, follow these steps:

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. An example is

* * * **Split X - Agent XXXXX - Talk Time > = XXX sec**

2 Press a function key to administer another agent exception, or press [F8] (labeled "Admin Exceptns") to return to the Administer 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* . Press [F6] (labeled "Next Field") to keep the current value.

2 Enter the number of seconds (1 through 999) for the maximum talk time for each split.

To leave the exception turned off for a split, enter a hyphen.

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

Exception: **Split X - Agent XXXXX - Talk Time > = XXX sec**

[F2] **ACW (After Call Work).** The after-call-work state refers to the 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 as long as or 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* . Press [F6] (labeled "Next Field") to keep the current value.

2 Enter a number of minutes (1 through 999) for each split. To leave the exception turned off for a split, enter a hyphen.

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

Exception: **Split X - Agent XXXXX - After Call Work > = XXX min**

[F3] **Agent Logout.** If you turn on this exception, CMS puts agents in the logged out state when they have remained in ACW state for the specified threshold.

Prompt: **AGENT OUT (minutes): ON/OFF? _____ Split 1: _____ 2: _____ 3: _____ 4: _____ 5: _____ 6: _____**

Action:

1 Type *on* or *off* . Press [F6] (labeled "Next Field") to keep the current value.

2 Enter a number of minutes (1 through 999) for each split. To leave the exception turned off for a split, enter a hyphen.

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

Exception: **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.

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

Action: **1** Type *on* or *off.*

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

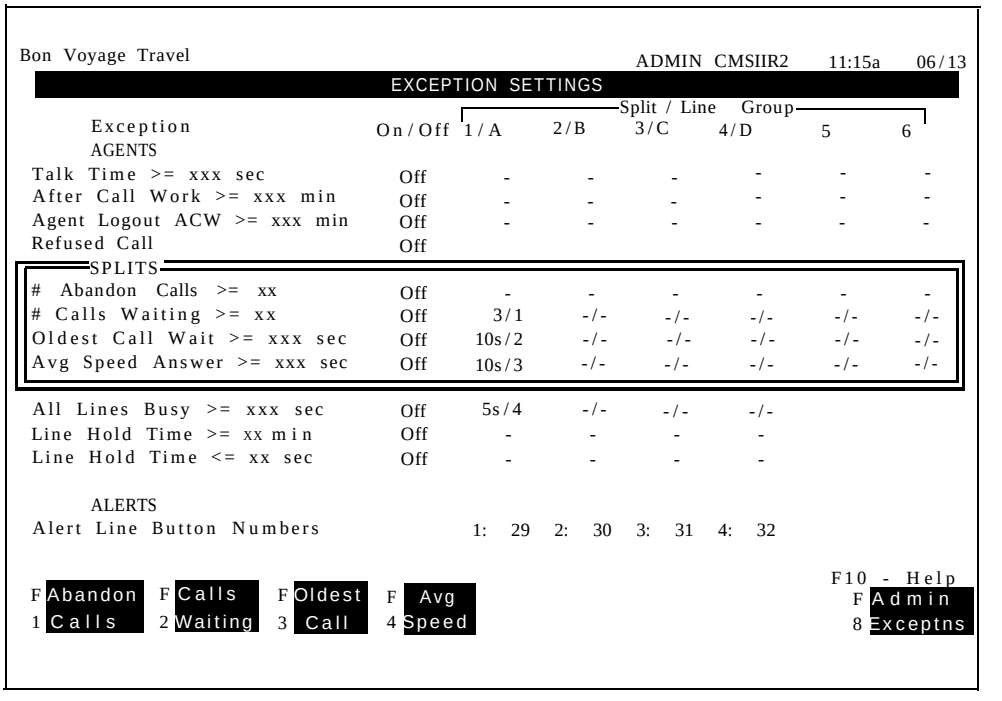
Exception: ***Split X - Agent XXXXX - Refused Call**

[F8] **Admin Exceptions.** Press [F8] (labeled "Admin Exceptns") to return to the Administer 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 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 Exception Settings screen selects the Split Exceptions screen shown below. The box indicates the split exceptions.



ADMINISTER A SPLIT EXCEPTION

To administer a split exception, follow these steps:

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. A typical example is

```
***Split X - # Calls Waiting > = XX
```

If you need more detailed instructions on administering exceptions, see the information in "Administering Exceptions" under the heading, "Instructions for Selecting Exceptions," earlier in this section.

2 Press a function key to administer another split exception or press [F8] (labeled "Admin Exceptns") to return to the Administer Exceptions screen when you are finished.

[F1] **Abandon Calls (Number of Abandoned Calls).** When a caller hangs up before speaking to an agent, 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.

Prompt:
```
# ABANDON CALLS: ON/OFF?_____Split 1:_____2:_____3:_____
4:_____5:_____6:_____
```

Action:

1 Type *on* or *off* to turn this exception on or off. Press [F6] (labeled "Next Field") to keep the current value.

2 If you want to enter threshold values, enter a number 1 through 99 for each split. If you do not want to activate this exception for a particular split, type a hyphen.

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

Exception:
```
***Split X- # Abandoned Calls > = XX
```

[F2] **Calls Waiting (Number of Calls Waiting).** The calls waiting exception refers to the number of calls on hold and waiting to be connected to agents, as well as calls in the main split that are eligible for intraflow to the secondary split. If you turn on this exception, CMS notifies you when the number of calls waiting in a split 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 lines assigned to that split. You can assign an external alert to this exception.

Prompt:
```
# CALLS WAITING: ON/OFF?_____(#/a)1:_/_2:_/_3:_/_4:_/_
5:_/_6:_/_
```

Action:

1 Type *on* or *off* . Press [F6] (labeled "Next Field") to keep the current value.

2 If you want to enter threshold values, enter numbers (before the slash) that are less than or equal to the number of lines assigned to each split (l-99). If you do not want to activate this exception for a particular split, type a hyphen.

3 If you wish to assign an alert to this exception, enter an alert number in the field to the right of the slash. If not, enter a hyphen.

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

Exception: `***Split X - # Calls Waiting > = XX`

[F3] **Oldest Call (Oldest Call Waiting).** The oldest call is the call that has been waiting the longest (to be answered by an agent) in a split. 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. You can assign an external alert to this exception.

Prompt: `OLDEST CALL: ON/OFF?_____(s/a)1:_/_2:_/_3:_/_4:_/_5:_/_6:_/_`

Action:

1 Type *on* or *off* . Press [F6] (labeled "Next Field") to keep the current value.

2 If you want to enter threshold values, enter a number of seconds (1 through 999) for each split. If you do not want to activate this exception for a particular split, type a hyphen.

3 Assign an alert number or enter a hyphen in the field to the right of the slash.

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

Exception: `***Split X - Oldest Call Waiting > = XXX sec`

[F4] **Avg Speed (Average Speed of Answer).** The average speed of answer is the average time it takes from the time a call rings until it is connected to an agent in a given split. This includes the answer delay (the amount of time a call rings before CMS answers it), the time connected to the voice announcement unit, the time on hold, 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. You can assign an external alert to this exception.

Prompt: `AVG SPEED ANS:ON/OFF?_____ (s/a)1:_/_2:_/_3:_/_4:_/_5:_/_6:_/_`

Action:

1 Type *on* or *off* . Press [F6] (labeled "Next Field") to keep the current value.

2 If you want to enter threshold values, enter, to the right of the slash, a number of seconds (1 through 999) for each split. If you do not want to activate this exception for a particular split, type a hyphen.

3 To assign an alert number, enter the number in the field to the left of the slash. If not, enter a hyphen.

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

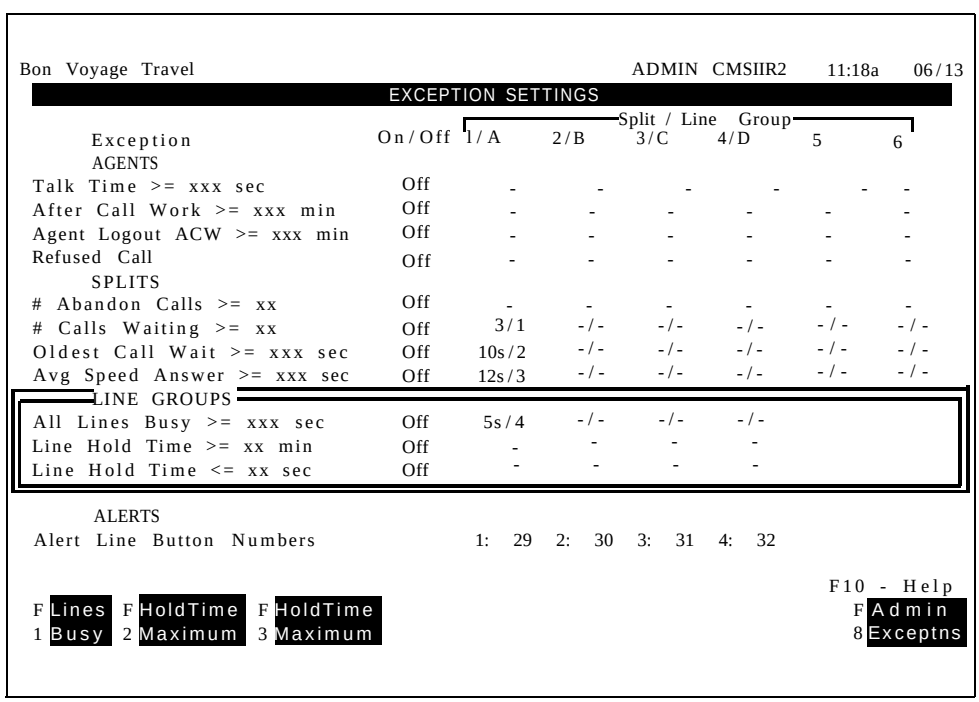
Exception: ***Split X - Avg Speed Answer > = XXX seconds**

[F8] **Admin Exceptions.** Press [F8] (labeled "Admin Exceptns") to return to the Administer 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 have been busy more than a certain number of seconds.

Pressing [F3] (labeled "Group Exceptns") from the Exception Settings screen selects the Line Group Exceptions screen shown below. The box indicates the line group exceptions.



ADMINISTER A LINE GROUP EXCEPTION

To administer a line group exception, follow these steps:

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. A typical example is

```
***Group B - All Lines Busy > = XXX seconds
```

If you need more detailed instructions on administering exceptions, see the information in "Administer Exceptions" under the heading, "Instructions for Selecting Exceptions," earlier in this section.

2 Press a function key to administer another group exception, or press [F8] to return to the Administration Menu.

[F1] **Lines Busy (All Lines Busy).** The all lines busy exception refers to the number of seconds all lines in a line group are busy. If you turn on this exception, CMS notifies you when the length of time all lines are busy meets or exceeds the threshold you set. When all lines in a line group are busy, incoming calls are blocked and callers receive a busy signal.

Prompt: **ALL LINES BUSY: ON/OFF? ____ (s/a) A: _/_ B: _/_ C: _/_ D: _/_**

Action:

1 Type *on* or *off* . Press [F6] (labeled "Next Field") to keep the current value.

2 If you want to enter threshold values, enter a number of seconds (1 through 999) for each group. If you do not want to activate this exception for a particular group, type a hyphen.

3 Assign an alert number or enter a hyphen in the field to the right of the slash.

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

Exception: *****Group X - All Lines Busy > = XXX seconds**

[F2] **HoldTime Maximum (Maximum Line Holding Time).** The line holding time refers to the number of seconds a line has been in use for a single call. If you turn on this exception, the maximum line holding time exception allows you to set an upper limit on the length of time a line is in use. 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 HOLDTIME (minutes): ON/OFF? _____ Line Group A: _____ B: _____ C: _____ D: _____**

Action:

1 Type *on* or *off* . Press [F6] (labeled "Next Field") to keep the current value.

2 If you want to enter threshold values, enter a number of minutes (1 through 99) for each group. If you do not want to activate this exception for a particular group, type a hyphen.

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

Exception: *****Group X - Line XXXXX Hold Time > = XX minutes**

[F3] **Hold Time Minimum (Minimum Line Holding Time).** The line holding time refers to the number of seconds 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 HOLDTIME (seconds): ON/OFF? _____ Line Group A:_____ B:_____ C:_____D:_____**

Action:

1 Type *on* or *off* to turn this exception on or off. Press [F6] (labeled "Next Field") to keep the current value.

2 If you want to enter threshold values, enter a number of seconds (1 through 99) for each group. If you do not want to activate this exception for a particular group, type a hyphen.

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

Exception: *****Group X - Line XXXXX - Hold Time < = XX seconds**

[F8] **Admin Exceptions.** Press [F8] (labeled "Admin Exceptns") to return to the Administer Exceptions screen.

External Alert Checklist

SUMMARY CHECKLIST

The summary below provides a checklist for assigning external alerts to CMS.

1 Line button numbers for the alerts are assigned to line ports on the MERLIN II System control unit by the MERLIN II system administrator.

2 External alerts are mounted on the wall and connected to the line ports either directly or through building wiring.

3 Each alert is clearly marked and identified as Alert #1, Alert #2, Alert #3, and Alert #4.

NOTE: Each external alert has a corresponding line button number. In CMS, each external alert is represented by the number you have assigned to it in this step. In the step 5, the CMS administrator has to match the line button number to its corresponding alert number.

4 From the CMS Administration screen, the CMS administrator presses [F4] (labeled "Assign Alert") to display the Exception Alerts screen with the following prompt:

ALERT LINE BUTTON NUMBER: 1:_ 2:_ 3:_ 4:_

5 The CMS administrator matches the assigned line button numbers (1 through 32) to their corresponding alert numbers (1 through 4), and enters the data.

NOTE: CMS cannot be managing calls at this point.

6 The CMS administrator sets exception thresholds for various groups and splits.

7 The CMS administrator assigns the alert numbers to any of the splits or line groups for which thresholds are set and for which visual alerts are to light Up when the thresholds are met or exceeded.

NOTE: If all external alert wiring and administration procedures are complete, alerts may be assigned to specific exceptions (from the Exception Setting screen) while CMS is managing calls.

Backing Up Shift Configurations

If you routinely make a backup copy of your shift configurations, you will have a current version to use if you need to restore your system after a problem.

You should also copy the system tables at the same time you copy the shift configurations. The system tables contain the agent directory and line assignments CMS needs to interpret the shift configurations.

> **NOTE:** If you plan to archive your historical data, you should copy the system tables each time you make a change in your shift configurations. That way you will have the correct system tables to interpret each day's historical data. Both the shift configurations and system tables will fit on one floppy diskette.

COPY SHIFT CONFIGURATIONS

To make a backup copy of your shift configurations and system tables, follow these steps:

1 Insert the diskette labeled "CMS Duplicate Copy" into disk drive A. Instructions for making a duplicate copy are found in Section 3, "Your 6300 WGS and CMS."

2 At the C> prompt, type the following commands to change to the cmsmgmt directory (a directory within the CMS program) on the hard disk. Press [↵] after each command. (If you just exited to MS-DOS from the CMS program, you will be in the cms directory. Skip the first command below.)

```
C> cd cms
C> cd cmsmgmt
```

3 To get into the cmsmgmt directory on the floppy diskette, type the following commands, Press [↵] After each command.

```
C> a:
A> cd ems
A> cd cmsmgmt
```

4 To copy all your shift configurations from the hard disk onto the floppy diskette, type

```
copy c:shift*.cms a:
```

5 To copy the system tables onto the floppy diskette, type

```
copy c:systbls. cms a:
```

6 Remove the duplicate copy when the red light on disk drive A goes out.

7 Write the current date on a label and attach it to the duplicate.

8 To return to the cms directory on disk drive C, type these commands:

```
A> c:
C> cd. .
```

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 duplicate as follows:

1 Repeat steps 1 through 3 in the previous procedure.

2 To copy all your shift configurations from the duplicate onto the hard disk, type

```
copy a:shift*.cms c:
```

To copy a single shift configuration from the duplicate, type

```
copy a:shiftX. cms c:
```

(Replace X with the number of the shift configuration.)

3 To copy the system tables from the duplicate copy onto the hard disk, type

```
copy a:systbls.cms c:
```

4 Remove the duplicate when the red light on disk drive C goes out.

For more information on restoring CMS after system problems, see Section 9, "Troubleshooting."

Overview

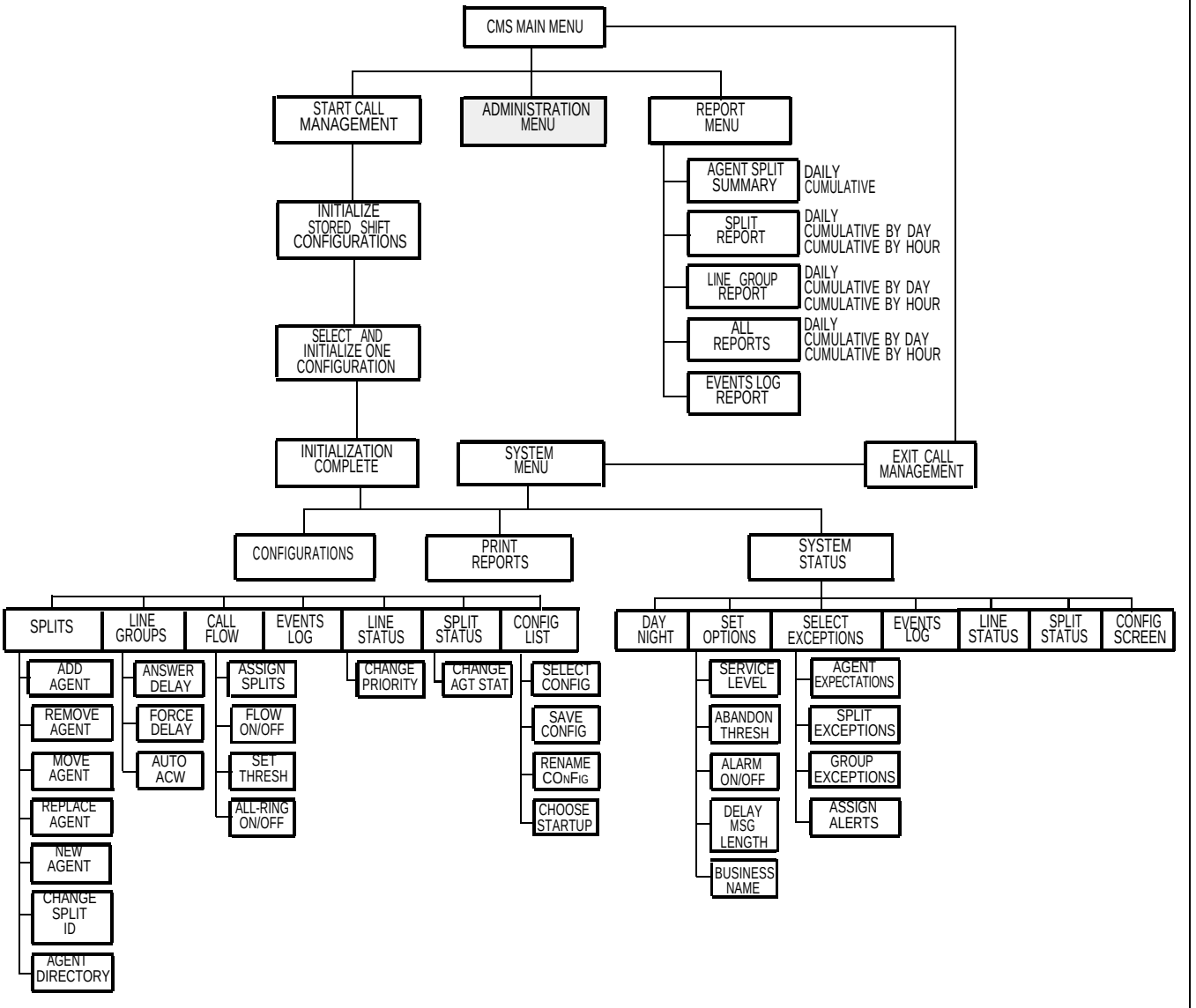
You must complete several initial administration activities before you can manage calls with CMS. These activities, described in Section 4, "Administering CMS," involve identifying your CMS lines and agents and building at least one shift configuration. If you have not completed these activities, refer to Section 4 and return to this section after you build your shift configuration(s).

"Supervising CMS" describes the task of setting up your attendant console and the following activities involved in the day-to-day operation of CMS:

- **The Administrator/Supervisor's Responsibilities.** Lists the primary CMS activities of the administrator or shift supervisor.
- **The Attendant Console.** Describes the three available consoles and what lines and features you should assign to the voice terminal buttons.
- **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 after-call-work state or logged out state.
- **Monitoring Call Management.** Explains the status screens that give you current information on agent and split activity, call traffic, and system problems.
- **Dynamic Reconfiguration.** Describes changing a shift configuration while CMS is managing calls. Typical activities during dynamic reconfiguration are reassigning agents or turning on intraflow. This part also describes saving your dynamic reconfiguration changes, if you want, and selecting a different configuration for call management.
- **Selecting Day or Night Service.** Describes changing CMS from Day Service mode (where a shift configuration is in use and CMS routes calls to agents) to Night Service mode (where CMS answers calls, connects them to a delay message, and disconnects the calls).
- **Day-to-Day Operation of CMS: An Example.** Describes how the administrator at Bon Voyage Travel, a hypothetical business, interacts with 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 shows the screens you use to monitor call management and perform dynamic reconfiguration.

FIGURE 5-1 Map of the screens for call management.



NOTE 1:
Additional Call Management screens and function keys are provided to allow for easy navigation between configuration and system status displays as well as easy access to the Events Log.

NOTE 2:
After initialization is complete and another menu is selected, the system menu screen can be used to select Configurations rewiew system status screens, print reports, and exit call management.

The Administator/Supervisor's Responsibilities

The MERLIN II system administrator is responsible for establishing certain systemwide options and features, such as setting the system for square or pooled lines, assigning the lines that a voice terminal can access, or storing System Speed Dial codes in the MERLIN II system. In many systems the administrator may also be given the responsibilities of the CMS super-visor; in other systems the two roles will be assigned to different people. If the latter is the case, the MERLIN II system administrator and the CMS supervisor must work closely together in defining the needs of both the MERLIN II system and CMS and making decisions about how the MERLIN II system and CMS will work together.

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

- Creating shift configurations of line groups and agent splits (See Section 4, "Administering CMS.")
- Monitoring line status, split status, call traffic, and system problems during call management (See "Monitoring Call Management" and "Dynamic Reconfiguration" in this section.)
- Helping agents understand the MERLIN II system features that they use to handle CMS calls (See Section 6, "Handling CMS Calls.")
- Generating reports (See Section 7, "Generating Reports.")
- Using system status information and the Management Information System (MIS) 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 past CMS data.)
- Troubleshooting (See Section 9, "Troubleshooting.")

To better understand the duties of the CMS supervisor, you may also find it helpful to read the description of the supervisor's role at Bon Voyage Travel, a hypothetical business, and how he interacts with CMS, (See "A Typical CMS Application" in Section 2, "Understanding CMS," and "Day-to-Day Operation of CMS" in this section.)

The system administrator should have set your MERLIN II system for a large system, that is, for a system with more than eight lines or more than 20 voice terminals. As CMS supervisor, you therefore must have a console that will accommodate a large system.

For CMS to work with the MERLIN II System with Feature Module 2, you must have a MERLIN II System Display Console. The display console (Figure 5-2) has Auto Intercom buttons on the right side of the console which can be used to represent up to 72 voice terminals. The buttons on the left side of the console are available to show the status of up to 56 lines. All lines and intercom numbers are assigned to buttons on the console automatically when the system is activated for the first time.

The display provides information that helps you handle calls and program your voice terminal more easily. You can also use the display to set an alarm, time calls, and check the time, day, and date.

The requirements for setting up your MERLIN II system display console are as follows:

- The console must be plugged in to one of the attendant jacks on the MERLIN II system control unit. For more information on connecting your console to an attendant jack, see "Other Attendant Positions" under the heading "Complete the Master Planning Form" in Section 2 of the *MERLIN II Communications System with Feature Module 2 Installation and Administration Manual*
- Your console also needs buttons for lines and the Auto Intercom feature. If you need information on using the line buttons and the Auto Intercom feature, see the procedures described in Section 6, "Handling CMS Calls."
- You may also want to use the Group Page feature.

Use a Voice Terminal Configuration Form to help you keep a record of your decisions for your voice terminal. See the *MERLIN II Ccmmunications System Planning Guide for the Call Management System* for instructions on how to fill out the forms.

LINE BUTTONS

On your console you need the following kinds of line buttons:

- One button for each line (not line group) assigned to CMS.
- Lines or line pools not associated with CMS for personal lines or for outgoing calls, if applicable.

For additional information on line buttons, see the *MERLIN II Communications System Getting Started Guide for the Call Management System.*

AUTO INTERCOM BUTTONS

You should have an Auto Intercom button for each CMS agent so that you can contact any agent with the touch of a button. Also, use the lights next to the Auto Intercom buttons to see which agents are busy on calls and which are not.

Conversely, a CMS agent can have *either* a Manual Signaling button *or* an Auto Intercom button to contact you. And, you can tell which agent is calling because the light next to that agent's Auto Intercom button on your voice terminal flashes rapidly, If the agent has a Manual Signaling button for you on his or her voice terminal, the agent and you should have a prearranged meaning for the signal, such as "Please pick up on this call. I need help." You can determine which line the agent is on by using the CMS Split Status screens (see "Using the Split Status Screens" in this section) and pick up on that line.

GROUP PAGE

Sometimes, it may be necessary for you to use the MERLIN II system Group Page feature to make group announcements to agents of a particular split or to all agents on duty. (In order to administer the Group Page feature, see the administration procedures for Group Page in the *MERLIN II System Manual.)* A typical message might be that CMS is starting up for the day and the agents should touch their Available buttons to signal CMS that they are ready to receive calls. The agents will hear your voice through their voice terminal speakers. However, the agents must not lift their handsets during the announcement or the announcement is terminated.

> **NOTE:** If you want to assign paging groups to buttons, you need one button for each paging group.

To use the Group Page feature to make a paging announcement, you can use the programmed button or you may choose to use a dial code, To program a Group Page button on your console for each paging group, follow the directions in "Programing a Voice Terminal" in Section 6, "Handling CMS Calls."

Use the Group Page feature as follows:

1 Touch the Group Page button for the group you want to page.

2 When you hear a beep, lift your handset and make the announcement, (You hear a busy signal if all the voice terminals in the group are busy.)

or

1 Touch **Intercom-Voice.**

2 Lift your handset.

3 Dial the code for the group you want to page:

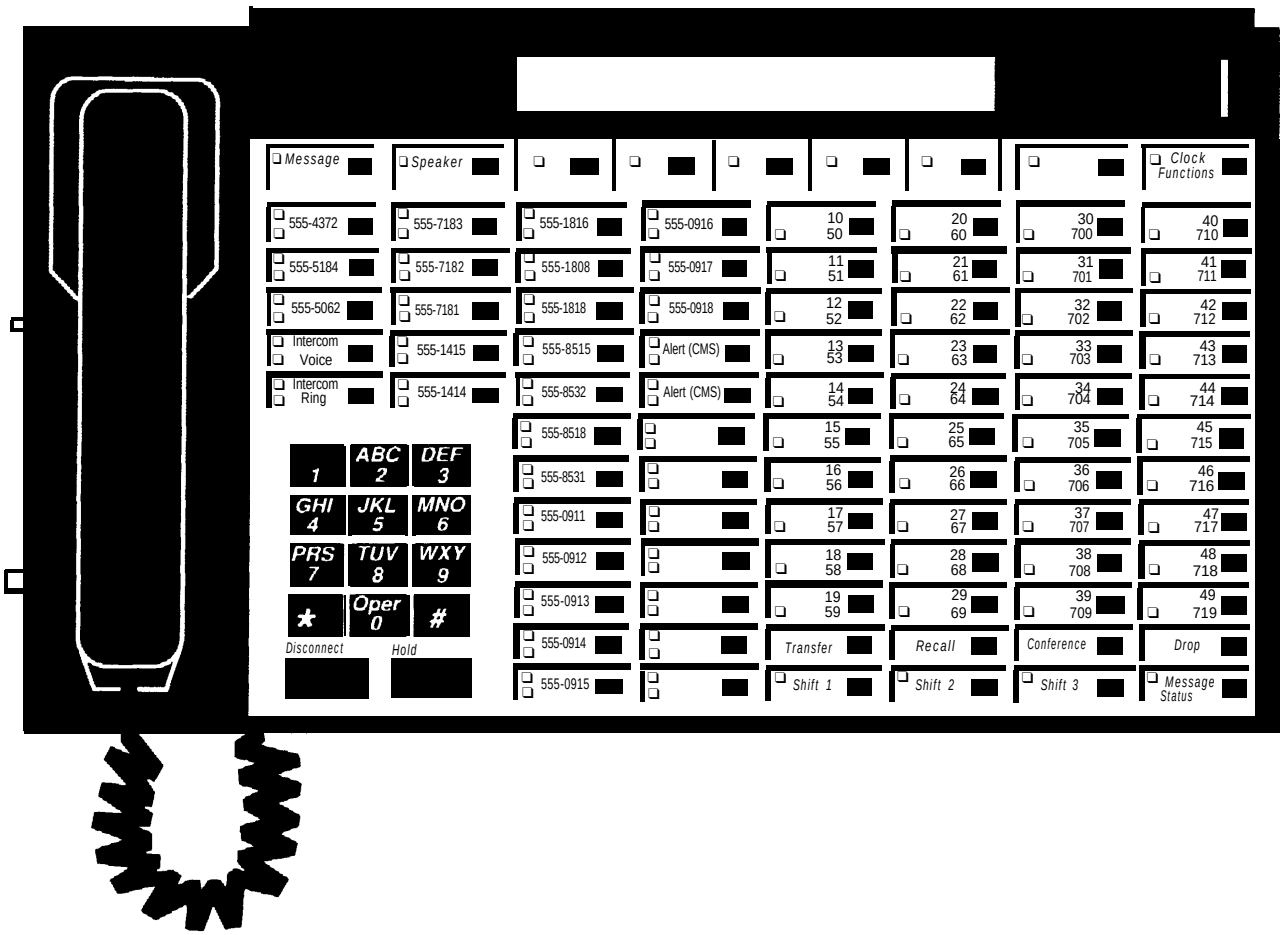
881 for group 1
882 group 2
883 group 3
884 group 4
885 group 5
886 group 6
887 group 7

4 When you hear a beep, speak into your handset. (You hear a busy signal if all the voice terminals in the group are busy.)

> **NOTE:** The above group page codes are default codes. If the MERLIN II system has non-CMS activity, some codes may have undergone flexible numbering. If so, check the Master Planning Form and the Group Page Planning Form to see what the new numbers are. CMS does not operate properly with flexible numbering. If Group Page will not work with the assigned flexible numbers; use the above default codes. If Group Page doesn't work with either the flexible numbers or the default codes, see your MERLIN II system administrator.

To program other MERLIN II system features onto your own or your agents' voice terminals, such as Last Number Redial or Saved Number Redial, see the entry for that feature in Section 2, "Reference" of the *MERLIN II System Manual.*

FIGURE 5-2 The MERLIN II System Display Console.



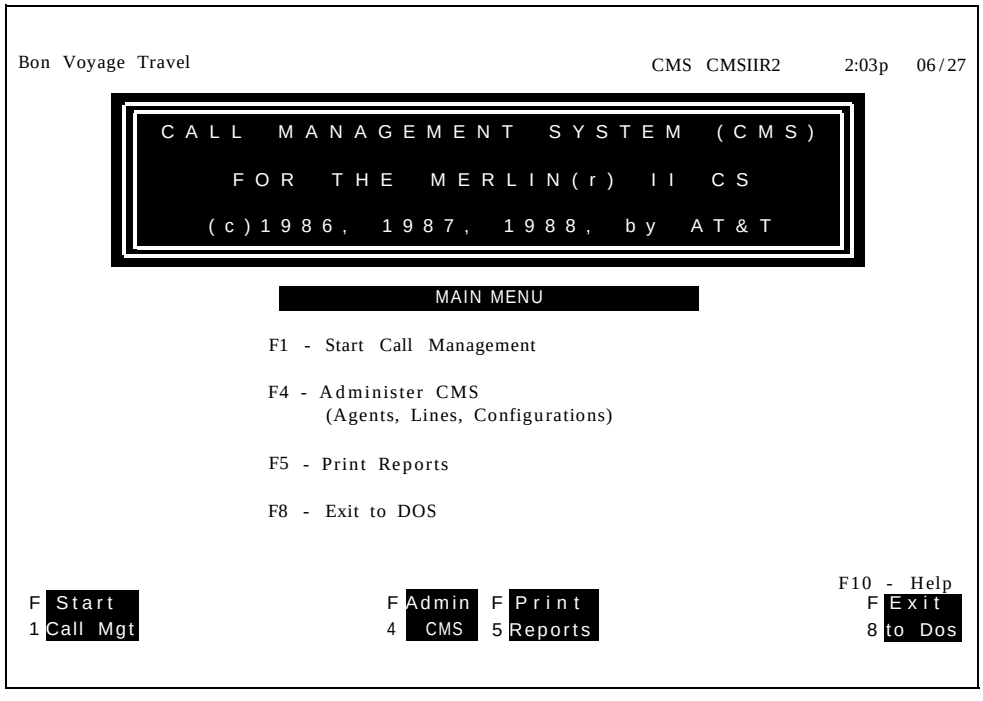
To activate CMS, follow these steps:

1 Turn on your PC.

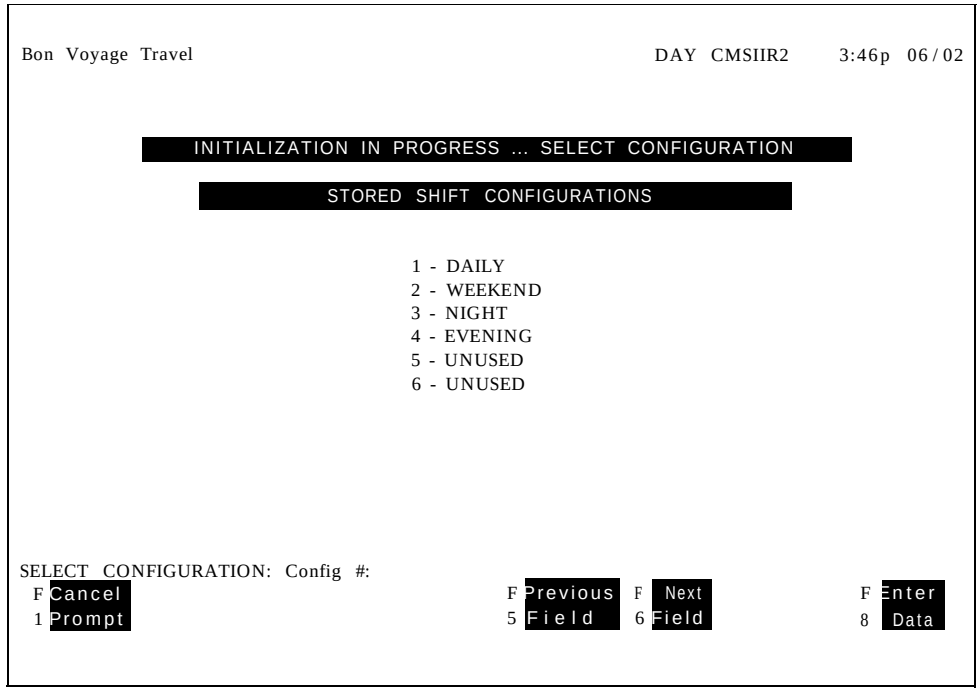
If you use an AUTOEXEC.BAT file to automatically start the CMS program, the CMS Menu appears. Go to step 4. (For informatiom on creating an AUTOEXEC.BAT file, refer to "Starting up the CMS Program Automatically" in Section 3.)

2 When the C> prompt appears, type *cd cms* and press [↵].

3 When C> prompt appears again, type *cms* and press [↵].This starts the CMS program. The CMS Main Menu, below, appears.



4 Press [F1] (labeled "Start Call Mgt") to begin call management. If you have not preselected a shift configuration, the Initialization screen (below) appears with a list of configurations and a prompt.



While this screen is displayed, CMS checks cable connections and CMS files and checks to see if sufficient file space exists to store data. (If you receive an error or warning message, turn to Section 9, "Troubleshooting," for instructions).

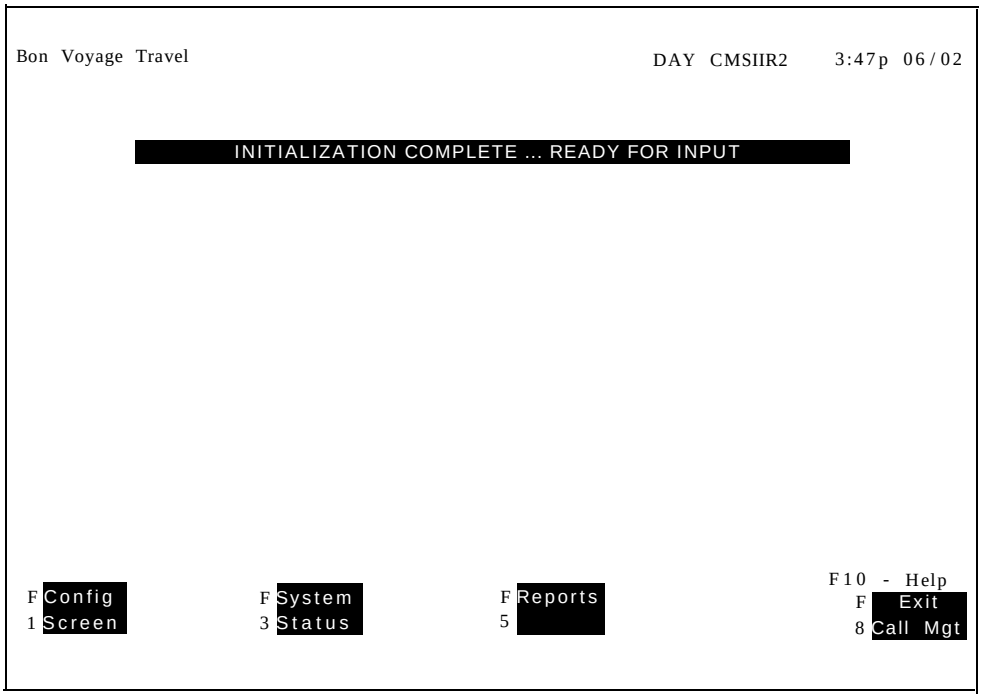
5 At this point, enter the number of the configuration you want to use and press [F8] (labeled "Enter Data").

The screen clears except for the following message:

INITIALIZATION IN PROGRESS...PLEASE WAIT

Another series of system checks begins and the configurations complete their initialization.

6 When, after a successful system check, CMS is ready to begin call management, the following screen appears.



NOTE: You can choose to have a particular shift configuration begin automatically during system startup, CMS performs another series of system checks. For more information on activating a configuration automatically, refer to the Select Startup function in "Building or Editing Shift Configurations" in Section 4.

When call management begins, all agents are automatically in the logged out state, To make themselves available, they have to touch 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.

If administered, the Auto ACW feature begins working after an agent receives his first call. Upon completion of the call, the agent is placed into ACW for the administered time and then returned to the Available state automatically.

7 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.** Use this function key to select the Configuration screen, which displays the current shift configuration, From this screen you can change 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, " in this section.

[F3] **System Status.** Use this function key to select the System Status screen, the "home" screen of the running CMS. It summarizes the activity in each agent split and line group. For information on interpreting this screen, see "Using the System Status Screen."

[F5] **Reports.** Use this function key to select the Report Menu screen. You can select reports from the Report Menu and print them out. This screen is accessible even while CMS is managing calls. For more information, see Section 7, "Generating Reports."

[F8] **Exit** Use this function key to stop call management. You are prompted to confirm your request. Your CMS stops answering incoming calls but continues to function until all calls already in the system are completed. This includes *any* call already answered by CMS, whether it is connected to the voice announcement unit, waiting in a queue, or connected to an agent. 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.

Since it is important that your CMS knows when an agent is available for CMS calls, agents must understand how to designate the work state they are in. In this way, your CMS can run efficiently and maintain accurate records.

AGENTS' VOICE TERMINAL BUTTON REQUIREMENTS

Each agent must have on his or her voice terminal both an Available button and an ACW button. For programming procedures, see Section 6, "Handling CMS Calls."

AGENTS' VOICE TERMINAL WORK STATES

Agents assigned to splits in an active configuration can place themselves in one of three alternate work states:

- **Logged out state.** In particular circumstances your CMS can place agents in the logged out state. When agents are logged out, they are not available to take calls, and time spent in this state is not included in report statistics. It is also possible for agents to log themselves out. Agents are considered to be in the logged out state when the lights next to **Available** and **ACW** are off.
- **Available state.** An agent is available for CMS calls when the light next to the Available button on the agent's voice terminal is on.
- **after-call-work (ACW) state.** When an agent is completing work related to CMS, such as filling out forms for a previous CMS call, the light next to the ACW button on the agent's voice terminal must be on. As the CMS supervisor, you must decide how to define this work state for your business.

  NOTE: An enhancement to the ACW state is the **automatic after-call-work (Auto ACW) state.** The agent does not have to touch the voice terminal buttons to determine work states, except to log out. This hands-free operation allows an agent the option of using a headset adapter. The after-call-work state occurs automatically upon completion of a call, and stays in that state until the time administered for the auto ACW state has passed (l-999 seconds). When the specified time has passed, the agent is automatically available to receive the next incoming call for that line group. As the CMS administrator, you must determine the length of time for the Auto ACW state.

  NOTE: While CMS is in the Night Service mode, any agents on duty are in the **Night state.** Time spent in this state is not counted as time logged in for reporting purposes.

For additional information about the Available state, see "Announcing Availability for CMS Calls," in Section 6.

LOGGED OUT STATE

When call management begins, all agents are automatically in the logged out state. Use the MERLIN II system Loudspeaker Page or Group Page feature to tell your agents that call management has begun and they should make themselves available for calls. (For directions on using the paging features, see the *MERLIN II System Manual.)* At this time, those agents who are available for CMS calls can turn on the light next to the Available button at their voice terminals by touching **Available.**

All agents are automatically placed in the logged out state when you stop managing calls with one shift configuration and begin managing calls with another. *Individual* agents are automatically placed in the logged out state in the following instances as well:

- When you add, move, or replace an agent
- When an agent has been in the after-call-work state for longer than the Agent Logout exception threshold, if you have specified one
- When an agent refuses a call

You can use the Auto Intercom feature to tell agents when they are being moved to new splits and to let them know they should make themselves available for calls after you have moved them.

Agents can place themselves in the logged out state when they are not available for CMS calls and not doing work associated with CMS. Agents are logged out when the lights next to **Available** and **ACW** are off. This signals the system that the agent is not available for CMS calls. When the agent is available for CMS calls again, he or she can touch **Available** and the light next to that button goes on.

AVAILABLE STATE

When agents no longer need to be in the after-call-work or logged out state and are available again for CMS calls, they can announce their availability by turning on the light next to **Available.** When agents are not available for CMS calls, they can do one of the following:

- If they want to enter the logged out state, they can turn off the light next to the Available button by touching **Available.**
- If they want to enter the after-call work state, they simply turn on the light next to the ACW button by touching **ACW.** The light next to **Available** automatically turns off.

AFTER-CALL-WORK STATE

An agent can announce unavailability when he or she is finishing paperwork connected with the previous CMS call by turning on the light next to **ACW.**

- When the agent has completed the after-call-work and is available for CMS calls again, he or she should touch **Available** so that the light next to that button goes on. If the light next to **ACW** is on, the light next to that button goes off when the agent touches **Available,**
- If agents want to enter the logged out state, they can turn off the light next to the ACW button by touching **ACW.**

AUTOMATIC AFTER-CALL-WORK STATE

An agent receiving a call from a line group with automatic ACW does not have to touch the ACW button to announce unavailability upon completion of a call. The agent has a set period of time that was administered for the agent's line group for finishing paperwork connected with the previous CMS call. This hands-free operation allows an agent the option of using a headset adapter.

- When the specified time for the automatic ACW has passed, the light next to the **ACW** button goes off and the light next to the Available button turns on. The agent is made available automatically for the next incoming call.
- If an agent is finished with the paperwork before the specified time has elapsed, the agent can touch **Available** on the voice terminal, which turns on the light next to the button.
- To enter the logged out state, an agent can turn off the light next to the ACW button by touching **ACW,**

SUPERVISORY LOGIN/LOGOUT

The supervisor can use the Split Status screens on the CMS PC to place agents in either the available, ACW, or logged out work status. See "Using the Split Status Screens" later in this section.

Once you begin call management (as described earlier in "Startup Procedures"), you can monitor activity in the line groups and splits through the status screens. These screens, described in this chapter, are as follows:

- **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.** You can view a Split Status screen for each split. This screen describes the activity of each agent in a particular split and summarizes the activity for the entire split.
- **Line Status screen.** This screen summarizes the activity for each line and line group.
- **Events Log screen.** This screen lists the 19 most recent exception messages and system problems and 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.")

To print a copy of any screen, press [↑] - [Prt Sc] while the screen is displayed.

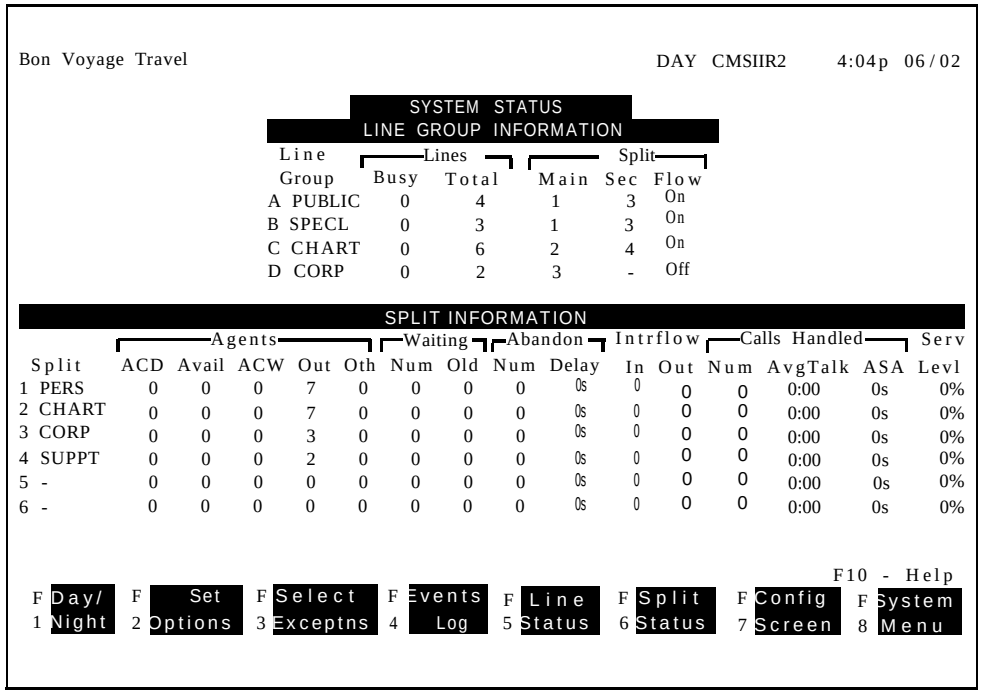
> **NOTE:** If you see the message **Don'tPrtSc** on the ID line or **Printer Not Ready. Using Prt Sc Key will Halt CMS** on the error line, do *not* attempt to print a screen. If you attempt to print a screen while either of these messages is displayed, CMS will stop running,

If the printer is not ready, you can perform the following checks:

- Make sure the printer is plugged in and turned on. The Ready light should be on.
- Make sure there is paper in the printer and that it is aligned properly and not jammed.
- Press the Form Feed button on the printer to make sure the paper feeds properly.
- Turn to "Printer Problems" in Section 9, "Troubleshooting," for more information about troubleshooting your printer.

Using the System Status Screen

The System Status screen, 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 Data."



So you can tell at a glance if CMS is operating efficiently, the System Status screen lists:

- The status of line groups such as the number of busy lines and the total number of lines in the line group
- How splits are assigned to line groups and whether intraflow is active
- 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

> **NOTE:** The System Status screen shows an agent to be on an ACD call while the call is ringing at the agent's voice terminal. The CMS supervisor should be aware that agents are *not* credited with an ACD call until they actually pick up their handset to answer the call.
>
> When CMS transfers a call to an agent, the call disappears from the group of calls waiting to be answered by an agent. If the call is refused, it reappears in the same group of waiting calls.

If the System Status screen indicates a problem that needs immediate correction, you can make that correction through dynamic reconfiguration. For more information, see "Dynamic Reconfiguration,"

You can also change the system from Day Service mode to Night Service mode using [F1] (labeled "Day/Night") on the System Status screen. In Day Service mode, CMS routes calls to agents. In Night Service mode, CMS connects incoming calls to the 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 access another screen from the System Status screen, to change to Day or Night Service, or to exit call management, press the corresponding function key:

[F1] **Day/Night.** Press this function key 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.

[F2] **Set Options.** Use this function key to select the Set Options screen to change options such as the service level and the abandoned call threshold. For more information, refer to "Setting Options" in Section 4.

[F3] **Select Exceptns.** Use this function key to view the Exception Setting screen. That screen 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. This screen displays the 19 most recent exceptions and system errors. 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., This screen displays information about every line and every line group. For more information, see "Using the Line Status Screen," later in this section.

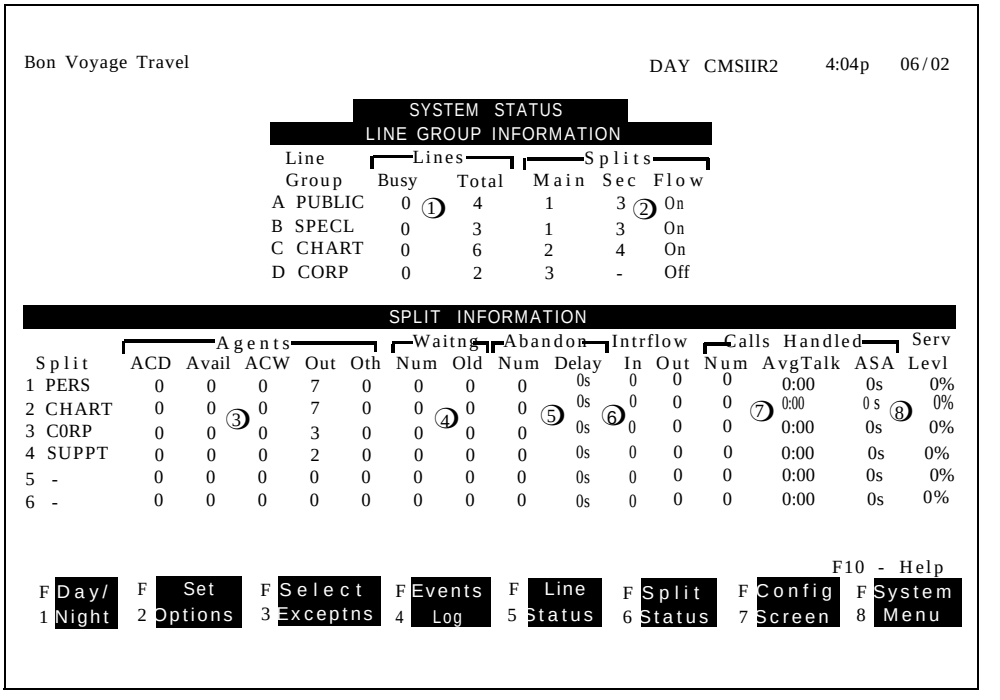
[F6] **Split Status.** Press this function key to view a Split Status screen for a particular split. (You are prompted for the split number.) The Split Status screens give you a detailed picture of the activity in each split. For more information, see "Using the Split Status Screen," later in this section.

[F7] **Config 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] **System Menu.** Use this function key to get to the System Menu for performing dynamic reconfiguration, review system status, generate reports, and exit call management.

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.

Key to System Status Data



Bon Voyage Travel DAY CMSIIR2 4:04p 06/02

SYSTEM STATUS

LINE GROUP INFORMATION

Line Group	Lines Busy	Lines Total	Splits Main	Splits Sec	Flow
A PUBLIC	0 ①	4	1	3 ②	On
B SPECL	0	3	1	3	On
C CHART	0	6	2	4	On
D CORP	0	2	3	-	Off

SPLIT INFORMATION

Split	Agents ACD	Avail	ACW	Out	Oth	Waitng Num	Old	Abandon Num	Delay	Intrflow In	Out	Calls Handled Num	AvgTalk	ASA	Serv Levl
1 PERS	0	0	0	7	0	0	0	0	0s	0	0	0	0:00	0s	0%
2 CHART	0	0 ③	0	7	0	0 ④	0	0 ⑤	0s ⑥	0	0	0 ⑦	0:00	0s ⑧	0%
3 CORP	0	0	0	3	0	0	0	0	0s	0	0	0	0:00	0s	0%
4 SUPPT	0	0	0	2	0	0	0	0	0s	0	0	0	0:00	0s	0%
5 -	0	0	0	0	0	0	0	0	0s	0	0	0	0:00	0s	0%
6 -	0	0	0	0	0	0	0	0	0s	0	0	0	0:00	0s	0%

F10 - Help

F1 Day/Night | F2 Set Options | F3 Select Exceptns | F4 Events Log | F5 Line Status | F6 Split Status | F7 Config Screen | F8 System Menu

The numbers in the following list are keyed to the circled numbers in the screen above.

LINE GROUP INFORMATION

1 Number of busy lines and total number of lines

2 Main and secondary split assignments and intraflow status

SPLIT INFORMATION

Current Status of Agents and of Waiting Calls

3 Number of agents on ACD calls; available to take calls; in the after-call-work, logged out, or night state (”Out”); or on other than ACD (”Oth”) calls

4 Number of calls now waiting and length of time the oldest call has been waiting

Record of Calls Received during Current How’

5 Number of abandoned calls and average length of time these calls spent in system

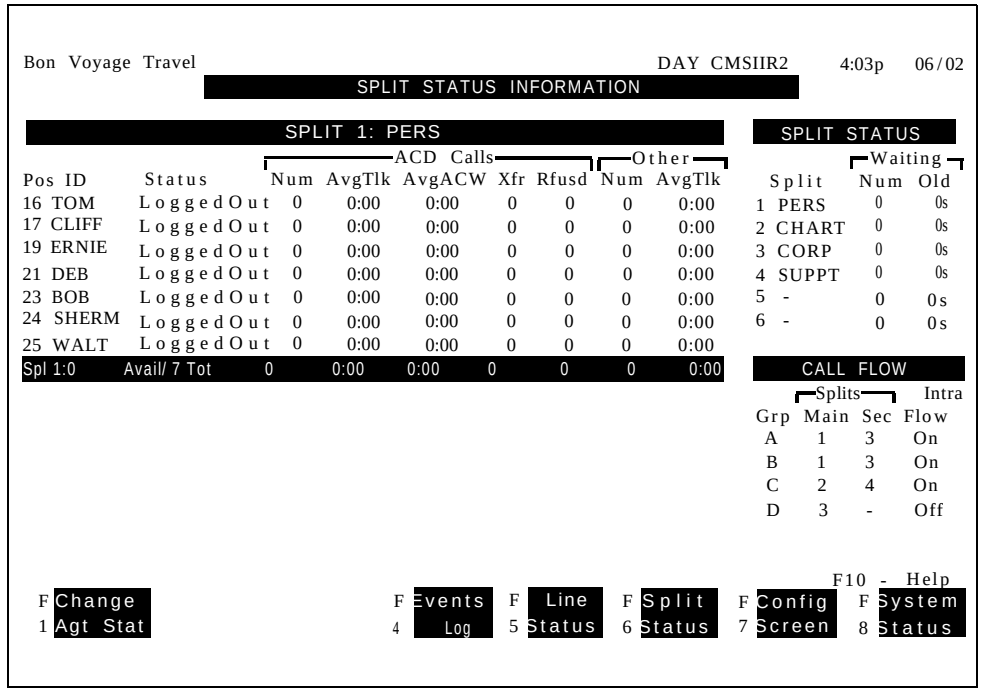
6 Number of calls intraflowed into and out of each split

7 Number of ACD calls handled, average talk time, and average speed of answer

8 Service level (percentage of calls answered within your service level limit)

With the Split Status screens, you can get a detailed picture of the activities of each agent in each split. For instance, you can see how many calls each agent has answered and the average time an agent spends on a call.

The same data are collected for each split. Each Split Status screen contains one split's data. Pressing [F6] (labeled "Split Status") from any other status screen prompts you to enter the split number for the Split Status screen you want to see. A typical Split Status screen appears below.



The left section of the screen describes the activities of each agent in a particular 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 summarizing calls waiting for all splits and intraflow assignments. For an explanation of each type of data on this screen, see "Key to Split Status Data."

If a Split Status screen 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 select another screen or perform a function from the Split Status screen, press the corresponding function key:

[F1] **Change** Press this function key to change an agent's work status (Supervisory Login/Logout feature).

When the function key is pressed, the following prompt appears:

CHANGE AGENT STATUS: AGENT ID: NEW STATUS (AVAIL/ACW/OUT):

Enter the agent ID in the AGENT ID field and the desired status in the NEW STATUS field, then press [F8] to enter the data.

The agent's work state (under the "Status" column) will change from its previous status to the new status. The supervisor can change an agent's work state at any time in an active split.

Error messages are displayed if an agent is already in the status entered, or if an ID is entered for an agent that is not in the split, or if either of the prompt fields is left blank. If an ACD call is in progress when the supervisor initiates the change, the new status takes effect upon completion of the call, and a message to that effect is displayed.

> **NOTE:** This feature is not in effect when CMS is in Night Service. When in Night Service, CMS does not display the F1 function key in the Split Status screen.

[F3] **Next Page/Previous Page.** Press this function key to toggle between the pages of the "SPLIT STATUS INFORMATION" screen when there are more than 14 agents in a split.

If you are on the first page of the screen, **Next Page** is presented at the bottom of the screen. If you are on the second page of the screen, **Previous Page** is presented at the bottom of the screen.

[F4] **Events Log.** Press this function key to select the Events Log screen. It lists the 19 most recent exceptions and system errors. For more information, see "Using the Events Log Screen," later in this section.

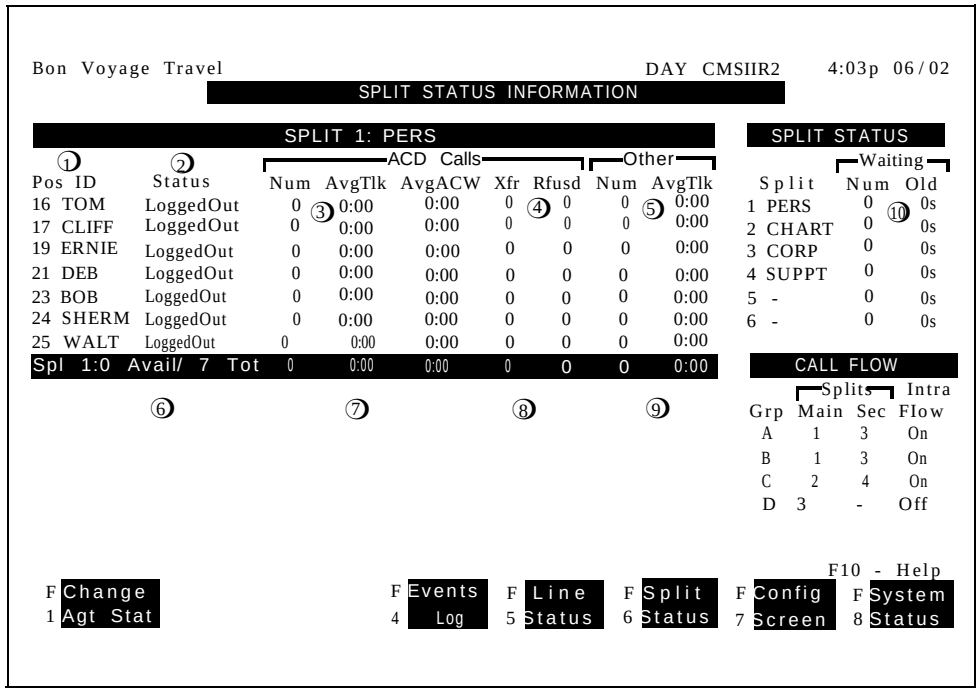
[F5] **Line Status.** Press this function key to select the Line Status screen. It displays information about every line and every line group. For more information, see "Using the Line Status Screen," later in this section.

[F6] **Split Status.** Press this function key to view another Split Status screen. You are prompted to enter a split number.

[F7] **Config 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, It summarizes the activity in each split and line group. For more information, see "Using the System Status Screen," earlier in this section.

Key to Split Status Data



The numbers in the following list are keyed to the circled numbers in the screen above.

AGENT STATUS

Individual Agents

1 Position number (MERLIN II system intercom number) and ID of agent

2 Current status, i.e., busy with ACD call, (including ID of line that agent is using), available to take call (”Avail”), in after-call-work state (”ACWork”), in logged out state (”LoggedOut”), in night state (” Night”), or on an other than ACD (”OtherCall”) call

3 Number of ACD calls answered during this hour, average talk time per call, and average length of time spent in the after-call-work state

4 Number of ACD calls transferrd by the agent and calls refused during this hour

5 Number of “Other” (not ACD) calls and average talk time per call during this hour

Agent Summary Line

6 Number of agents currently available out of total number of agents active in split

7 Total number of calls answered during this hour, average talk time per call, and average time spent in the after-call-work state

8 Total number of ACD calls transferred by agents in the split and calls refused during this hour

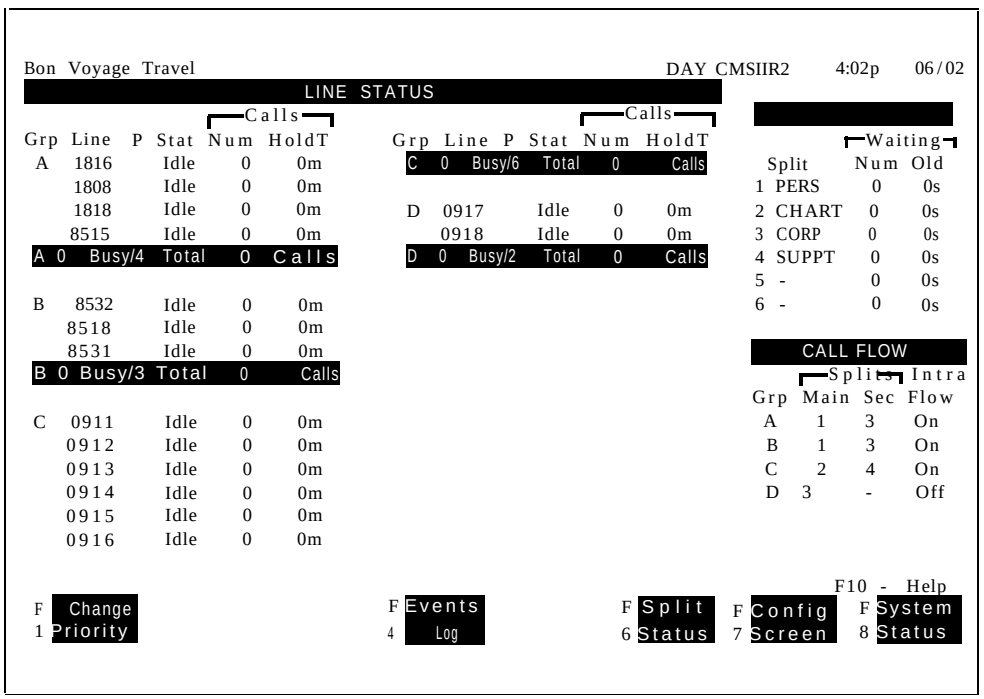
9 Total number of other than CMS calls during this hour and average talk time per call

SPLIT STATUS **10** Number of calls waiting in each split and length of time the oldest call has been waiting

CALL FLOW **11** Main and secondary split assignments and intraflow status

Using the Line Status Screen

The Line Status screen, shown below, summarizes the activity for each line in each line group. Pressing [F5] (labeled "Line Status") from any other status screen selects the Line Status screen.



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 summarizing calls waiting for all splits and call flow assignments. (For an explanation of the data on this screen, see "Key to Line Status Data."

If the Line Status screen indicates 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 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.** Use this function key to change a line from a priority line *to* a nonpriority line, or vice versa. The priority of a line determines its position among the 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: Enter a line ID to change the priority of that line. Press [F8] (labeled "Enter Data").

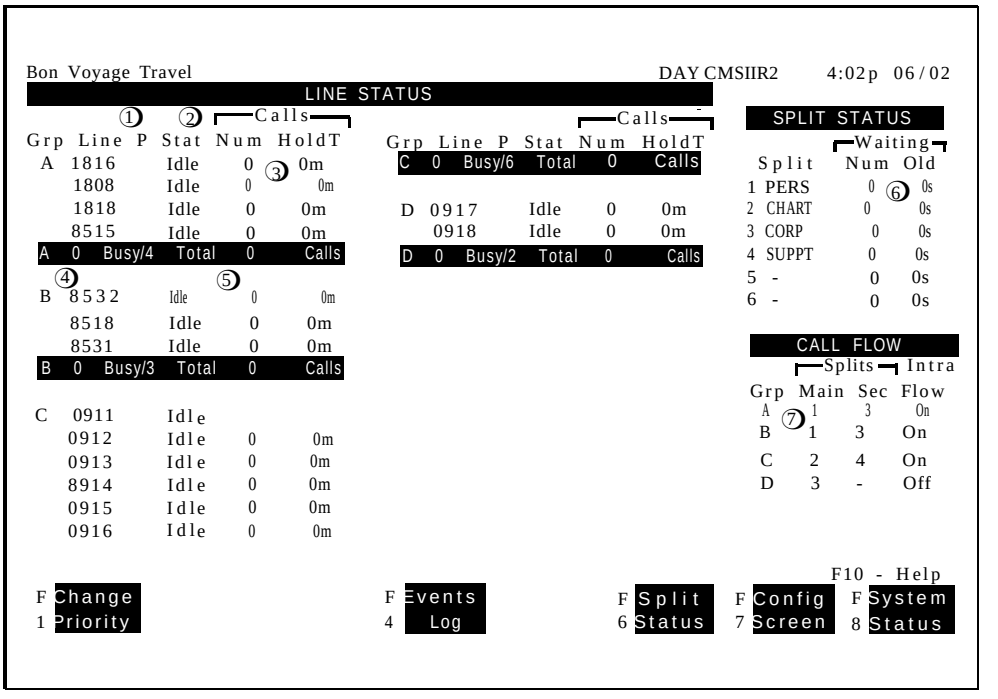
[F4] **Events Log.** Press this function key to select the Events Log screen. It displays the 19 most recent exceptions and system errors. For more information, see "Using the Events Log Screen," later in this section.

[F6] **Split Status.** Press this function key to view a 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. For more information, see "Using the Split Status Screens," earlier in this section.

[F7] **Config 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. It summarizes the activity in each split and line group. For more information, see "Using the System Status Screen," earlier in this section.

Key to Line Status Data



The numbers in the following list are keyed to the circled numbers in the screen above.

LINE STATUS

Individual Lines

1 Lines marked + are priority lines and wil lbe answered first

2 Current status of line, i.e., ringing, idle, waiting (on hold), or connected

3 Number of ACD calls received and total length of time line has been in use for ACD calls during this hour

LINE GROUP SUMMARY LINE

4 Number of lines currently busy out of total number of lines in line group

5 Number of ACD calls to line group during current hour

Split Status

6 Number of calls waiting in each split and length of time the oldest call has been waiting

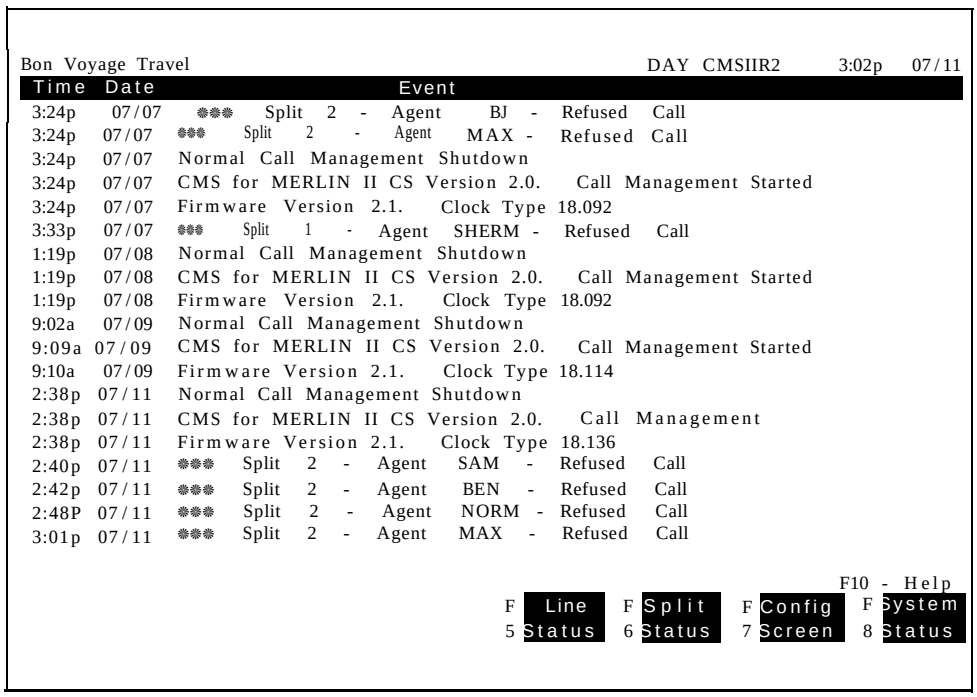
Call Flow

7 Main and secondary split assignments and intraflow status

Using the Events Log Screen

The Events Log screen displays the last 19 exceptions and system problems with the time and date they occurred. Exception messages alert you to unusual or undesirable situations.

Pressing [F4] (labeled "Events Log") on any status screen selects the Events Log screen. A typical example is shown below.



You must select the specific exceptions your CMS monitors. If you have not selected any exceptions, the Events Log screen lists only system errors. For an explanation of the exceptions and instructions for administering them, see "Selecting Exceptions" in Section 4.

If an exception indicates a problem that needs immediate correction, you can do so through dynamic reconfiguration. (For more information, see "Dynamic Reconfiguration," 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. This screen displays information about every line and every line group. For more information, see "Using the Line Status Screen," earlier 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. For more information, see "Using the Split Status Screens," earlier in this section.

[F7] **Config 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. It summarizes the activity in each split and line group. For more information, see “Using the System Status Screen,” earlier in this section.

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 changes in incoming call traffic.

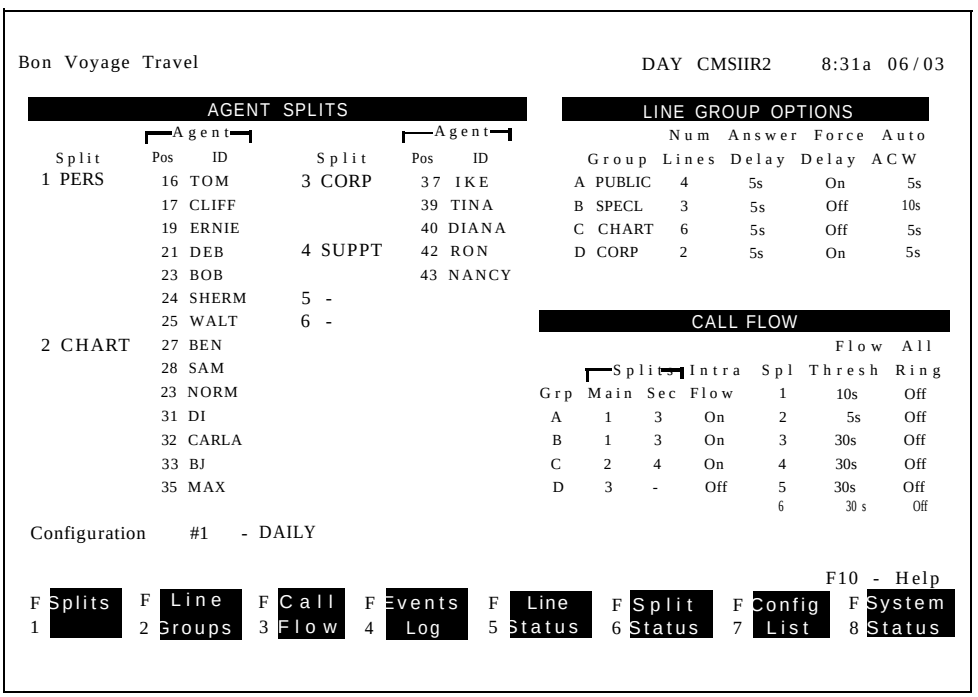
Such changes are immediately activated in the current configuration. If you want, you can save the changes before you shut down CMS or before you select another shift configuration. Otherwise, the changes are not saved once the current configuration is no longer active.

You use these screens during dynamic reconfiguration:

- Configuration screen
- Configure Splits screen
- Configme Call Flow screen
- Administer Line Group Options screen
- Stored Shift Configurations screen

These screens are almost identical to the configuration screens you use for administration. During administration, however, CMS *is not* managing calls. CMS *is* managing calls during dynamic reconfiguration.

Pressing [F1] (labeled "Config Screen") at the Initialization screen (or the System Menu) or [F7] (labeled "Config Screen") from any status screen selects the Configuration screen. It displays the current configuration, as shown below.



From the configuration screen you can perform three types of reconfiguration (described below) or select other screens.

- **Reconfigure Splits.** Through the Configure Splits screen, you can add, move, or remove the agents in splits.
- **Change Line Group Options.** With the line groups prompt, you can change the number of seconds calls ring before CMS answers them (answer delay), turn force delay on and off, and specify the number of seconds an agent is to be automatically placed into ACW after completing a call.
- **Reconfigure Call Flow,** Through the Configure Call Flow screen, you can reassign splits to groups, change intraflow thresholds, turn intraflow on or off, and designate splits for All-Ring operation.
- **Use the Configuration List.** With this screen, you can select a different configuration for call management, save your changes in the current configuration, rename a configuration, or select a startup configuration.

Once you are familiar with dynamic reconfiguration, you can follow the streamlined procedures in Section 10, "Quick Reference Guide to Dynamic Reconfiguration. " To see how the administrator at Bon Voyage Travel uses dynamic reconfiguration during a typical day, see "Day-to-Day Operation of CMS," in this section.

BEGINNING DYNAMIC RECONFIGURATION

To begin dynamic reconfiguration or to select another screen, press the corresponding function key.

[F1] **Splits.** Press this key to select the Configure Splits screen and reassign, add, or remove agents. For more information, turn to "Reconfiguring Splits," later in this section.

[F2] **Line Groups.** Press this function key to change the length of time calls ring before CMS answers them and administer the amount of time an agent is in Auto ACW. For more information, turn to "Changing Answer Delay, Force Delay, or Auto ACW" later in this section.

[F3] **Call Flow.** Press this function key to select the Configure Call Flow screen and change intraflow assignments. For more information see "Reconfiguring Call Flow," later in this section.

[F4] **Events Log.** Press this function key to select the Events Log screen. It lists the 19 most recent exceptions and system errors. For more information, see "Using the Events Log Screen," earlier in this section.

[F5] **Line Status.** Press this function key to select the Line Status screen. This screen displays information about every line and every line group. For more information, see "Using the Line Status Screen," earlier in this section.

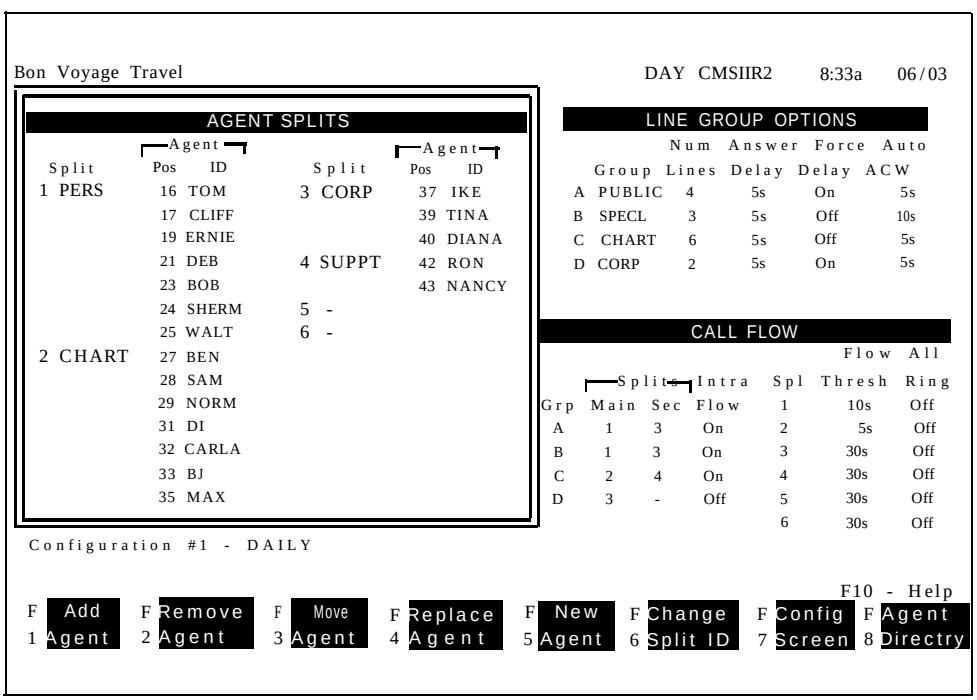
[F6] **Split Status.** Press this function key to view a Split Status screen for a particular split. (You are prompted for a split number.) The Split Status screens summarize activity in each split. For more information, see "Using the Split Status Screens," earlier in this section.

[F7] **Config List.** Press this function key to select the Stored Shift Configurations screen. From this screen you can activate a different configuration, save or rename a configuration, or select a default configuration for startup. For more information, see "Using the Stored Shift Configurations screen," later in this section.

[F8] **System Status.** Press this function key to select the System Status screen. It summarizes the activity in each split and line group. For more information, see "Using the System Status Screen," earlier in this section.

Reconfiguring Splits

Pressing [F1] (labeled "Splits") from the Configuration screen selects the Configure Splits screen shown below. It looks similar to the Configuration screen except 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 current configuration.



To reconfigure splits, press the function key for the activity you want to perform and follow the instructions:

[F1] **Add Agent.** Use this function key to assign an agent listed on the Agent Directory screen to a position and split in the current configuration. *When you add agents, they are automatically placed in the logged out state.* They must make themselves available for calls by touching the Available button. No report statistics are collected for an agent until this is done.

Prompt: **ADD AGENT: ID:_____ Pos #:_ Split #:_**

Action:

1 Enter an agent's ID.

2 Enter the agent's position number (a MERLIN II system 2-digit intercom number).

3 Enter a split number (1 through 6).

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

[F2] **Remove Agent.** Use this function key to remove an agent from the current configuration. (The agent entry remains on the Agent Directory screen, however.)

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

Action: Enter the agent's ID and press [F8] (labeled "Enter Data"),

[F3] **Move Agent.** Use this function key to shift an agent from one position number to another in the same split or to shift an agent to a different split. This is equivalent to removing the agent from one position or split and adding the agent to another position or split. The agent is placed *automatically* in the logged out state in the new split, and no statistics are collected for the agent until the agent is made available.

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

Action:

1 Enter an agent ID.

2 You may enter a new position number, 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 position 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 incomplete 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 several IDs for that agent, use the New Agent function key to add the agent with a different ID.

For example, an agent named Bill might have the ID BILL1 whenever he works in split 1 and BILL3 whenever he works in split 3. If you use a separate ID for each split in which he works, complete data will be collected for Bill as he is moved from split to split.

[F4] **RepIace Agent.** Use this function key to substitute agents at a particular position and split. This is equivalent to removing one agent and adding another agent to the same position and split. The second agent is placed *automatically* in the logged out state.

Prompt: **REPLACE AGENT: Pos # : _ New Agent ID: _____**

Action:

1 Enter the position number of the agent to be removed.

2 Enter the ID of the new agent.

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

[F5] **New Agent.** Use this function key to add a new agent (one who is not listed in the Agent Directory) to the current configuration. Agents added using the Configure Splits screen are simultaneously added to the Agent Directory. When new agents are added to a split, they are placed automatically in the logged out state.

Prompt: **NEW AGENT: Last Name: _____**
First: _____ ID: _____ P o s : _ Split #: —

Action:
1 Make entries in each of these fields as follows:

Last name: up to 12 letters, numbers, or special characters

First: up to 8 letters, numbers, or special characters

lD: up to 5 letters, numbers, or special characters

Position: a 2-digit MERLIN II system intercom number

Split: a number from 1 through 6

2 Press [F8] (labeled "Enter Data") after your last entry.

[F6] **Change Split ID.** Use this function key to assign or change a split ID.

Prompt: **CHANGE SPLIT ID: Split #: _ New Split ID: _____**

Action:
1 Enter a split number (1 through 6).

2 Enter a split ID (up to 5 letters, numbers, or special characters).

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

[F7] **Config Screen.** Use 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 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. Press [F7] (labeled "Config Splits") to return to the Configure Splits screen.

Changing Answer Delay, Force Delay, or Auto ACW

You can change the current setting for the answer delay, force delay, or Auto ACW options at any time.

ANSWER DELAY

If an agent is not available when a call first rings, CMS lets the call continue to ring for a certain number of seconds before it answers the call and connects it to the voice announcement unit. The number of seconds calls ring before CMS answers them is called the *answer delay.*

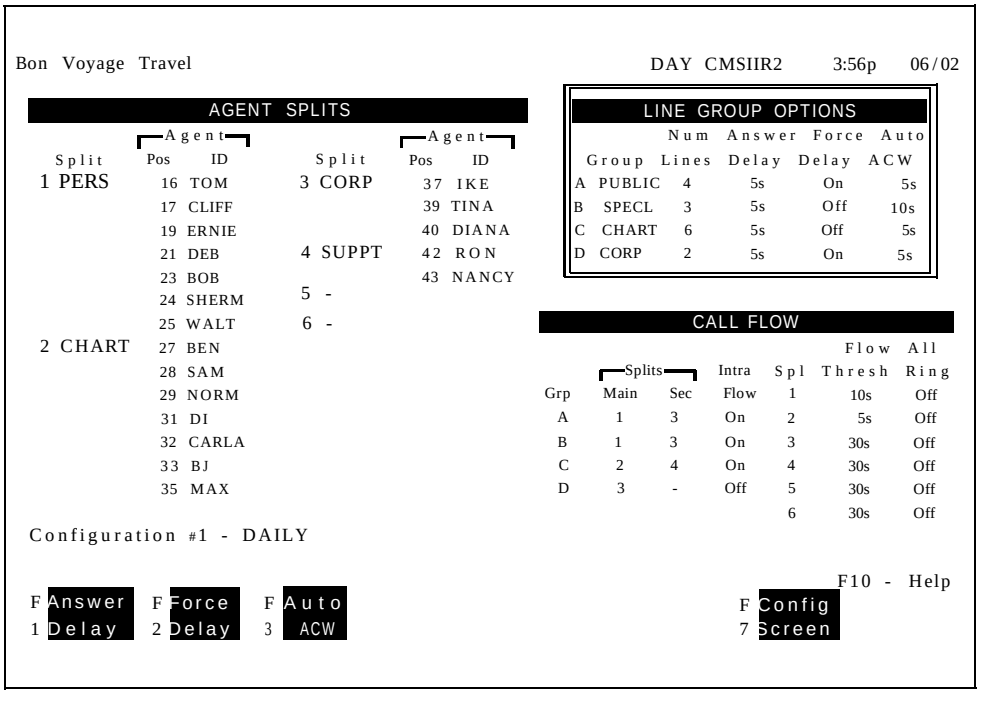
Think of answer delay as a trade-off between the time a customer spends listening to ringing and the time the customer spends on hold. You can use a different answer delay value for each line group, depending on the type of lines in the group and the amount of time the caller is likely to wait before 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. You may have changed that value when you administered your system. You can also change the answer delay value for an active configuration through dynamic reconfiguration. Consider these factors when choosing an answer delay value for a line group:

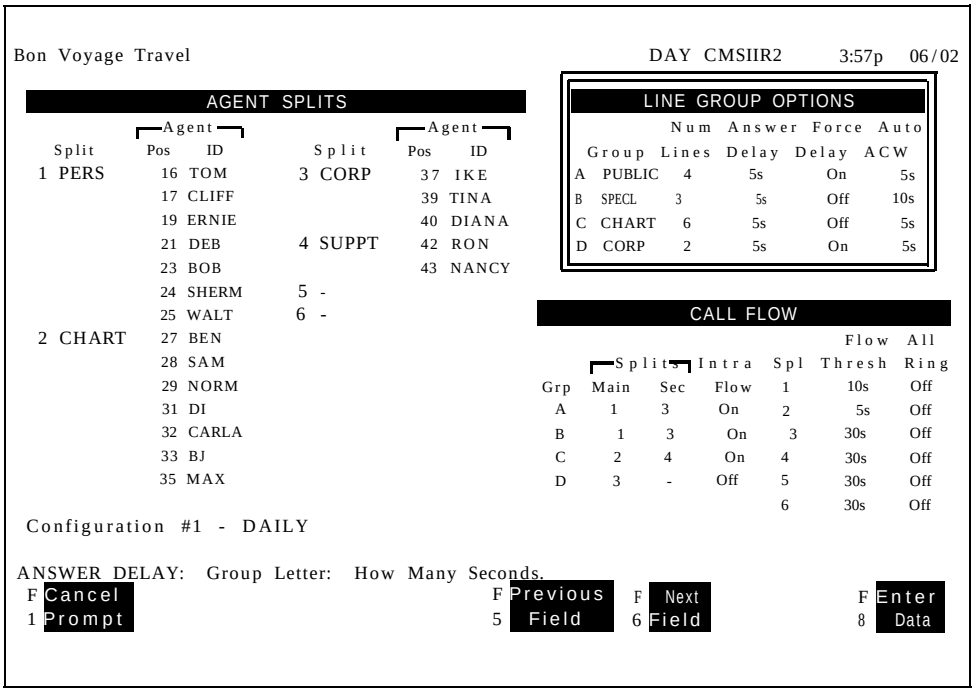
- If you have toll lines (such as 800 lines), you begin paying for a call as soon as the line is answered. If calls are likely to be on hold before an agent is available, you can increase the answer delay value in order to decrease the amount of time on hold. This reduces your expenses for toll lines.
- 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.

Example

Pressing [F2] (labeled "Line Groups") from the Configuration screen selects the line group function. A box appears around the line group area of the Configuration screen and a different set of function keys appears at the bottom of the screen. Refer to the following example.



To change answer delay for any line group, press [F1] (labeled "Answer Delay") and the following screen with the answer delay prompt appears:



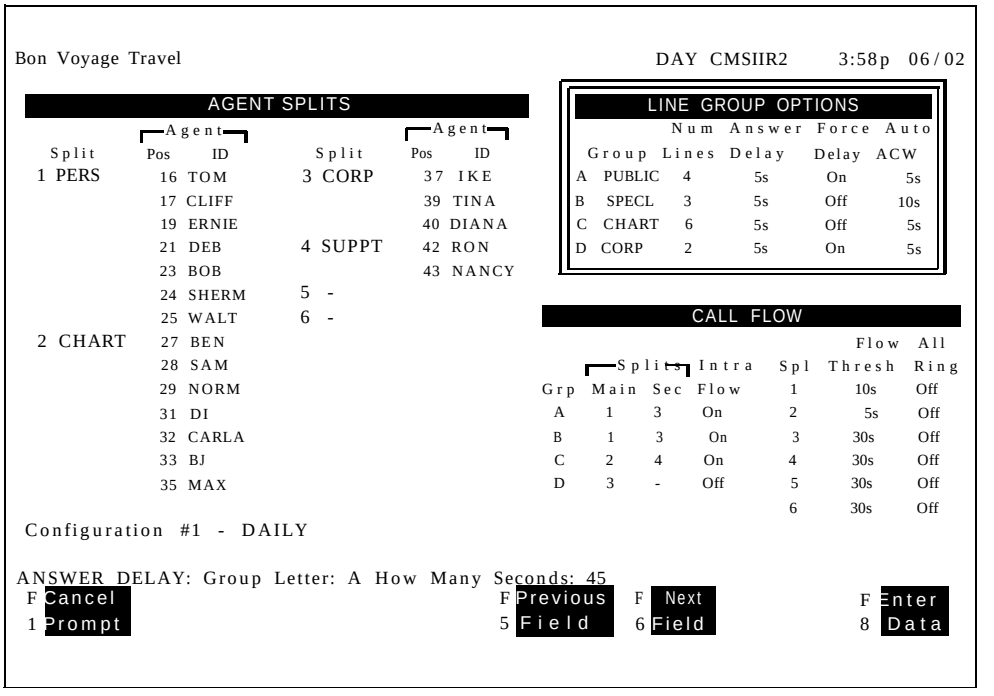
To change answer delay for any line group, respond to the prompt:

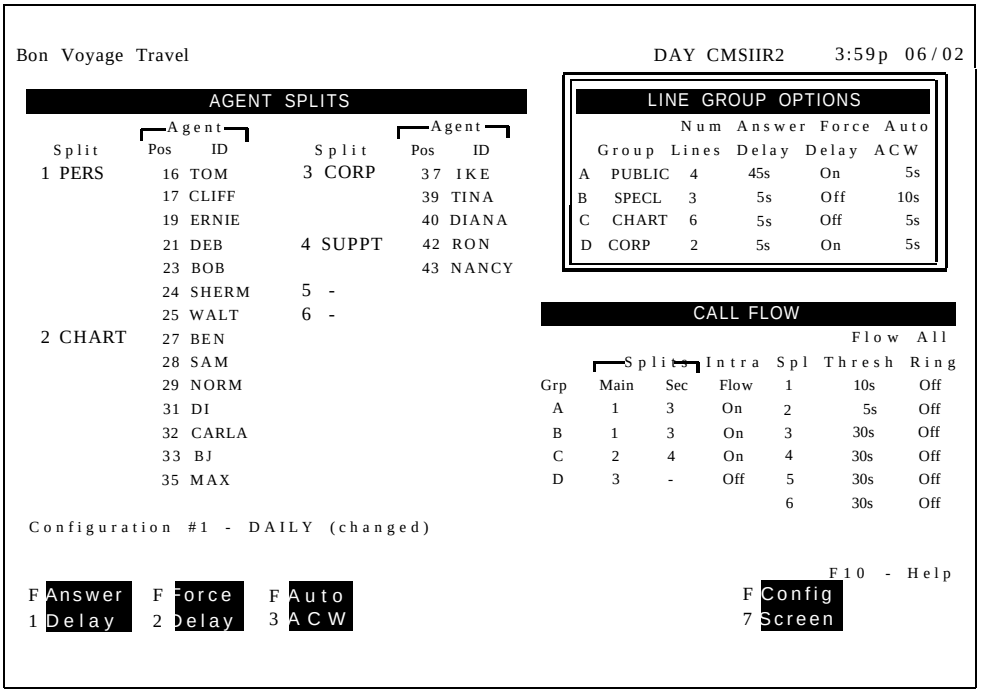
Prompt: **Answer Delay: Group Letter:_ How Many Seconds:_**

Action:

1. Enter a group letter.
2. Enter the number of seconds (O through 99) you want calls to ring before CMS answers them.
3. Press [F8] (labeled "Enter Data"), and the new data will be displayed.

The first screen shows the group letter and number of seconds entered on the prompt; the screen following shows the new time for the group.





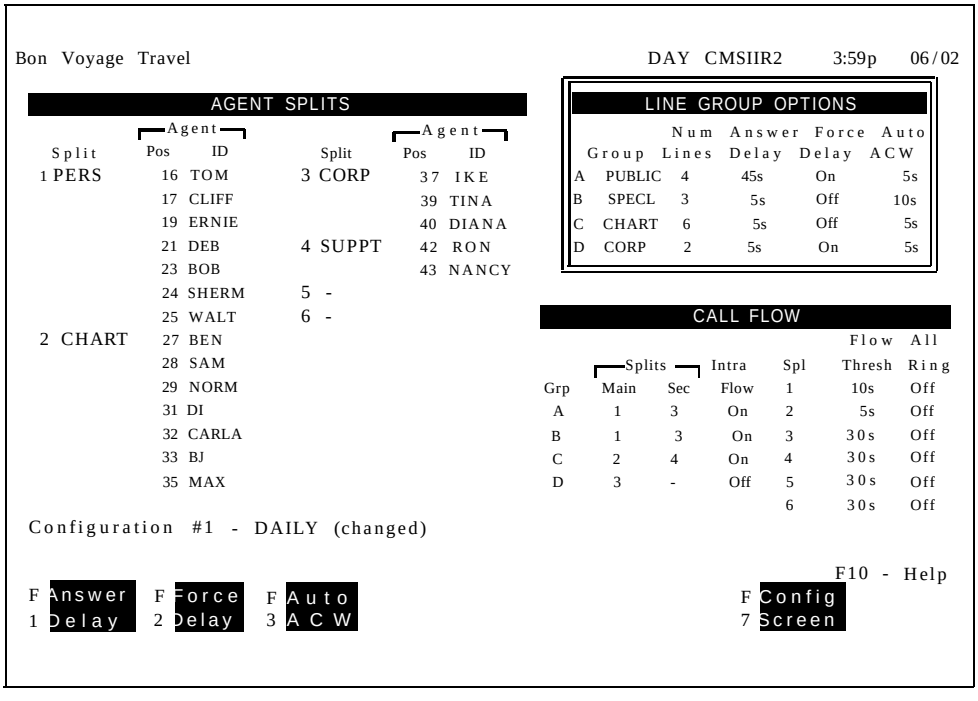
FORCE DELAY

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 group will not be transferred to an agent until callers have heard the entire message. If it is off, they will be transferred to an agent as soon as one becomes available. If answer delay is set to zero and force delay is on, all incoming calls will connect directly to the message.

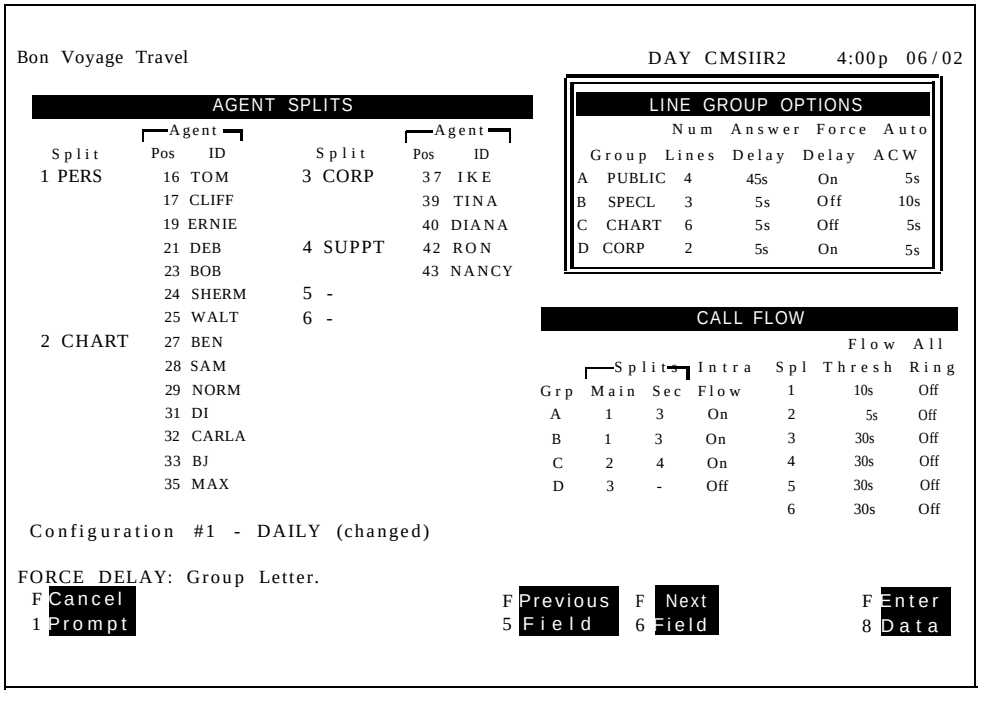
Remember that the force delay option can sometimes cause calls to backup, especially if your delay message is long.

Example

Pressing [F2] (labeled "Line Groups") from the Configuration screen selects the line group function. A box appears around the line group area of the Configuration screen and a different set of function keys appears at the bottom of the screen. Refer to the following example.



To change force delay for any line group, press [F2] (labeled "ForceDelay") and the following screen with the force delay prompt appears:



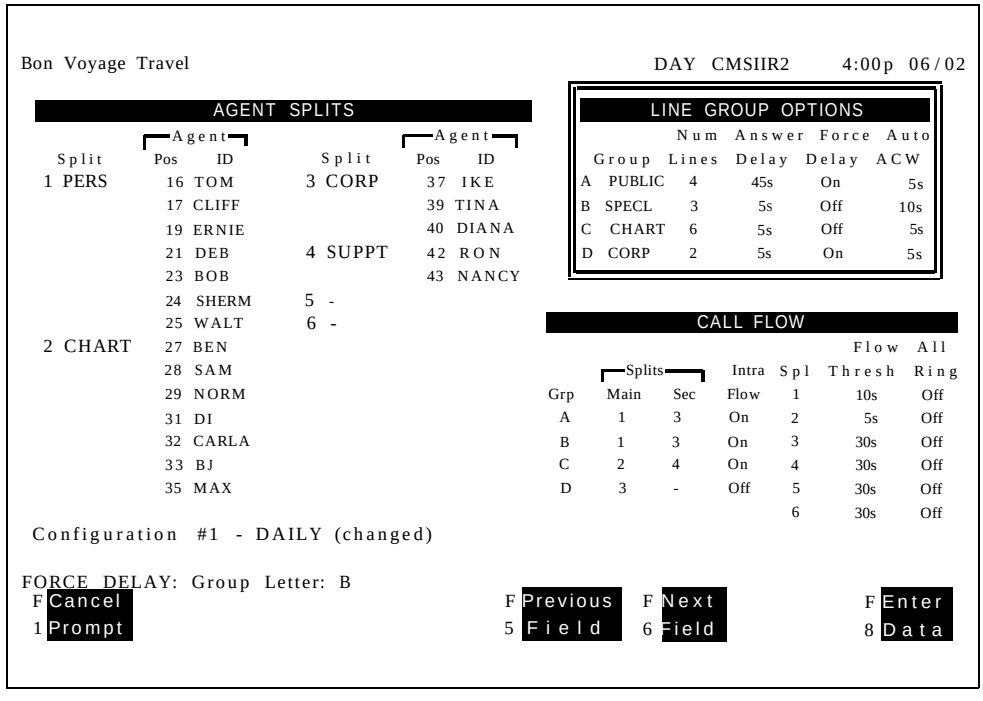
To change force delay for any line group, respond to the prompt:

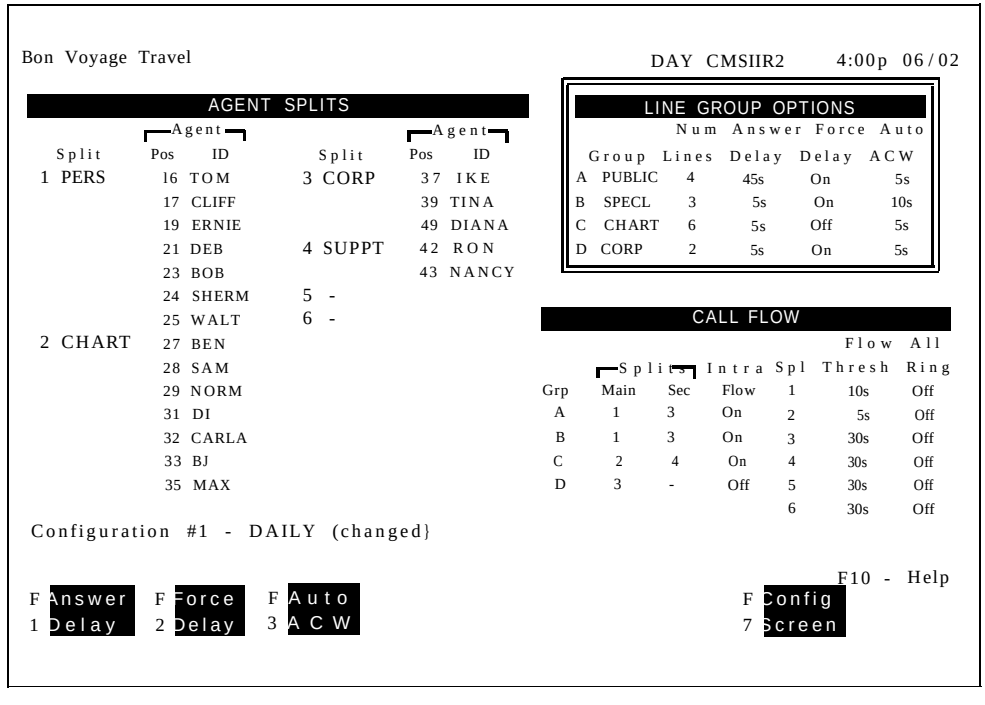
Prompt: **Force Delay: Group Letter:_**

Action: **1** Enter a group letter.

2 Press [F8] (labeled "Enter Data"), and the new data will be displayed.

The first screen shows the group letter entered on the prompt; the screen following shows the force delay turned on after the data was entered.





AUTOMATIC ACW

The automatic ACW option controls the length of after-call-work time, from O to 999 seconds. If 0 time is designated for a line group, the Auto ACW feature is not in effect.

Pressing [F2] (labeled "Line Groups") on the Configuration screen, and ([F3] (labeled "Auto ACW") on the subsequent screen provides the prompt and function keys to administer for Auto ACW.

The line group letter and the number of seconds that an agent requires to complete any after-call work should be entered in the appropriate fields of the prompt. Pressing [F8] (labeled "Enter Data") enters the data for the line group.

When an agent completes an ACD call, the voice terminal will change to the Auto ACW state for the number of seconds specified for that agent's line group. If the value is changed while agents are in the Auto ACW state, the old value remains in effect for those current calls. The new value takes effect on agents entering Auto ACW after the value was changed.

Example

pressing [F2] (labeled "Line Groups") from the Configuration screen selects the line group function. A box appears around the line group area of the Configuration screen and a different set of function keys appears at the bottom of the screen. Refer to the following example.

Bon Voyage Travel DAY CMSIIR2 4:00p 06/02

AGENT SPLITS

Split	Agent Pos	Agent ID	Split	Agent Pos	Agent ID
1 PERS	16	TOM	3 CORP	37	IKE
	17	CLIFF		39	TINA
	19	ERNIE		40	DIANA
	21	DEB	4 SUPPT	42	RON
	23	BOB		43	NANCY
	24	SHERM	5 -		
	25	WALT	6 -		
2 CHART	27	BEN			
	28	SAM			
	29	NORM			
	31	DI			
	32	CARLA			
	33	BJ			
	35	MAX			

LINE GROUP OPTIONS

Group		Num Lines	Answer Delay	Force Delay	Auto ACW
A	PUBLIC	4	45s	On	5s
B	SPECL	3	5s	On	10s
C	CHART	6	5s	Off	5s
D	CORP	2	5s	On	5s

CALL FLOW

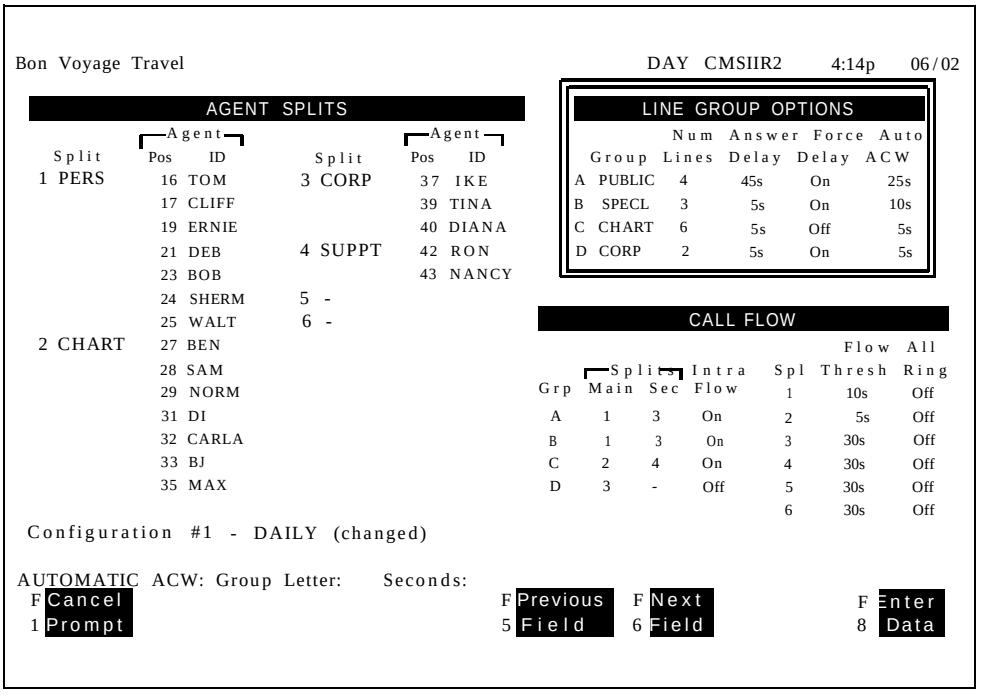
Grp	Splits Main	Splits Sec	Intra Flow	Spl	Flow Thresh	All Ring
A	1	3	On	2	5s	Off
B	1	3	On	3	30s	Off
C	2	4	On	4	30s	Off
D	3	-	Off	5	30s	Off
				6	30s	Off

Configuration #1 – DAILY (changed)

F10 - Help

F1 Answer Delay F2 Force Delay F3 Auto ACW F7 Config Screen

To change Auto ACW for any line group, press [F3] (labeled "Auto ACW") and the following screen with the Auto ACW prompt appears:



To change Auto ACW for any line group, respond to the prompt:

Prompt: **AUTOMATIC ACW: Group Letter:_ Seconds:_____**

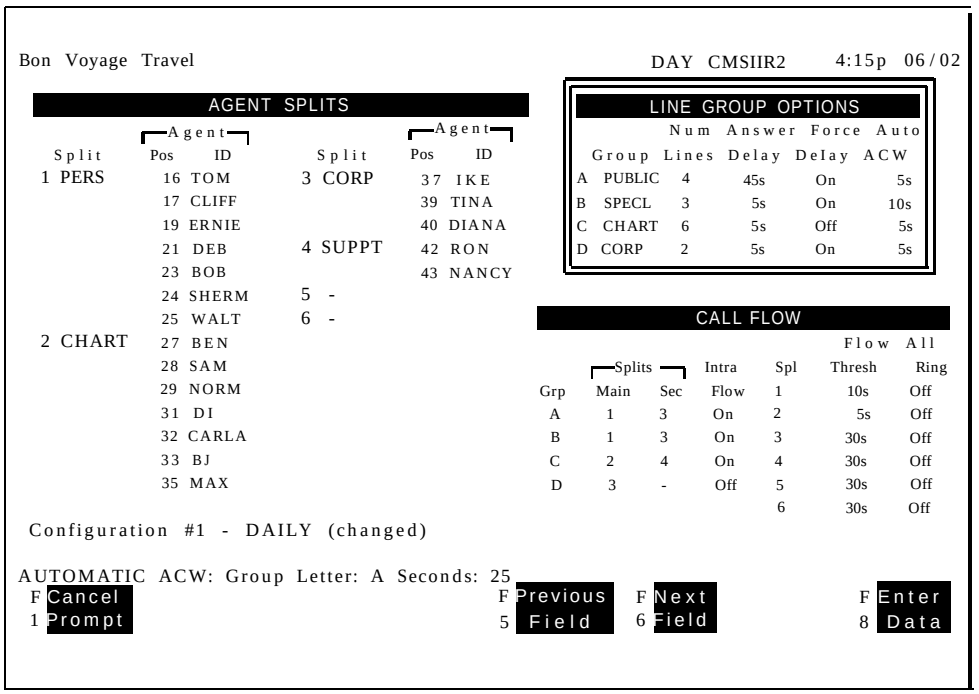
Action:

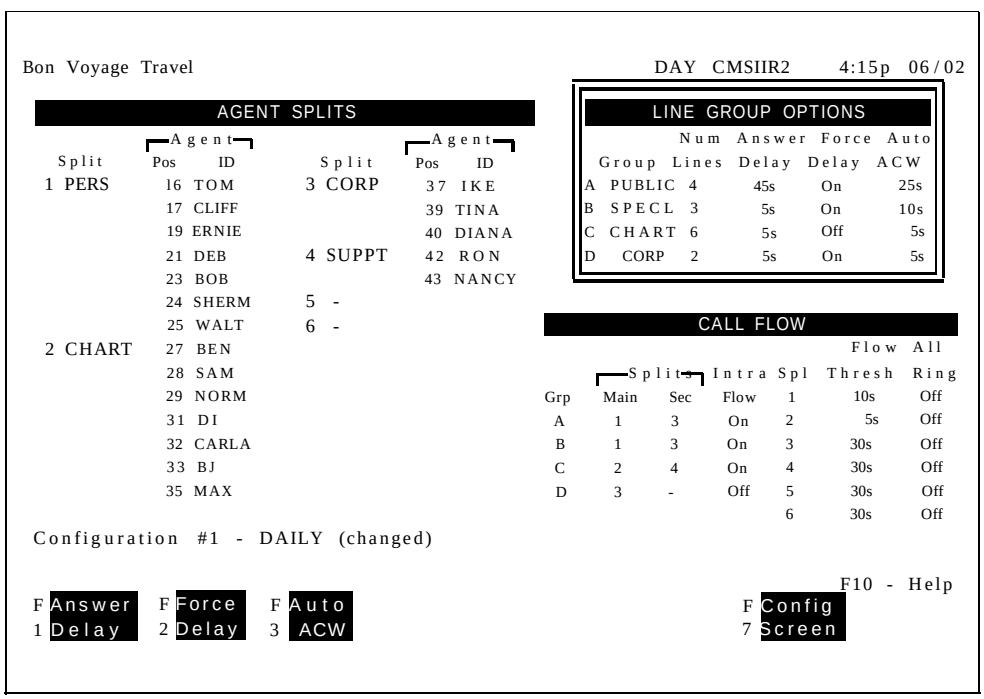
1 Enter a group letter.

2 Enter the number of seconds (O through 999) you want for the agent to be in the automatic ACW state upon completion of a call.

3 Press [F8] (labeled "Enter Data"), and the new data will be displayed.

The next screen shows the data entered in the prompt; the screen following shows the data entered for the appropriate line group.

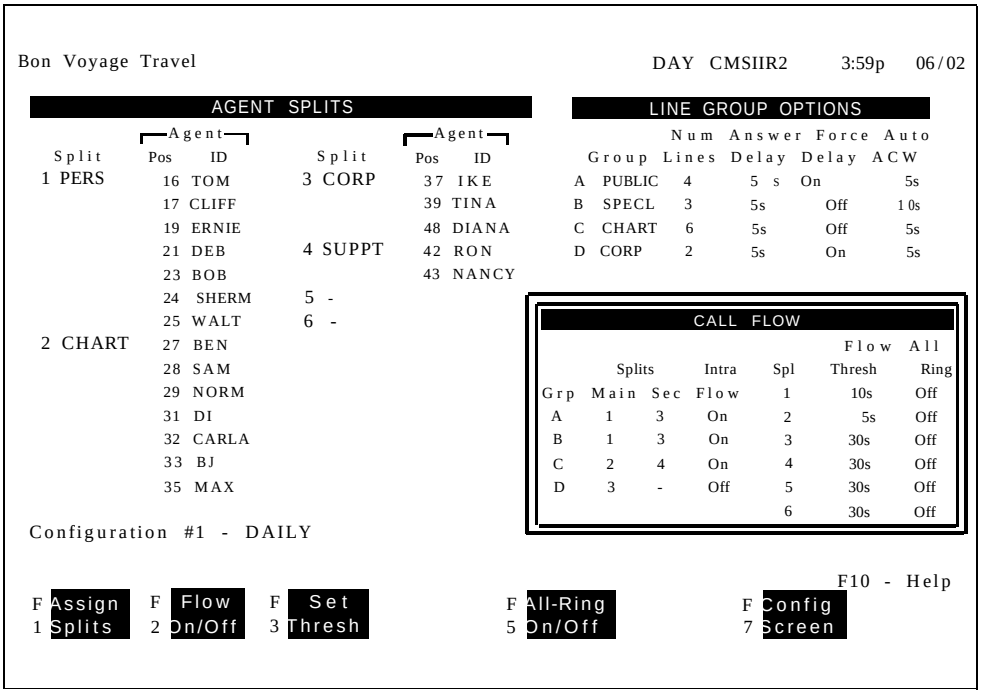




Reconfiguring Call Flow

If you experience unexpected changes in call traffic, you may need to reconfigure call flow assignments in the current 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 reconfiguration screen selects the Configure Call Flow screen shown below. It looks the same as the

Configuration screen, except a box appears around the Call Flow area and the function key labels change.



Use the Configure Call Flow screen to set thresholds for intraflow, assign splits to line groups, and turn intraflow on or off. You can also change Ail-Ring operation from this screen. In splits that have All-Ring operation, every call rings at every agent's voice terminal.

To reconfigure call flow or change Ail-Ring operation, press the function key for the activity you want to perform:

[F1] **Assign Splits.** Use this function key to assign main splits and secondary splits to line groups. If you do not want to assign a secondary split, enter a hyphen instead of a split number. For more information on assigning splits, see "Administering Call Flow" in Section 4.

Prompt: **ASSIGN SPLITS: Line Group Letter: _ Main Split #:_ Secondary Split #: _**

Action:
1. Enter a line group letter (A through D).
2. Enter a main split number (1 through 6).
3. Enter a secondary split number (or a hyphen).
4. Press [F8] (labeled "Enter Data").

[F2] **Flow On/Off.** Use this function key to turn intraflow on or off for a particular line group. A line group's intraflow status appears in the Intraflow column of the Call Flow area of the screen.

Prompt: **CHANGE INTRAFLOW: Line Group Letter: _**

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 Off to On or vice versa.

[F3] **Set Thresh (Set Intraflow Threshold).** Use 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. You may need to set an intraflow threshold for both main splits and secondary splits. The initial setting is 30 seconds. For more information on intraflow and intraflow thresholds, see "Administering Call Flow" in Section 4.

Prompt: **SET INTRAFLOW THRESHOLD: Split #_ Threshold (seconds):___**

Action:
1 Enter a split number (1 through 6).

2 Enter a number of seconds from O through 999.

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

[F5] **All-Ring On/Off.** Use this function key to change a split from All-Ring operation to normal ACD operation, or vice versa. In the All-Ring column of the Call Flow area of the screen, On indicates a split has All-Ring operation, and Off indicates normal ACD operation.

> **NOTE:** If you turn on All-Ring operation for a split, you must assign a "ghost" agent as the only member of the split. All your "real" agents should have a Cover button for the "ghost" agent. If you change a split from All-Ring operation to normal operation, remove the "ghost" agent and add the real agents to the split. (For more information on All-Ring operation, see "All Ring Operation" in Section 6, "Handling CMS Calls. "

Prompt: **CHANGE ALL-RING OPERATION: Split #__**

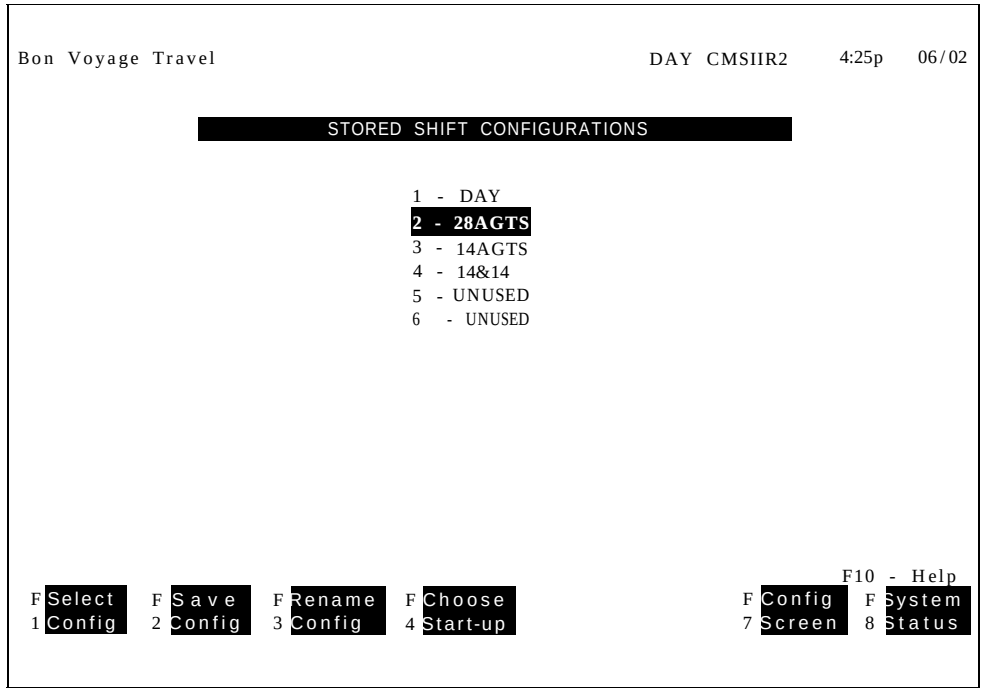
Action: Enter a split number (1 through 6)

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

[F7] **Config Screen.** Press this function key to return to the Configuration screen.

Using the Stored Shift Configurations Screen

The Stored Shift Configurations screen, shown below, is very similar during call management and administration.



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 **(changed)** appears to the left of that configuration number. If you have chosen a configuration to be invoked automatically when you start call management, the words **(startup default)** appear next to that configuration name.

During call management, you can perform these activities with the Configuration List:

- Select a shift configuration for call management or change from one configuration to another.
- Save the changes you made during dynamic reconfiguration.
- Rename a configuration.
- Choose a startup configuration.

To use the Configuration List, press the function key for the activity you want to perform:

[F1] **Select Config.** Use this function key to select a shift configuration for call management or to change from one configuration to another.

Prompt: **SELECT CONFIGURATION: Config #: _**

Action: Enter a configuration number (1 though 6)

Press [F8] (labeled “Enter Data”).

If you are changing from one shift configuration to another, calls are handled as follows during the change:

- If you have made changes during dynamic reconfiguration, you are prompted to choose whether you want to save the changes. If you do not save the new configuration, it will revert to the last saved configuration.
- Calls currently waiting for agent splits are placed in a temporary queue. The time of arrival for each call is saved.
- All new calls that ring are connected to the delay message and then placed in the temporary queue.
- All ACD calls connected to agents (in-progress calls) are considered "completed" (for the purpose of report statistics) at the time of the request to select a new configuration.

The new configuration is activated as follows:

- 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 are handled normally. If no agent is available, the call is connected to the delay message and routed to the appropriate queue.

> **NOTE:** All agents in the new configuration are automatically placed in the logged out state and must make themselves available to take CMS calls by touching the Available button.

[F2] **Save Config.** Use this function key to save any changes you made in the current 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 under a previously unused configuration number or store it in place of another configuration.

Prompt: **SAVE CONFIGURATION: Into 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 an unused configuration number and press [F8] (labeled "Enter Data") to save the edited configuration under a different configuration number.

2 A second prompt appears:

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

Type *y* to confirm your request or *n* to deny it. Press [F8] (labeled "Enter Data").

[F3] **Rename Config.** Use this function key to name or rename a configuration. Configuration names can be up to 10 letters, numbers, or special characters. Spaces are not allowed, so you may want to use underscores instead. Remember that if you rename a configuration "UNUSED," the system deletes the configuration.

Prompt: **RENAME CONFIGURATION: Config #:_**
New Name: _____

Action:
1. Enter the configuration number (1 through 6).
2. Enter the new name (up to 10 letters, numbers, or special characters),
3. Press [F8] (labeled "Enter Data").

[F4] **Choose Startup.** Use this function key to select a shift configuration to be invoked automatically during the CMS startup procedure. Don't select a startup configuration, however, if you want to choose a configuration each time you begin call handling.

Prompt: **CHOOSE STARTUP CONFIGURATION: (Enter '-' for none) Config #: _**

Action:
1. Enter a configuration number, or enter a hyphen if you do not want a startup configuration.
2. Press [F8] (labeled "Enter Data"). The words **(startup default)** appear next to the configuration you selected.

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 calls to agents. During Night Service, CMS answers incoming calls, connects them to the voice announcement unit, and disconnects the calls after the message is over.

You may want callers to hear a different message at night or on weekends than they might hear during the day. A typical Night Service message is "Thank you for calling Bon Voyage Travel. We are closed now. Please call again between 8 a.m. and 5 p.m. any weekday."

When you start CMS, it is automatically in Day Service mode. You can change from Day Service to Night Service (and vice versa) only when CMS is managing calls.

Change Day or Night Service from the System Status screen by pressing [F1] (labeled "Day/Night"). Then continue with the instructions below for the mode you have selected. A description of system status during Night Service follows the procedure for selecting Night Service.

To change from Day Service to Night Service:

Prompt: **DAY/NIGHT: Change to Night Service? (Y/N): _**

Action:

1 Type *y* to change to Night Service.

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

CMS stops answering calls, and the following prompt appears on the prompt line:

Change to Night Message and Press Any Key to Start Night Service.

3 Change to the night message on the voice announcement unit, and press any key to start Night Service. A message stating that Night Service is in effect will be displayed.

Incoming calls are connected to the night message and then disconnected. The word NIGHT appears to the left of the CMS version on the ID line.

4 Press a function key to select another activity or screen.

Change Day or Night Service from the System Status screen by pressing [F1] (labeled "Day/Night"). Then continue with the instructions below for the mode you have selected. A description of system status during Night Service follows the procedure for selecting Night Service.

To change from Night Service to Day Service:

Prompt: **DAY/NIGHT: Change to Day Service? (Y/N): _**

Action:

1 Type *y* to change to Day Service or type *n* to keep the system in Night Service.

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

3 If you typed y to change mode, the prompt line reads:

change to Day Message and Press Any Key to Start Day Service.

When the prompt appears, the system 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.

When you change to the day message and press any key, 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 on the ID line. When call management begins, all agents in the configuration are automatically in the logged out state, To become available to answer calls, they must touch their Available button.

4 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, the screens show only Night Service data.

The System Status screen shows Night Service data for the number of busy lines and calls waiting. It shows agent status as “0th” if agents are on other than CMS calls, and as “Out” if agents are in night state. Time spent in night state is not counted as time logged in for reporting purposes.

The Split Status screen shows data for any “Other” calls placed during Night Service, and shows the appropriate agent status (”OtherCall” or “Night”) for each agent.

You can also access configuration screens during Night Service. Any changes you make on these screens do not influence Night Service operation, but do affect the last active configuration. If you return to Day Service, any changes you made and saved in the last active configuration will be in effect.

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 administrator at Bon Voyage Travel interacts with the system during a typical day.

THE ADMINISTRATOR'S ACTIVITIES AT BON VOYAGE TRAVEL

At 9 a.m. each business day, Pat Payne switches on Bon Voyage's PC and starts managing calls with the weekday configuration. All agents are automatically in the logged out state when call management begins. Pat uses the MERLIN II system Group Page feature to ask the agents in some splits to touch the Available button on their voice terminals to signal they are available to begin answering calls. Another split is using a line group with Auto ACW; they automatically become available when the calls start coming in.

Pat performs several dynamic reconfiguration activities during the day. First, Pat removes Tom Baker from his position in the Personal Travel split because he is on vacation. He moves a new agent into Tom's position in that split, and tells the agent to move himself to the Available state.

As the peak calling hour approaches, Pat turns on intraflow for the Public line group. Pat uses the Group Page feature to tell 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 takes time out from other work to monitor the System Status screen, the Line Status screen, and the Split Status Information screen. He can use the [↑] - [Prt Sc] keys to print any of these screens if he wants to. 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.

Pat has set an external alert to be triggered whenever more than three calls are waiting. This way he can be immediately aware of this condition no matter where he is in the room. Also, agents are immediately aware of this condition and know, without Pat telling them, that they have to move on to the next calls quickly. Pat does have to take time out from other work to tell them.

When Pat notices that three calls are waiting in the Charter Travel main split, and there have been several abandoned calls. Pat turns on intraflow to allow waiting calls to be sent to the Corporate Travel split (the secondary split for the Charter line group). Pat also increases the answer delay (the length of time calls ring before CMS answers them) so callers will spend a little less time on hold.

Pat has a new agent in the Corporate Travel split, Yesterday, Pat spent time with the new agent, explaining the voice terminal features he'll be using. As the new agent answers CMS calls for the first time, Pat watches the Split Status screen to see when the new 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. He prints some of the daily reports to review hourly call activity for the day and prints cumulative daily and hourly reports to help develop a CMS profile for his business.

The Events Log Report lists many occurrences of the all lines busy exception, which signifies that many people hear a busy signal when they call. Pat can use exception information like this to see if more lines should be added to some line groups.

When a call comes into CMS, 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 available the longest. After answering the call, the agent may need to:

- Transfer calls to another split or agent
- Call another split for information
- Contact the supervisor for help

When the transaction 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 problems, it is important that they understand how to use the MERLIN II system voice terminals and features. In most cases, you, as the CMS supervisor, will be the person responsible for teaching the agents how to use the voice terminal and the one whom agents will call if problems arise. This section will help you understand how you and the agents in your CMS can use the MERLIN II system voice terminals and features for the most effective call management.

If the agents in your CMS have questions about handling calls, you may refer them to this section of the system manual, or you may want to photocopy this section and share the copies with your agents. Your CMS agents should also be given a *MERLIN II Communications System User's Card for the Call Management System.*

This section contains the following information about the role of the CMS agent:

- **The MERLIN II System Voice Terminal.** Describes the types of analog and digital voice terminals that your agents can use and the arrangement of line and feature buttons on these voice terminals.
- **Selecting a Voice Terminal for Your Agents.** Helps you determine the size of voice terminal your agents need by listing the lines and/or line pools and the features agents usually need.
- **Programming a Voice Terminal.** Gives the procedure for programming an agent's voice terminal.
- **Announcing Availability for CMS Calls.** Describes how agents make themselves available for CMS calls and enter the after-call-work state and the logged out state.
- **Using MERLIN II System Features with CMS.** Describes the features that CMS agents most often use and gives procedures for using each feature.

The MERLIN II System Voice Terminal

The MERLIN II system voice terminal provides the user with basic telephone functions, such as Transfer and Hold. However, in order for the agents to use the Available and after-call-work (ACW) state buttons, and the Manual Signaling, Auto Intercom, Transfer-to-Split, and All-Ring operation features, either you or the agent must program them onto an agent's voice terminal.

There are two basic types of voice terminals, analog and digital. You may have either or both types in your system. The voice terminals come in different sizes, with various special features and accessories, Use only those voice terminals with programmable buttons.

You can use the following types of analog voice terminals with your CMS:

- BIS-10 Voice Terminal
- 10-Button Hands-Free Answer on Intercom (HFAI) Voice Terminal
- 34-Button Built-In Speakerphone (BIS) Voice Terminal
- 34-Buttcm Deluxe Voice Terminal

You can also use the following digital voice terminal with your CMS:

- 7406 Digital Voice Terminal

NOTE: Although you can attach a display unit to the 34-button BIS and the 7406 voice terminals, a display is not recommended for CMS agents' voice terminals.

The Analog Voice Terminal

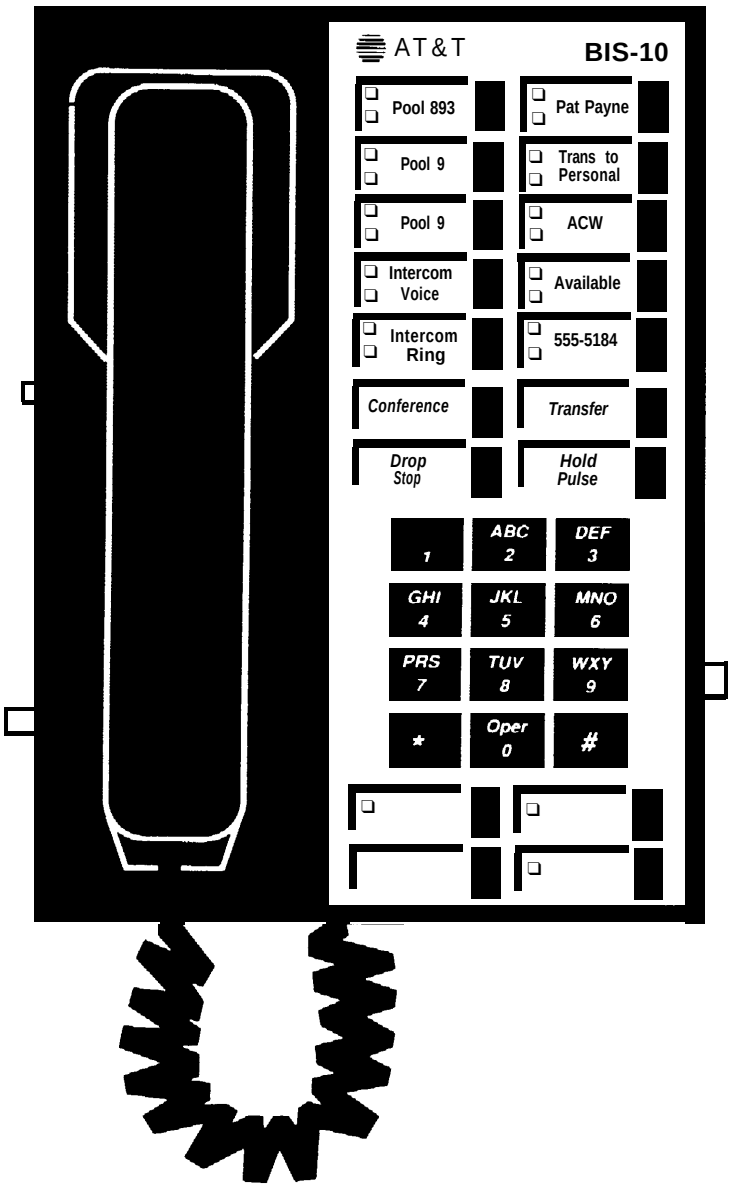
All analog voice terminals have two Intercom buttons, Intercom-Ring and Intercom-Voice. The voice terminals also have buttons with red and green lights beside them that can be used for lines, line pools, or programmable features.

Figure 6-1 shows a BIS-10 analog voice terminal. Although your own agents' voice terminals may have a different number of buttons or have push buttons beside each labeled button, the lines and features you assign to your agents' voice terminals will probably be similar to the voice terminal assignments shown in Figure 6-1.

The BIS-10 voice terminal has two columns of five buttons located above the dial pad. In the lower leftmost column are two Intercom buttons, Intercom-Voice and Intercom-Ring. The other eight buttons can be used for lines, line pools, or programmable features. The diagram illustrates the voice terminal buttons, lights, and switches that an agent can use to access MERLIN II system and CMS features. For more information about some of the features shown in this illustration, see both "Selecting a Voice Terminal for Your Agents" and "Using MERLIN II System Features with CMS" in this section.

NOTE: The All-Ring operation is unrelated to the MERLIN II system No Ring feature. See "Ringing Options" later in this section.

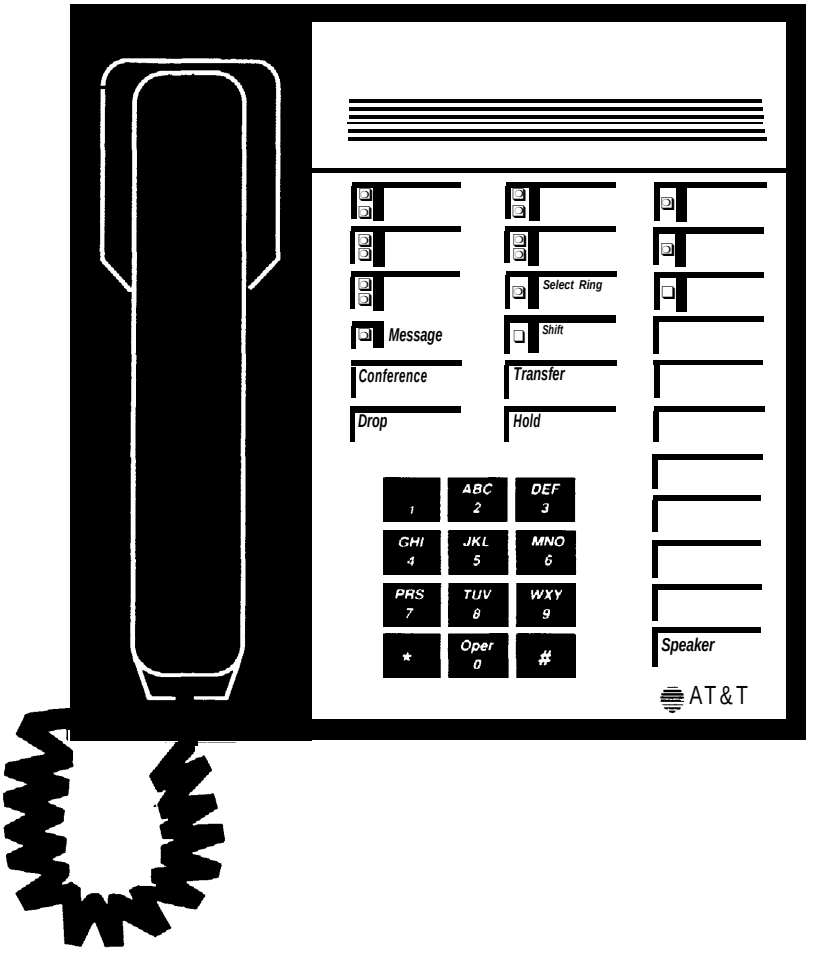
FIGURE 6-1 The BIS-10 Voice Terminal.



Your agents may use a 7406 digital voice terminal. The 7406 voice terminal has three columns of buttons. (See Figure 6-2.) The lower two buttons in the leftmost column are reserved for intercom calls. The top button in the leftmost column and the second button from the top in the middle column are used for line buttons in a square system or line pool buttons in a pooled system. The top button in the middle column can be used for a line, line pool, or a programmable feature.

Below the two line or line pool buttons in the middle column are the Shift button and a programmable button with the Select Ring feature preassigned on it. You can use the Shift button to program two features on any of the seven buttons without lights to the right of the dial pad. The three top buttons in the right column can be used for features that require lights, such as Available and ACW. Figure 6-2 identifies the components of the 7406 digital voice terminal. For more information about some of the features shown in the illustration, see both "Selecting a Voice Terminal for Your Agents" and "Using MERLIN II System Features with CMS" in this section.

FIGURE 6-2 The 7406 Digital Voice Terminal.



Selecting a Voice Terminal for Your Agents

Your agents' voice terminals may need the following types of buttons:

- Line and/or line pool buttons
- Available and after-call-work state buttons
- Auto Intercom and/or Manual Signaling buttoms
- A Cover button for the Transfer-to-Split and All-Ring operation features

The following information briefly describes each of these line and feature assignments and ways in which your agents can use them. This information should help you decide the number of but-tons with lights your agents' voice terminals will need and, in turn, help you determine the size of the voice terminal that you should assign to each agent. This part also suggests some features that help make call management more efficient.

You can use this part of the system manual in a couple different ways:

- If you have already designated on the Voice Terminal Configuration Forms the lines or lines pools and programmed features that will be assigned to each voice terminal button (directions for filling out the forms are in the *MERLIN II Communications System Planning Guide for the Call Management System),* you may want to take the forms out now and review them. Then refer to this part of the system manual when you want to change the button assignments on an agent's voice terminal or when you need to assign lines and features to a new agent's voice terminal.
- If you have not filled out the Voice Terminal Configuration Forms, read this part carefully and complete the forms now. Then use this part of the system manual later to help you change voice terminal feature assignments or assign lines and features to voice terminals you add to your CMS.

LINE BUTTONS

You and your MERLIN II system administrator have the responsibility of assigning appropriate lines and/or line pools for each split. Refer to the CMS planning forms found in the CMS Planning Guide and to the System Configuration Forms in the *MERLIN II System Manual* as you perform line administration.

Your CMS lines can be set for either pooled or square operation. The way in which you assign lines and/or line pools to your agents' voice terminals depends on how your system is set up. The following information will help you assign lines and/or line pools to your agents' voice terminals. Read the suggestions below that pertain to your system.

Pooled System

If your system is configured with line pools, all voice terminals will automatically have two buttons for the main pool. All calls transferred to CMS agents arrive on the two main pool buttons. On an analog voice terminal, these two pool buttons are located above **Intercom-Voice.** On a digital voice terminal, the two main pool buttons are located on the top button in the leftmost column and the second button from the top of the middle column. See Figures 6-1 and 6-2.

Each CMS line group should be assigned to a separate line pool in order to prevent people not working with CMS from placing or receiving calls on those lines. CMS lines should *not* be placed in the same line pool as lines not assigned to CMS.

All CMS lines and line pools on an agent's voice terminal should be set to No Ring. (See "Ringing Options" later in this section.) Intercom calls and calls transferred to the agent's voice terminal by CMS or another agent will still ring.

Square System

If your system is set for square operation, each line that you assign to an agent's voice terminal appears on a separate button. Any lines an agent is responsible for *must* appear on the agent's voice terminal so that the agent can receive incoming or transferred calls on those lines.

All CMS lines and line pools on an agent's voice terminal should be set for No Ring. (See "Ringing Options" later in this section.) Intercom calls and calls transferred by CMS or other agents still ring at the agent's voice terminal.

A NOTE ON GHOST VOICE TERMINALS

In order for agents to use the All-Ring operation or Transfer-to-Split feature, either you, as the CMS supervisor, or the MERLIN II system administrator must assign a "ghost" voice terminal for each split that needs to use these features. The "ghost" voice terminal should be assigned a valid and unused 2-digit intercom number. However, you *do not* need to connect a voice terminal to the voice terminal jack. Your MERLIN II system administrator must also assign the proper CMS lines and line pools to the "ghost" voice terminals and program those lines and line pools for No Ring. Agents who need to use either the All-Ring operation or Transfer-to-Split feature must have on their voice terminals a Cover button programmed for the "ghost" voice terminal.

MANUAL SIGNALING AND AUTO INTERCOM BUTTONS

If a problem occurs, the agent may need to contact you for help. The agent can have *either* a Manual Signaling *or* an Auto Intercom button for that purpose. An agent may also want to have an Auto Intercom button for a co-worker in the MERLIN II system or for another split.

> **NOTE:** An agent *cannot* have *both* a Manual Signaling and an Auto Intercom button for the same person.

Auto Intercom Buttons

An auto intercom button allows a person to touch a programmed button to call someone within the MERLIN II system. An agent will probably need two types of Auto Intercom buttons:

- **An Auto Intercom button for the supervisor or a co-worker.** An agent can contact you or another co-worker with a Manual Signaling or an Auto Intercom button. When the agent needs to call someone in the MERLIN II system, he or she can just touch that person's Auto Intercom button. (See the note below.) If the agent has a call in progress, he or she can put the current call on hold and touch the Auto Intercom button for the person he or she wants to call.

- **An Auto Intercom button for another split.** Splits that need to transfer calls to other splits may want an Auto Intercom button for the intercom numbers of the "ghost" voice terminals of each of the splits they transfer calls to. See "A Note on Ghost Voice Terminals." For this purpose, you should give the intercom numbers of the "ghost" voice terminals to the agents who may need to call or transfer a call to the split. The agent can dial the intercom number for the "ghost" voice terminal assigned to the split or program the intercom number on an Auto Intercom button. (See the note below.) The Auto Intercom button should be labeled with the name of the split such as "Service."

  NOTE: In order for agents to transfer calls with one touch (the agents merely touches an Auto Intercom button in order to transfer a call), the system administrator must have set the system for One-Touch Transfer. If not, the agent needs to touch **Transfer** before touching the Auto Intercom button of the person to whom the call is to be transferred.

Manual Signaling

Rather than use an Auto Intercom button to contact you, an agent may choose to use a programmed Manual Signaling button instead. By touching the Manual Signaling button, the agent can generate a beep at your console. The agent can also use the Manual Signaling button to place an intercom call. The button should be labeled "Signal" plus the name of the person the agent wants to signal, such as "Signal Supervisor."

COVER BUTTONS FOR TRANSFER-TO-SPLIT

If you decide that a split needs to be able to receive transferred calls, up to six agents in the split can have on their voice terminals a Cover button for a "ghost" voice terminal that you have associated with the split. (See "A Note on Ghost Voice Terminals" earlier in this section.) When an agent transfers a call to another split, it rings at all those voice terminals that have a Cover button for that "ghost" voice terminal.

> **NOTE:** Agents' voice terminals in a split that has All-Ring operation already have a Cover button for a ghost voice terminal. If a voice terminal already has a Cover button for All-Ring operation, there is no need to program another for the Transfer-to-Split feature.

When you program a Cover button on an agent's voice terminal for the Transfer-to-Split feature.

- Program the Cover button for the intercom number of the split's "ghost" voice terminal. (See "Programming a Voice Terminal" in this section.)
- Set the Cover button for immediate ring. (See "Ringing Options" in this section.)
- Label the button "Cover" plus the name of the split, such as "Cover Sales."

ALL-RING OPERATION

If agents in a split are frequently away from their voice terminals (for instance, in a warehouse), you can set Up All-Ring operation for that split. Each agent in an All-Ring split needs a special button to receive calls, When a call comes in for the split, it rings at all the voice terminals that have a Cover button for the "ghost" voice terminal, See "A Note on Ghost Voice Terminals." Up to six voice terminals in the split can have an All-Ring operation button.

> **NOTE:** Since both the All-Ring operation and the Transfer-to-Split features require a Cover button for the intercom number of the "ghost" voice terminal assigned to that split, an agent does not need (and cannot have) a button for each feature.

On each agent's voice terminal, you need to do the following:

- Program an All-Ring operation (a Cover) button for the "ghost" voice terminal (See "Programming a Voice Terminal" in this section.)
- Set the All-Ring operation button for immediate ring (See "Ringing Options" in this section.)
- Label the button with the name of the agent split, such as "Service"

If you have more than six voice terminals in the split, the remaining voice terminals can use the Call Pickup feature to pick up the call. For more information about using this feature, see "Using MERLIN II System Features with CMS" in this section.

Programming a Voice Terminal

The MERLIN II system voice terminals come with fixed features agents can use immediately. They must also add features to their voice terminals so that they can announce their availability or unavailability for CMS calls and handle CMS calls more efficiently. Either you or the agent can assign these features to available buttons on an agent's voice terminal by following the basic programming instructions. For more information about MERLIN II system features, see the *MERLIN II System Manual.*

NOTES:
The CMS system cannot be used with the Flexible Numbering feature.

All agents *must* have on their voice terminals a button labeled "Available" for announcing their availability for CMS calls and a button labeled "ACW" that an agent can use when he or she is completing paperwork associated with a previous CMS call. Program these features on buttons with lights.

No one in your CMS should use the Privacy, Do Not Disturb, or the Simultaneous Voice and Data Calls features with CMS.

BASIC PROGRAMMING INSTRUCTIONS

Use the following procedures for programming MERLIN II system features onto an agent's voice terminal.

1 Label the button(s) you want to program.

2 Enter the programming mode in one of the following ways:

- For analog voice terminals, slide the T/P (Test/Program) switch on the left side of the voice terminal to the *P (Program)* position.
- For the digital voice terminals, dial the 3-character code # 33.

  In programming mode, both types of voice terminals ring every 5 *seconds to remind you that you are programming and that you cannot place or receive calls.*

3 Without lifting your handset, touch the button you want to program.

4 Dial the feature's programming code and any other numbers required. See the following chart or refer to the "Quick Reference Guides" in the *MERLIN II System Manual.*

5 If you want to program other buttons, repeat steps 3 and 4.

If you make a mistake when dialing any of the characters, simply touch the button again and redial the programming code and all required numbers.

6 Leave the programming mode in one of these ways:

- For analog voice terminals, slide the T/P switch to the center position.
- For digital voice terminals, dial the 3-character code # 00.

Feature name	Programming code	Notes
Available	*301	Use a button with lights
ACW	*302	Use a button with lights
Auto Intercom	*91 + intercom number	If possible, use a button with lights
Manual Signaling	*6O + intercom number	

Feature name	Programming codes	Notes
All-Ring operation and Transfer-to-Split (a Cover button for the "ghost" voice terminal assigned to that split)	*4O + the intercom number of the split's "ghost" voice terminal	Use a button with lights
Call Pickup	*84	
Group Page	*91 plus one of these codes: 881 for group 1 882 group 2 883 group 3 884 group 4 885 group 5 886 group 6 887 group 7	

Announcing Availability for CMS Calls

During call management, agents assigned to splits in an active configuration can place themselves in one of the following work states:

- **Available state.** When an agent is available for CMS calls, the light next to the Available button must be on.
- **After-call-work (ACW) State.** When an agent is finishing paperwork associated with a previous CMS call, the light next to **ACW** must be on.
- **Logged out state,** If agents are not available for CMS calls and not doing after-call-work, they can place themselves in the logged out state. Agents are placed in the logged out state by CMS when the system starts up, when you, as the supervisor, select a new configuration, or when you move an agent or add him or her to a configuration. Agents can also be placed in the logged out state when they have been in after-call-work state for a period of time that exceeds an administered threshold. When agents are in the logged out state, the lights next to both **Available** and **ACW** are off.

The following chart will help you remember the work states and the corresponding button lights.

CMS work state	Available button light	ACW button light
Available	ON	OFF
After-call-work	OFF	ON
Logged Out	OFF	OFF

For more information about the availability feature and the logged out state, see "Making Agents Available for CMS Calls" in Section 5.

THE AVAILABLE AND ACW BUTTONS

Each agent must have on his or her voice terminal both an Available button and an after-call-oork button. *These two features must be programmed on individual buttons with lights.* Label these two buttons **Available** and **ACW.** For programming directions, see "Programming a Voice Terminal" in this section. The programming codes for these two work state features are:

* 301 for **Available**
* 302 for **ACW**

You *do not* need a button for the logged out state.

> **NOTE:** Since the Available and ACW button lights can be activated even if the agent is not part of an active shift configuration, agents cannot depend on these button lights to know if they are in an active configuration.

ANNOUNCING AVAILABILITY

When call management begins, all agents are automatically placed in the logged out state. The agent must indicate when he or she is available for CMS calls by turning on the light next to **Available.** In order to do this, the agent can

1 Touch **Available.**
*The light next to **Available** goes on.*

An agent uses this procedure whenever the light next to **Available** is off and he or she is available for CMS calls.

> **NOTE:** If agents need to do paperwork associated with the current CMS call, they must turn on the light next to **ACW** *before* hanging up. If they hang up while the light next to **Available** is on, they are available for another CMS call.

ANNOUNCING UNAVAILABILITY

There are two ways that agents can announce that they are unavailable:

- If they are doing work related to a previous CMS call, such as filling out order forms, they are in the after-call-work state.
- If they are on personal time or doing work *not* related to CMS, they are in the logged out state.

For additional information about the logged out state, see "Making Agents Available for CMS Calls" in Section 5.

After-Call-Work State

An agent can enter the after-call-work state by making sure that the light next to the button labeled "ACW" is on.

1 Touch **ACW.**
*The light next to **ACW** goes on.*

If the light next to **Available** is on, the light automatically goes off when the agent turns on the light next to **ACW.**

Logged Out State

Agents can be placed in the logged out state or place themselves there. When an agent is logged out, the lights next to both the Available and the ACW buttons are off.

If the light next to **Available** or **ACW** is on, the agent must turn it off.

1 Touch the button labeled Available or ACW.
The light next to the button goes off.

When the agent is available for CMS calls again, he or she can touch **Available** to turn on the light next to that button.

AUTOMATIC ACW

An enhancement to the ACW state is the **automatic after-call-work (Auto ACW) state.** The agent does not have to touch the voice terminal buttons to determine work states, except to log out. This hands-free operation allows an agent the option of using a headset adapter. The after-call-work state occurs automatically upon completion of a call, and stays in that state until the time administered for the auto ACW state has passed (l-999 seconds). When the specified time has passed, the agent is automatically available to receive the next incoming call for that line group.

If administered, the Auto ACW feature begins working after an agent receives his or her first call. Upon completion of the call, the agent is placed into ACW for the administered time and then returned to the available state automatically. An agent receiving a call from a line group with automatic ACW does not have to touch the ACW button to announce unavailability upon completion of a call. The agent has a set period of time that was administered for the agent's line group for finishing paperwork connected with the previous CMS call.

SUPERVISORY LOGIN/LOGOUT

The supervisor can log an agent in or out from the CMS PC. The agent's voice terminal lights will reflect the work status {either logged out, available, or ACW) set at the PC from the Split Status screen.

If, at any time, the supervisor has determined that the agent has been in one status for too long a period, the supervisor can change that status without the agent having to press any buttons on the voice terminal.

The agent's work status under the "Status" column will change to reflect the status entered.

Error messages are displayed if incorrect or incomplete information was entered at the prompt. If agent is currently on a call, the new status takes effect as soon as the call is completed.

With a MERLIN II system voice terminal an agent can easily place and answer both outside and intercom calls, set up a conference call, transfer calls, and use the Auto Intercom and Manual Signaling features to contact other people in the MERLIN II system. An agent can also choose a ringing pattern that helps identify his or her voice terminal when it rings.

If you or your agents need more information about any of the MERLIN II system features described here, see the *MERLIN II System Manual.*

ANSWERING CMS CALLS

When a CMS call comes in, the CMS automatically distributes the call to an available agent in the appropriate split, according to which agent has been available 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. Agents should be aware that:

- They will receive CMS calls only if the light next to the button labeled Available is on.
- All lines and/or line pools should be programmed for no ring. (See "Ringing Options" in this section.) However, when CMS distributes a call to an available agent, the agent's voice terminal does ring.

  NOTE: Advise agents that even though they may see a light flashing next to a line button, they should not pick up the handset unless the call is ringing at their own voice terminal.

To answer a ringing call, the agent merely has to:

1 Lift the handset or switch on the headset.
The agent is automatically connected to the CMS call.

If a CMS agent does not answer a CMS call within several rings (the number is set by your system administrator), the call returns to CMS. That agent is placed in the logged out state (the light next to Available goes off), and the computer 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 touching **Available.**

When the call is finished,

1 Hang up the handset, or press the switchhook, or switch off the headset.

NOTE: If agents need to complete paperwork connected with a previous CMS call, they must touch the **ACW** button *before* hanging up from the call.

THE MEANING OF THE VOICE TERMINAL LIGHTS

You can check the status of a line by looking at the lights next to the line or line pool button. The following chart will remind you of the meaning of the lights.

Lights	Line status
Red light steady	This is either the line you are now using or the line you will get when you lift your handset.
Green light steady	This is the line that either you or someone else is using.
Green light flashing	This is the line on which a call is coming in.
Green light flashing rapidly	This is the line of a call *you* have put on hold.
Green light flashing slowly	This is the line of a call *someone else* has put on hold from another voice terminal.

PLACING OUTSIDE CALLS

You should restrict your CMS lines to incoming calls. If you want CMS agents to be able to place outside calls, you can assign to all agents' voice terminals a special line not associated with CMS on which agents can place calls to people outside the MERLIN II system.

To place an outside call on a specific line, an agent has to:

1 Touch the line button for the line the agent wants to use.
The red light next to the line button goes on.

2 Lift the handset.

3 Dial the outside number.

If your MERLIN II system lines are pooled, the administrator must specify whether agents should have Button Access or Dial Access to Line Pools. Then the agents can access any of the lines in a particular line pool in either of these two ways:

- Touching a line pool button (Button Access to Line Pools)
- Dialing a code for a specific line pool (Dial Access to Line Pools,

PLACING INTERCOM CALLS

Each voice terminal connected to the MERLIN II system, including your own console and the agents' voice terminals, has its own intercom number. You can dial intercom numbers to place calls to people connected to your system. On all voice terminals in the MERLIN II system you can place two types of intercom calls:

- **Ringing Intercom Calls.** You can place ringing intercom calls when you want to have a two-way conversation with people connected to the MERLIN II system. Your calls ring at the other person's voice terminal, and your co-workers lift their handset to hear you and to talk with you.
- **Announced Intercom Calls.** When you place an announced intercom call, your co-worker hears your voice through the voice terminal speaker, but must lift the handset to respond to you.

If there is someone whom the agent often needs to call (for example, when the agent needs to call you for assistance), the agent can program an Auto Intercom button for the person. When the agent needs to call the person, he or she can just touch that person's Auto Intercom button.

If an agent is using a digital voice terminal, he or she can place both ringing and announced intercom calls, but can receive only ringing intercom calls.

To place ringing intercom calls, the agent must:

1 Touch **Intercom-Ring,**

2 Lift the handset.

3 Dial the intercom number.

To place announced intercom calls, the agent must:

1 Touch **Intercom-Voice**

2 Lift the handset.

3 Dial the intercom number.

4 Listen for a beep, then speak into the handset.

CONFERENCING A CALL

An agent may need to have you or an agent in another split assist in a CMS call. One way of doing this is to ask you or the other agent to join the call in progress.

To establish the conference call, the agent must:

1 Touch **Hold** to put the current call on hold.
The green light next to the held call's line button flushes rapidly.

2 Touch **Intercom-Ring** or **Intercom-Voice.**

3 Dial the intercom number of the person to be added.

4 Announce the call, if appropriate.

5 Touch **Conference.**

6 Touch the line button for the call on hold.

To disconnect a person in a conference call, the agent must:

1 Touch **Drop.**

2 Touch the button of the line to be disconnected.

USING THE MANUAL SIGNALING AND AUTO INTERCOM FEATURES

If agents needs a quick way of contacting you for help or calling another split for information, they can program either a Manual Signaling or an Auto Intercom button for you or another person's intercom number.

> **NOTE:** An agent cannot have both types of buttons for the same person.

Manual Signaling Buttons

When the agent needs to signal you or someone else in the MERLIN II system, he or she can use a Manual Signaling button. You or other person hears a beep and sees the light flashing next to the Auto Intercom button of the agent who is calling. You and the agents in your CMS should have a prearranged meaning for the signal such as "Please pick up on this call.

need help." An agent can also use the Manual Signaling button for placing an intercom call.

If an agent programs this feature on a button with lights, the green light next to the button goes on when you or the other person uses his or her voice terminal.

To signal someone in the MERLIN II system:

1 If the agent has a call in progress, he or she can just touch the Manual Signaling button for you or the other person.

If the agent is not on a call, he or she does not need to lift the handset. The agent can just touch the Manual Signaling button for the person he or she wants to signal.

To place an intercom call using a Manual Signaling button, the agent must:

1 Touch **Intercom-Ring** or **Intercom-Voice.**

2 Lift the handset.

3 Touch the Manual Signaling button for the person to be contacted.

Auto Intercom Buttons

If an agent does not need the Manual Signaling feature to signal you, program an Auto Intercom button instead. An agent can use an Auto Intercom button to call you for assistance, call another split, or transfer a call to another split or to a co-worker.

> **NOTE:** You *cannot* have *both* a Manual Signaling button and an Auto Intercom button for the same person.

The agent can place an intercom call with or without a call in progress.

With a Call in Progress If the agent has a call in progress, he or she can still call you for help. To do so, he or she must do the following:

1 Without hanging up, touch **Hold** to put the current call on hold.
The green light next to the held call's line button flashes rapidly.

2 Touch **Intercom-Ring** or **Intercom-Voice.**

3 Touch the Auto Intercom button for the person to be contacted.

or

Touch the person's Manual Signaling button.

4 Discuss the call.

5 When the agent wants to return to the call on hold, he or she would touch the line button of the held call.

Without a Call in Progress An agent can place *either* a ringing or an announced intercom call to another person in the MERLIN II system.

To place a ringing intercom call with an Auto Intercom button:

1 If the red light next to **Intercom-Voice** is on, touch **Intercom-Ring.**

2 Without lifting the handset, touch the Auto Intercom button for the intercom number the agent wants to dial.
The agent's voice terminal speaker goes on and he or she hears ringing.

3 When the other person answers, the agent can lift the handset.

To place an **announced intercom call** with an Auto Intercom button:

1 If the red light next to it is not already on, touch **Intercom-Voice.**

2 Touch the Auto Intercom button for the intercom number the agent wants to dial.
The agent's voice terminal speaker goes on and he or she hears a beep.

3 The agent can lift the handset and begin speaking.

When a person leaves a call on hold for more than a minute, the voice terminal rings as a reminder.

TRANSFERRING CALLS

After answering a CMS call, the agent may need to transfer the call to another split or to another person in the MERLIN II system. An agent can transfer a call with or without a voice announcement.

Transferring Calls to Another Split

In order to transfer a call to another split, the agent needs to know the intercom number of the "ghost" voice terminal that you have assigned to the split. See "A Note on Ghost Voice Terminals."

If an agent needs to transfer a call to another split, he or she must:

1 Touch **Transfer.**

2 Touch the Auto Intercom button or dial the intercom number of the "ghost" voice terminal assigned to the split to which the call is to be transferred.
The transferred call rings at all the voice terminals that have a Cover button for the "ghost" voice terminal.

NOTE: If the MERLIN II system administrator has set the system for One-Touch Transfer, a person can merely touch the Auto Intercom button of the person or split to which the call is to be transferred. The person transferring the call does not need to touch **Transfer** beforehand.

Transferring Calls to a Person in the MERLIN II System

When an agent needs to transfer a call to you, another agent, or a person in the MERLIN II system, he or she must:

1 Touch **Transfer.**

2 Touch the Auto Intercom button or dial the intercom number of the person to whom the call is being transferred.

NOTE: If the system administrator has set the system for One-Touch Transfer, a person can merely touch the Auto Intercom button of the person or split to which the call is to be transferred. The person transferring the call does *not* need to touch **Transfer** beforehand.

If the agent has a Manual Signaling button for the person, he or she can touch **Intercom-Ring** and then touch the Manual Signaling button.

Transferring Calls with Voice Announcement

An agent can announce a call before transferring it by following this procedure:

1 Touch **Transfer.**

2 Touch **Intercom-Voice.**

3 Touch the Auto Intercom button or dial the intercom number of the person to whom the call is to be transferred.

If the agent has a Manual Signaling button for the person, he or she can touch **Intercom-Voice** and then touch the Manual Signaling button.

4 Announce the call through the handset.

5 Hang up.

USING A COVER BUTTON

To allow agents in other splits to transfer calls, program a Cover button for the "ghost" voice terminal designated for the split, and set it for immediate ring. Label the button "Cover" plus the name of the split, such as "Cover Sales."

When an agent transfers a call to another split, the call rings at all the voice terminals in the split that have a Cover button for the "ghost" voice terminal assigned to that split. The transferred call rings and the green light next to the Cover button flashes until an agent picks up the call. If an agent in the split receiving the transferred call is busy with another call, the light beside the Cover button on his or her voice terminal flashes and the voice terminal gives one transfer ring (two rings).

To answer a call transferred from another split the agent should:

1 Lift the handset.

If the agent is on another call and a Transfer-to-Split call comes in, he or she should:

1 Touch **Hold** to put the first call on hold.
The green light next to the held call's line button flashes rapidly.

2 Touch the Cover button to pick up the new call.

3 Touch the held call's line button to return to the call on hold.

ANSWERING CALLS IN ALL-RING OPERATION

In some offices, agents do not stay by their voice terminals, and thus it is necessary to have all voice terminals ring when a call comes in. For this. purpose, you can use the CMS option, All-Ring operation. Up to six voice terminals in a split can have a programmed All-Ring operation button set for immediate ring. Label the button with the name of the agent split, such as "Service"

When a CMS call comes in, all the voice terminals in the split that have an All-Ring operation button ring and the light beside the button flashes. To answer one of the ringing voice terminals, the agent must:

1 Lift the handset.
The agent is automatically connected to the incoming call.

The agent can also use the Call Pickup feature to pick up the ringing call. In order to use this feature, the agents can use a dial code or a programmed Call

Pickup button. (For information about how to program a Call Pickup button, see "Programming a Voice Terminal" in this section.)

To pick up a call using Call Pickup, the agent must:

1 Touch **Intercom-Ring** or **Intercom-Voice.**

2 Lift the handset.

3 Dial *9.

4 Dial the special intercom number for that split.

or

1 Touch a programmed Call Pickup button.

2 Lift the handset.

3 Dial the special intercom number for that split.

TYPES OF RINGING SOUNDS

You can tell what kind of call you are receiving by the sound of the ring. The following chart will remind you of the different types of calls and their individual ringing sounds.

Type of call	Sound of ring
Ringing intercom	Three rings
Outside (Calls placed on lines other than CMS lines.)	One long ring
Transferred (All CMS calls are transferred calls.)	Two rings

PROGRAMMING PERSONALIZED RINGING

It may be easy for agents to confuse the ring of nearby voice terminals with the ringing sound of their own. Each agent, especially within an individual split, may want to program his or her voice terminal with a ringing pattern that is easier to identify. There are eight different ringing patterns available.

> **NOTE:** Even if you program your voice terminal with its own personalized ring, you can still distinguish between the different kinds of calls.

To program the preferred ringing pattern for a voice terminal:

For an analog voice terminal,

1 Slide the T/P switch to *P*.
You hear the voice terminal's current ring.

2 Touch **Speaker** repeatedly until you hear a ringing pattern you like.

3 Slide the T/P switch to center.

For a digital voice terminal,

1 Touch **Shift.**

2 Touch **Select Ring.**
You hear the voice terminal's current ring.

3 Touch **Select Ring** repeatedly until you hear a ringing sound you like.

4 To save the selected ringing sound, touch **Shift** again.

RINGING OPTIONS

You can determine whether incoming calls ring immediately at a voice terminal or do not ring at all. (With your MERLIN II system, you can also program lines for delayed ringing, but this option is not recommended for CMS.) The following suggestions will help you choose ringing options for line buttons and for Cover buttons for the Transfer-to-Split and All-Ring operation features on an agent's voice terminal.

- All CMS lines on an agent's voice terminal should be programmed for No Ring. This feature prevents all the CMS stations from ringing each time a new call enters the system, Instead, the PC provides the ring for each new call, answers it, and transfers it to the agent's voice terminal, which will ring.
- Lines or line pools used primarily for placing outgoing calls should be programmed for No Ring.
- Cover buttons for the Transfer-to-Split or All-Ring operation feature should be programmed for Immediate Ring.
- Private lines or lines not assigned to CMS can be programmed as needed.

To set ringing options for a voice terminal:

1 For analog voice terminals, slide the TIP switch to *P.*

For digital voice terminals, dial #33.
In programming mode, both types of *voice terminals ring every five seconds to remind you that you are programming and that you cannot place or receive calls.*

2 Touch the line or line pool button which is being programmed for immediate or no ring.

3 Dial one of the following codes for the type of ringing the line or line pool will have:

– Dial *35 for No Ring.
The red light next to the line button goes off.

– Dial *37 for Immediate Ring.
The red light next to the line button goes on steady.

4 Repeat steps 2 and 3 for each line button to be programmed.

5 For analog voice terminals, slide the T/P switch to the center position.

For digital voice terminals, dial #00.

Overview

CMS provides a wealth of Management Information System (MIS) data through both on-line and historical reports. They can help you manage your resources efficiently and keep your costs in line. For instance, you can use reports to forecast staffing needs and determine whether line groups need more or fewer lines.

The reports are generated from historical data stored on the hard disk. You can print reports while CMS is managing calls.

This section is divided into these parts:

- **Types of CMS Reports.** Describes the following MIS reports:
  - Daily Agent Split Summary
  - Cumulative Agent Split Summary
  - Daily Split Report
  - Cumulative Split Report by Day
  - Cumulative Split Report by Hour
  - Daily Line Group Report
  - Cumulative Line Group Report by Day
  - Cumulative Line Group Report by Hour
  - Events Log Report
- **How to Generate Reports.** Describes how to select and print reports.

You can also copy historical data onto floppy disks. For more information, see Section 8, "Archiving Data."

> **NOTE:** When you make certain types of changes in shift configurations, you could affect all the historical data for a line group, agent, or split. These changes include:
>
> - 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
> - Assigning an agent an ID that once belonged to another agent
> - Changing line group IDs or the number of line groups on the Administer Line Groups 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:

- Daily Agent Split Summary
- Cumulative Agent Split Summary
- Daily Split Report
- Cumulative Split Report
- Daily Line Group Report
- Cumulative Line Group Report
- Events Log Report

Daily reports cover one day's activities from 12:00 a.m. through 11:59 p.m. Cumulative reports summarize a specified number of consecutive days as entered by the CMS administrator when requesting reports. In addition, the Cumulative Split and Cumulative Line Group reports can show data summarized by hour or by day, excluding the time when CMS was not being used.

Many of the report statistics are based on activities completed during one particular hour. If a call or after-call-work state is in progress at the end of an hour, those 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 daily reports, the term ACD (automatic call distributor) calls refers to incoming calls on CMS lines that were handled by CMS agents.

The Events Log Report is not a daily report. It lists the 50 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.

Agent Split Summary

DAILY AGENT SPLIT SUMMARY

This report provides summary data on each agent in a given split. CMS provides an Agent Split Summary 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.

Many of the same statistics appear in this report and the Split Report. During Night Service, only data on Day Service calls in progress when Night Service began appear in this report. Time spent in the logged out or night states is not counted on these reports.

> **NOTE:** If an agent seines in two different splits during the same hour, 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.

A typical Daily Agent Split Summary appears below.

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DAILY AGENT SPLIT SUMMARY

SPLIT 2: CHART
Date: 06/10/88

Agent		ACD CALLS: Num ACD Calls	Avg Talk Time	Avg After Call	Avg Work Time	OTHER CALLS: Num Xfr Calls	Num Rfusd Calls	Num Other Calls	Avg Talk Other	% ACD Time	Total Time Staffed
bakerson	tom	27	2:06	0:00	2:06	1	0	21	3:06	16%	6.0hr
claren	clifford	42	1:32	0:00	1:32	7	1	38	2:12	18%	5.9hr
weiss	debra	2	0:35	0:00	0:35	1	2	25	2:53	1%	1.5hr
Split 2 Totals		71	1:43	0:00	1:43	9	3	84	2:53	15%	

Notes

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 MERLIN(r) II CS
Date Printed: 06/10/88 Time Printed: 6:09p

The following list corresponds to the report above.

DAILY ACD CALLS

- **Num ACD Calls.** The number of calls each agent handled while logged into that split. The number includes intraflowed calls and excludes abandoned calls. The number on the summary line is the total number of ACD calls handled by all agents in the split.
- **Avg Talk Time.** The average amount of time an agent spent on each ACD call. Average talk time includes intraflowed calls arid excludes abandoned calls. In the summary line, the average talk time is the average time per call, *not* per agent.
- **Avg After Call.** The average amount of time each agent spent in the after-call-work state (ACW). To calculate this average, the cumulative amount of time the agent spent in the after-call-work state is divided by the number of ACD calls answered by that agent. (If no calls were handled, the average ACW time is set equal to the cumulative ACW time.) In the summary line, the average after call value is the average ACW time per call, not per agent.
- **Avg Work Time.** The amount of time spent on CMS-related work. The average work time equals the sum of average talk time and average after call time.
- **Num Xfr Calls.** The number of ACD calls transferred by each agent in a given split.
- **Num Rfusd Calls.** The number of ACD calls refused by each agent in a given split.

OTHER DAILY CALLS

(These include outgoing calls, incoming calls not related to ACD work, and intercom calls.)

- **Num Other Calls. The** number of "other" calls handled by each agent.
- **Avg Talk Other. The** average amount of time an agent spent on each call designated as *other.* The summary line shows the average amount of time spent per call, *not* per agent.

ADDITIONAL DATA

- **% ACD Time.** The percentage of time the agent spent on CMS-related work, that is, on ACD calls and in the after-call-work state.
- **Total Time Staffed.** The total amount of time the agent was answering calls in a given split for a given day, and under a given ID (rounded to the nearest tenth hour).

  NOTE: Activities in progress at the end of the day are included in the statistics for the day in which the activities were completed. This includes the total amount of time the agent spent on CMS calls, on Other calls, in the Available state, and in the ACW state.

CUMULATIVE AGENT SPLIT SUMMARY

A Cumulative Agent Split Summary report can be generated for any past consecutive period from 2 to 93 days. The information for ACD and other calls as well as additional data will reflect the entire consecutive period specified.

The column headings are the same as that for the Agents Splits Daily report; the data items are summarized or averaged over the entire period specified when the report was generated. A typical Cumulative Agent Split Summary appears below:

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CUMULATIVE AGENT SPLIT SUMMARY

SPLIT 2: CHART
Period: 06/10/88 - 06/13/88

Agent		ACD CALLS: Num ACD Calls	Avg Talk Time	Avg After Call	Avg Work Time	Num Xfr Calls	Num Rfusd Calls	OTHER CALLS: Num Other Calls	Avg Talk Other	% ACD Time	Total Time Staffed
bakerson	tom	243	2:06	0:00	2:06	3	0	21	3:06	16%	76.0hr
claren	clifford	376	1:32	0:00	1:32	21	3	38	2:12	18%	75.9hr
weiss	debra	18	0:35	0:00	0:35	3	6	25	2:53	1%	31.5hr
Split 2 Totals		637	1:43	0:00	1:43	27	9	84	2:53	15%	

Notes

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 MERLIN(r) II CS
Date Printed: 06/13/88 Time Printed: 6:09p

Split Report

DAILY SPLIT SUMMARY

This report shows the statistics for *a particular split* by hour and summarized for 24 hours. Time spent in logout state is not recorded. During Night" Service, only data on ''other" calls are recorded in the Daily Split Report. 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.

A typical Daily Split Report appears below.

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DAILY SPLIT REPORT

SPLIT 2: CHART
Period: 06/10/88

	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 Xfr Calls	Num Other Calls	Avg Talk Other	Avg Num Pos	% ACD Time	Serv Levl
9:00a	8s	0	19	0	0	2:09	0:56	0	0	0:00	2.0	49%	100%
10: 00a	11s	1	24	0	0	1:57	1:19	3	1	3:56	2.0	65%	100%
11: 00a	17s	4	39	0	3	1:34	0:59	3	5	4:01	3.0	55%	85%
10:00p													
11:00p													
	9s	5	82	0	3	1:26	7:02	18	81	1:27	2.3	27%	51%

Note
1. Call statistics are counted in the hour and day in which they complete.

CALL MANAGEMENT SYSTEM FOR MERLIN(r) II CS
Date Printed: 06/10/88 Time Printed: 6:13p

The the following list corresponds to the report above.

TIME

- **Time.** The beginning of the day for which data were collected. Reports are updated on an hourly basis.

  For instance, the data on the 10:00 a.m. line were collected between 10:00 a.m. and 10:59 a.m. Hours in which no agents were handling calls in the split are omitted.

ACD CALLS

- **Avg Speed Ans.** The average speed of answer for all ACD calls answered by the agents in this split during a given hour.
- **Num Calls Aband.** The number of calls abandoned (that is, the caller hung up before an agent answered) during a given hour.
- **Num ACD Calls.** The total number of completed ACD calls (calIs connected to an agent) during a given hour. The number excludes abandoned calls.
- **Flow In.** The total number of ACD calls intraflowed *into* this split during a given hour. The number excludes abandoned calls.
- **Flow Out.** The total number of calls intraflowed *out* of this split and answered by agents in another split. The number excludes abandoned calls.

- **Avg Talk Time.** The average amount of time agents spent connected to each ACD call. The summary line displays the average amount of time per *call,* not per agent.
- **Avg After Call.** The average amount of time agents spent in the after-call-work state per call.
- **Num Xfr Calls.** The number of ACD calls transferred by agents within a given hour, with a total for the day.

OTHER CALLS

(These include outgoing calls, incoming calls not associated with ACD work, intercom calls, and transferred calls from other stations.)

- **Num Other Calls.** The total number of other than ACD calls completed by all agents in the split during a given hour.
- **Avg Talk Other.** The average amount of time spent on other calls.

ADDITIONAL DATA FOR DAILY CALLS

- **Avg Num Pos.** The average number of agent positions staffed during the hour.
- **% ACD Time.** The percentage of time agents spent on CMS-related work (that is, their talk time on ACD) calls and their after-call-work time).
- **Serv Levl.** The percentage of ACD calls that were connected to agents within the service level limit.

  NOTE: Calls in progress at the end of an hour are included in the statistics for the hour in which the calls were completed.

CUMULATIVE SPLIT REPORT BY DAY

A Cumulative Split Report by Day is a summary report that can be generated for any consecutive period from 2 to 93 days. Most of the column headings are the same as for the Daily Split Report. However, the leftmost column head for this report is "Day."

The dates are listed consecutively in the leftmost column. Each data line matches exactly the 24-hour summary line that would appear at the bottom of the Daily Split Report for the date specified in the leftmost column.

The information for ACD and other calls as well as additional data will reflect the entire consecutive period specified. Hours in which CMS was in Night Service for the entire duration are not included in the summaries.

A typical Cumulative Split Report By Day appears below:

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CUMULATIVE SPLIT REPORT BY DAY

SPLIT 2: CHART
Period: 06/10/88 - 06/13/88

	ACD CALLS							OTHER CALLS					
Day	Avg Speed Ans	Num Calls Aband	Num ACD Calls	Flow In	Flow Out	Avg Talk Time	Avg After Call	Num Xfr Calls	Num Other Calls	Avg Talk Other	Avg Num Pos	% ACD Time	Serv Levl
06/10	36s	5	62	0	3	1:26	7:02	18	81	1:27	0.9	27%	51%
06/11	11s	3	75	0	0	1:57	1:19	9	1	3:56	2.0	65%	100%
06/13	17s	12	120	0	3	1:34	0:59	9	5	4:01	3.0	55%	85%
	21.3s	20	257	0	6	1:32	3:06	36	87	2:66	1.9	27%	51%

Note
1. Call statistics are counted in the hour and day in which they complete.

CALL MANAGEMENT SYSTEM FOR MERLIN(r) II CS
Date Printed: 06/10/88 Time Printed: 6:13p

CUMULATIVE SPLIT REPORT BY HOUR

A Cumulative Split Report Report By Hour is a summary report that can be generated for any consecutive period from 2 to 93 days. Most of the column headings are the same as for the Daily Split Report and the Cumulative Split Report by Day. However, the leftmost column head for this report is "Hour."

The hours in a day during which CMS was active over the days specified are listed in the leftmost column. Each data line summarizes that hour's activity overall the days specified.

For example, if you specified a Cumulative Split Report by Hour for July 2 through July 10, the hours in a day when CMS was active would be in the leftmost column, and all the activity in a given hour for July 2 through July 10 would be summarized. The 10 o'clock period would list data for all the calls from July 2 through July 10 that were completed during the 10 o'clock period.

A typical Cumulative Split Report by Hour appears below.

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CUMULATIVE SPLIT REPORT BY HOUR

SPLIT 2: CHART
Period: 07/11/88 - 07/14/88

				ACD CALLS					OTHER CALLS				
Hour	Avg Speed Ans	Num Calls Aband	Num ACD Calls	Flow In	Flow Out	Avg Talk Time	Avg After Call	Num Xfr Calls	Num Other Calls	Avg Talk Other	Avg Num Pos	% ACD Time	Serv Levl
12:00a	4s	0	241	0	0	0:25	0:06	0	0	0:00	4.5	23%	100%
1:00a	4s	0	245	0	0	0:27	0:06	0	0	0:00	4.5	23%	100%
2:00a	7s	12	120	0	0	0:34	0:06	0	0	0:00	4.3	21%	98%
3:00a	23s	149	1	0	0	0:03	0:06	0	0	0:00	1.5	0%	1%
4:00a	0s	151	0	0	0	0:00	0:00	0	0	0:00	1.5	0%	0%
5:00a	0s	152	0	0	0	0:00	0:00	0	0	0:00	1.5	0%	0%
6:00a	0s	151	0	0	0	0:00	0:00	0	0	0:00	1.5	0%	0%
7:00a	0s	149	0	0	0	0:00	0:00	0	0	0:00	1.5	0%	0%
8:00a	0s	159	0	0	0	0:00	0:00	0	0	0:00	1.5	0%	0%
9:00a	0s	16	0	0	0	0:00	0:00	0	0	0:00	1.5	0%	0%
10:00a	0s	0	0	0	0	0:00	0:00	0	0	0:00	3.0	0%	0%
11:00a	0s	0	0	0	0	0:00	0:00	0	0	0:00	3.0	0%	0%
12:00p	0s	0	0	0	0	0:00	0:00	0	0	0:00	3.0	0%	0%
1:00p	0s	0	0	0	0	0:00	0:00	0	0	0:00	2.0	0%	0%
2:00p	0s	0	0	0	0	0:00	0:00	0	0	0:00	3.0	0%	0%
3:00p	0s	0	0	0	0	0:00	0:00	0	0	0:00	3.0	0%	0%
4:00p	0s	0	0	0	0	0:00	0:00	0	0	0:00	3.0	0%	0%
5:00p	0s	0	0	0	0	0:00	0:00	0	0	0:00	3.0	0%	0%
6:00p	0s	0	0	0	0	0:00	0:00	0	0	0:00	3.0	0%	0%
7:00p	0s	0	0	0	0	0:00	0:00	0	0	0:00	3.0	0%	0%
8:00p	0s	0	0	0	0	0:00	0:00	0	0	0:00	3.0	0%	0%
9:00p	0s	0	0	0	0	0:00	0:00	0	0	0:00	3.0	0%	0%
10:00p	0s	0	0	0	0	0:00	0:00	0	0	0:00	1.5	0%	0%
11:00p	0s	0	0	0	0	0:00	0:00	0	0	0:00	1.5	0%	0%
	4s	932	714	0	0					0:00	2.6	7%	99%

Note
1. Call statistics are counted in the hour and day in which they complete.

CALL MANAGEMENT SYSTEM FOR MERLIN(r) II CS
Date Printed: 07/14/88 Time Printed: 6:13p

Line Group Report

DAILY LINE GROUP REPORT

This 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 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.

A typical Line Group Report appears below.

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DAILY LINE GROUP REPORT

GROUP D: CORP Size: 3 lines
Date: 06/10/88

	ACD CALLS						CALLS			OTHER CALLS			
	Calls Offered		Num Calls	Num Calls	Hold Time		Num Xfr	Hold Time		Num Other	Hold Time		% All Lines
Time	Night	Day	Aband	Handled	Avg	Total	Call	Avg	Total	Calls	Avg	Total	Busy
9:00a	0	19	0	19	2:17	43m	0	0:00	0m	0	0:00	0m	0%
10:00a	0	25	1	24	2:03	51m	2	1:29	3m	1	1:25	lm	2%
11:00a	0	46	4	42	1:45	81m	1	2:46	3m	0	0:00	0m	5%
10:00p													
11:00p													
	27	90	36	85	10:05	1179m	9	2:01	18m	21	7:42	161m	11%

Busiest hours: l-ll:00a, 2-l:00p, 3-10:00a

Note
1. Call statistics are counted in the hour and day in which they complete.

CALL MANAGEMENT SYSTEM FOR MERLIN(r) II CS
Date Printed: 06/10/88 Time Printed: 6:13p

The column descriptions for the above report are as follows:

TIME

- **Time.** The beginning of the hour in which data were collected.

ACD CALLS

- **Calls Offered (Night/Day).** The number of ACD calls to the line group during a given hour. This number includes abandoned calls as well as calls connected to agents.
- **Num Calls Aband.** The number of incoming calls to a line group that were abandoned (that is, the caller hung up before an agent answered).

  (The example above includes only Day Service calls.)
- **Num Calls Handled.** The number of incoming calls connected to agents during Day Service. This number includes intraflowed calls and excludes abandoned calls.
- **Hold Time (Avg).** The average holding time is the average amount of time each call held a line, from the time the line was first seized until the line disconnects. Each average includes abandoned calls.
- **Hold Time (Total).** The total hoIding time is the total amount of time that all lines were held (in use) by ACD calls. These totals include abandoned calls. The entry in the summary line of this column is the total holding time for the day.

CALLS

- **Num Xfr Call.** The number of ACD calls transferred by agents, with a total for the day.
- **Hold Time (Avg).** The average hold time for ACD calls *after* the call has been transferred by an agent. The total includes an overall average hold time for transferred ACD calls for the day (by call, *not* by agent).
- **Hold Time (Total).** The total talk time *after* transfer for ACD calls transferred by agents. The summary line includes an overall total for the day.

OTHER CALLS

(These include outgoing calls and transfers from other stations.)

- **Num Other Calls.** The number of "other" calls made and received cm the lines in the group during a given hour.
- **Hold Time (Avg).** The average amount of time an "other" call held the line, from the time the line was seized until the line disconnects.
- **Hold Time (Total).** The cumulative amount of time all lines were held (in use) on "other" calls. The value in the summary line indicates the total holding time for the day.

ADDITIONAL DATA FOR DAILY CALLS

- **% All Lines Busy.** The percentage of time in each hour that all lines in the group were simultaneously busy.
- **Busiest hours.** The three hours with the largest total holding time for ACD calls. The busiest hour is shown first (lower portion of screen), followed by the second and third busiest hours.

  NOTE: Calls in progress at the end of an hour are included in the statistics for the hour in which the calls were completed.

CUMULATIVE LINE GROUP REPORT BY DAY

A Cumulative Line Group Report By Day can be generated for any consecutive period from 2 to 93 days. Most of the column headings are the same as for the Daily Line Group Report. However, the leftmost column head for this report is "Day."

The days are listed consecutively by date in the leftmost column. Each data line matches exactly the 24-hour summary line that would appear at the bottom of the Daily Line Group Report for the date specified in the leftmost column.

Hours in which CMS was in Night Service for the entire duration are included in the summaries.

A typical Cumulative Line Group Report By Day appears below:

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CUMULATIVE LINE GROUP REPORT BY DAY

GROUP D: CORP Size: 3 lines
Period: 06/10/88 - 06/13/88

	ACD CALLS						CALLS			OTHER CALLS			
	Calls Offered		Num Calls	Num Calls	Hold Time		Num Xfr	Hold Time		Num Other	Hold Time		% All Lines
Day	Night	Day	Aband	Handled	Avg	Total	Calls	Avg	Total	Calls	Avg	Total	Busy
06/10	0	609	0	609	:28	43h	0	0:00	0m	0	0:00	0m	0%
06/11	0	630	0	630	:28	44h	0	0:00	0m	0	0:00	0m	0%
06/12	0	630	0	630	:28	44h	0	0:00	0m	0	0:00	0m	0%
	0	1869	0	1869	:28	132h	0	0:00	0m	0	0:00	0m	0%

Busiest days: 1- 06/11/88 , 2- 06/12/88 , 3- 06/10/88

Note
1. Call statistics are counted in the hour and day in which they compete.

CALL MANAGEMENT SYSTEM FOR MERLIN(r) II CS
Date Printed: 06/ 13/88 Time Printed: 6:13p

CUMULATIVE LINE GROUP REPORT BY HOUR

A Cumulative Line Group Report By Hour can be generated for any consecutive period from 2 to 93 days. Most of the column headings are the same as for the Daily Line Group Report and the Cumulative Line Group Report by Day. However, the leftmost column head for this report is "Hour."

The hours in a day during which CMS was active over the days specified are listed in the leftmost column. Each data line summarizes that hour's activity over all the days specified.

For example, if you specified a Cumulative Line Group Report by Hour for July 2 through July 10, the hours in a day when CMS was active would be in the leftmost column, and all the activity in a given hour for July 2 through July 10 would be summarized. The 10 o'clock period would list data for all the calls from July 2 through July 10 that were completed during the 10 o'clock period.

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CUMULATIVE LINE GROUP REPORT BY HOUR

GROUP D: CORP Size: 6 lines
Period: 07/11/88 - 07/14/88

	ACD CALLS						CALLS			OTHER CALLS			
	Calls Offered		Num Calls	Num Calls	Hold Time		Num Xfr	Hold Time		Num Other	Hold Time		% All Lines
Hour	Night	Day	Aband	Handled	Avg	Total	Calls	Avg	Total	Calls	Avg	Total	Busy
12:00a	0	241	0	241	0:28	114m	0	0:00	0m	0	0:00	0m	0%
1:00a	0	245	0	245	0:29	116m	0	0:00	0m	0	0:00	0m	0%
2:00a	0	239	12	227	0:27	109m	0	0:00	0m	0	0:00	0m	0%
3:00a	0	150	149	1	0:50	125m	0	0:00	0m	0	0:00	0m	30%
4:00a	0	151	151	0	0:51	128m	0	0:00	0m	0	0:00	0m	31%
5:00a	0	152	152	0	0:50	128m	0	0:00	0m	0	0:00	0m	31%
6:00a	0	151	151	0	0:51	127m	0	0:00	0m	0	0:00	0m	31%
7:00a	0	149	149	0	0:51	125m	0	0:00	0m	0	0:00	0m	31%
8:00a	0	152	152	0	0:51	128m	0	0:00	0m	0	0:00	0m	30%
9:00a	0	16	16	0	0:50	13m	0	0:00	0m	0	0:00	0m	3%
	0	1646	932	714	0:41	18h	0	0:00	0m	0	0:00	0m	19%

Busiest hours: 1. 8:00a, 2. 5:00a, 3. 4:00a

Note
1. Call statistics are counted in the hour and day in which they complete.

CALL MANAGEMENT SYSTEM FOR MERLIN(r) II CS
Date Printed: 07/14/88 Time Printed: 6:13p

Events Log Report

The Events Log Report lists the 50 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. A typical Events Log Report follows:

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EVENTS LOG REPORT

Time	Date	Event
7:44a	07/02	***Split 1 - Agent TOM - Refused Call
12:52p	07/05	***Split 1 - Agent CLIFF - Refused Call
12:52p	07/05	***Split 1 - Agent TOM - Refused Call
12:52p	07/05	***Split 1 - Agent ERNIE - Refused Call
12:52p	07/05	***Split 1 - Agent DEB - Refused Call
12:53p	07/05	***Split 1 - Agent BOB - Refused Call
l:43p	07/05	NOTE - - Can't Find Repart File for 5129/88
l:43p	07/05	NOTE - - Can't Find Report File for 5/29/88
l:43p	07/05	NOTE - - Can't Find Report File for 5/29/88
l:44p	07/05	NOTE - - Can't Find Report File for 5/29/88
l:44p	07/05	NOTE - - Can't Find Report File for 5/29/88
l:44p	07/05	NOTE - - Can't Find Report File for 5/29/88
l:44p	07/05	NOTE - - Can't Find Report File for 5/29/88
l:44p	07/05	NOTE - - Can't Find Report File for 5/29/88
l:44p	07/05	NOTE - - Can't Find Report File for 5/29/88
l:44p	07/05	Normal Call Management Shutdown
l:53p	07/05	CMS for MERLIN II CS Version 2.0. Call Management Started
l:53p	07/05	Firmware Version 2.1. Clock Type 18.092
2:17p	07/05	***Split 3 - Agent BEN - Refused Call
2:50a	07/06	***Split 2 - Agent SAM - Refused Call
2:51a	07/06	***Split 2 - Agent NORM - Refused Call
2:57a	07/06	***Split 2 - Agent DI - Refused Call
2:59a	07/06	***Split 2 - Agent CARLA - Refused Call
2:59a	07/06	***Split 2 - Agent BJ - Refused Call
3:00a	07/06	***Split 2 - Agent MAX - Refused Call
9:07a	07/06	Normal Call Management Shutdown
9:08a	07/06	CMS for MERLIN II CS Version 2.0. Call Management Started
9:09a	07/06	Firmware Version 2.1. Clock Type 18.198
10:48a	07/06	Normal Call Management Shutdown
3:24p	07/06	CMS for MERLIN II CS Version 2.0. Call Management Started
3:24p	07/06	ERROR - - No Startup Configuration was Selected
3:24p	07/06	Firmware Version f0.f0. Clock Type 16.250
3:24p	07/06	Normal Call Management Shutdown
3:24p	07/06	CMA for MERLIN II CS Version 2.0. Call Management Started
3:24p	07/06	Firmware Version 2.1. Clock Type 18.092
3:33p	07/06	***Split 1 - Agent SHERM - Refused Call
l:19p	07/07	Normal Call Management Shutdown
l:19p	07/07	CMS for MERLIN II CS Version 2.0. Call Management Started
l:19p	07/07	Firmware Version 2.1. Clock Type 18.092
9:02a	07/08	Normal Call Management Shutdown
9:09a	07/08	CMS for MERLIN II CS Version 2.0. Call Management Started
9:10a	07/08	Firmware Version 2.1. Clock Type 18.114
2:38p	07/11	Normal Call Management Shutdown
2:38p	07/11	CMS for MERLIN II CS Version 2.0. Call Management Started
2:38p	07/11	Firmware Version 2.1. Clock Type 18.136
2:48p	07/11	Normal Call Management Shutdown
2:48p	07/11	CMS for MERLIN II CS Version 2.0. Call Management Started
2:48p	07/11	Firmware Version 2.1. Clock Type 18.092
3:01p	07/11	Normal Call Management Shutdown

CALL MANAGEMENT SYSTEM FOR THE MERLIN(r) II CS
Date Printed: 07/11/88 Time printed: 3:06p

You can use this report to review the following possible problem areas:

- Split staffing or configuration problems

  By monitoring the abandoned-call, average-speed-of-answer and oldest-call-waiting exceptions, you can see 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, or after-call-work time, the 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 should 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.

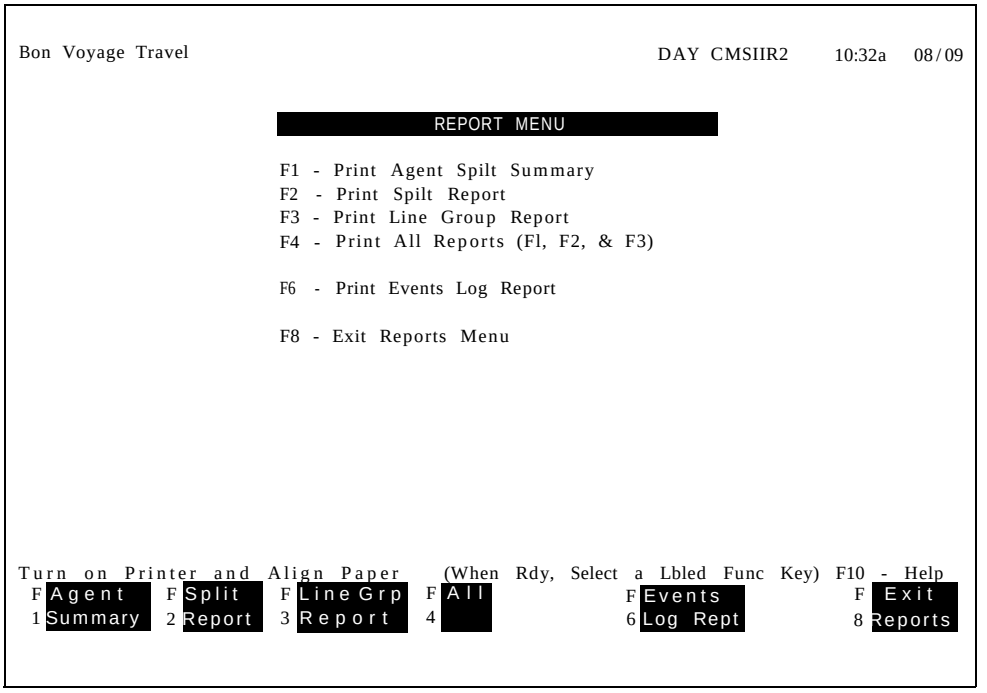
You can select and print MIS reports whether or not CMS is managing calls. You can print the reports individually, or you can choose to print all the reports (except the Events Log Report) at once. The Events Log Report must be printed separately.

If you have trouble with your printer, refer to "Printer Problems" in Section 9, "Troubleshooting."

GENERATE A REPORT

To generate a report, follow these steps:

1 Press [F5] (labeled "Print Reports") on the SYSTEM MENU (or the CMS MAIN MENU or even the INITIALIZATION screen after a configuration has been selected). The REPORT MENU screen, shown below, appears.



2 To get the printer ready:

a Turn on the printer.

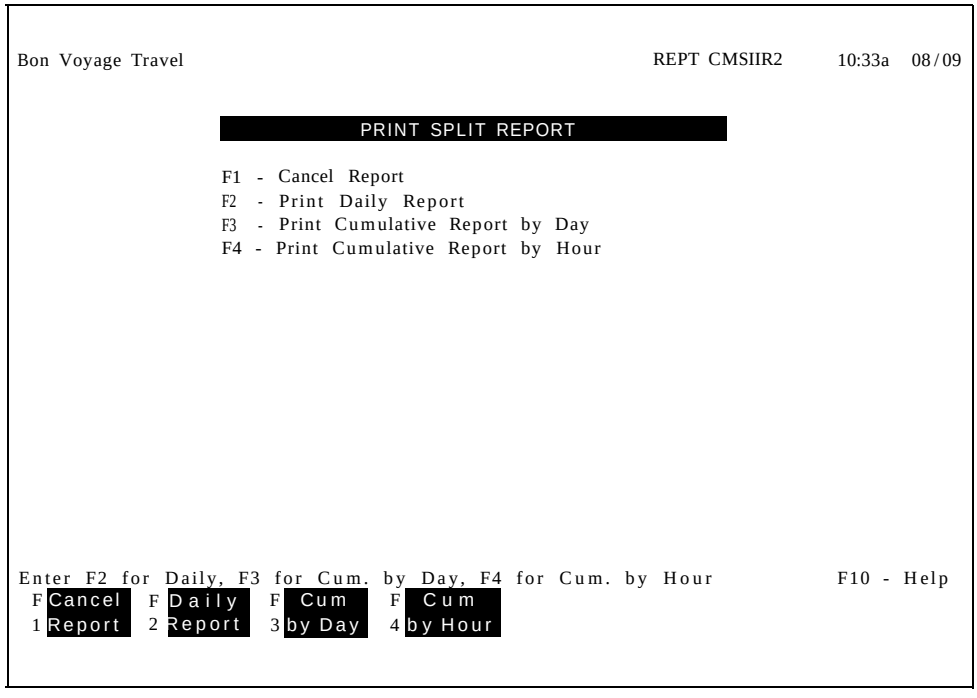
b Press the Ready button. (The Ready light goes off.)

c Press the Form Feed button.

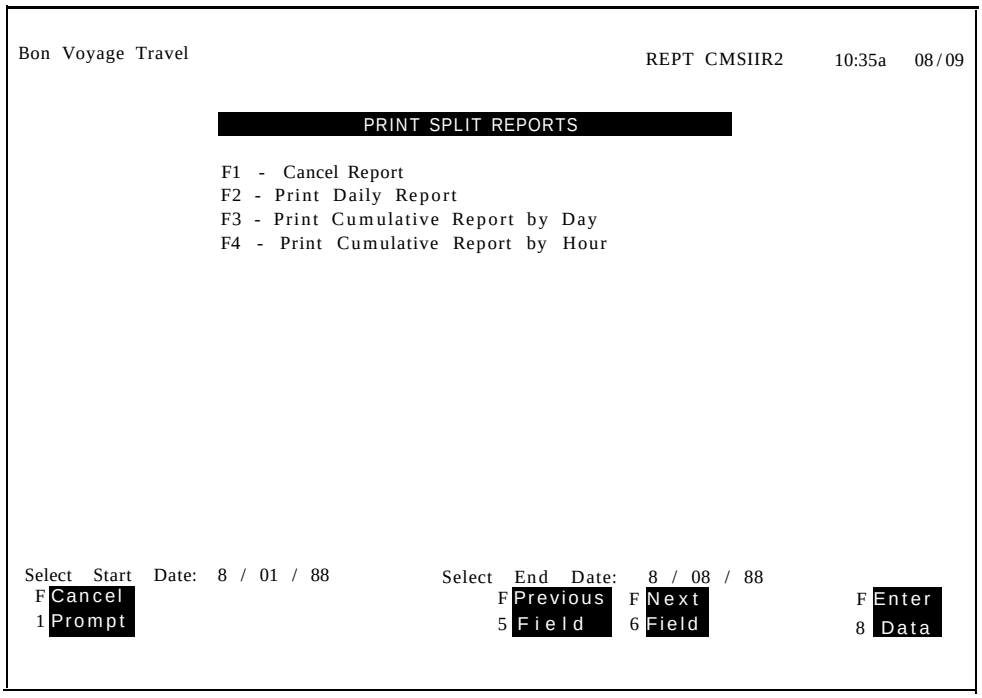
d Align the paper and press the Ready button. (Its light goes on.)

3 Press the function key for the report(s) you want to print:

For example, if you press [F2] (labeled "Split Report"), the following screen appears:



The function keys offer the choice of a daily report or cumulative report by day or hour. If you press [F2] (labeled "Daily Report"), you will be prompted for a date. After you enter the date, the daily report will print. If you press either [F3] (labeled "Cum by Day") or [F4] (labeled "Cum by Hour"), you will be prompted to specify the period over which the report is to be generated. For example, if you press [F3], the following screen will appear:



Using [F5] (labeled "Previous Field'') and [F6] (labeled "Next Field'')to move to the appropriate fields, enter the period of time, and then press [F8] (labeled ''Enter Data'') to print the report. The REPORT MENU will appear and the status line will display a message, such as:

Scheduling Cumulative Split Report by Day.

If the message:

Number of Days Requested in Range is Greater than 93

appears, then the start and end dates entered exceeds 93 days.

If the message:

Start Date Does Not Precede End Date

appears, the end date precedes the start date,

If the message:

Invalid Report Period Specified

appears, the period specified is not entirely in the past.

SUMMARY ON GENERATING INDIVIDUAL REPORTS

For any report you want to generate, follow these basic steps:

1 Select the report type from the REPORT MENU.

2 If it is not the Events Log, select the report period, as applicable:

- Daily
- Cumulative (Agent Split only)
- Cumulative by Hour (Splits or Line Groups)
- Cumulative by Day (Splits or Line Groups)

3 Enter the desired date or period, as applicable, and the report will print.

SUMMARY ON GENERATING ALL REPORTS

To generate all reports, follow these basic steps:

1 From the REPORT MENU, select [F4] (labeled "All Reports").

2 Press either [F2] (labeled "Daily Report"), [F3] (labeled "Cum by Day"), [F4] (labeled "Cum by Hour"), depending on which group of reports you want printed.

3 Enter the date (for the daily reports) or dates (for the either set of cumulative reports) and press [F8] (labeled "Enter Data") to print the reports.

SCREEN MESSAGES

The screen display messages keep you informed as to the printing status of the reports you are generating. Some examples are listed below:

- If you select the Events Log Report (from the REPORT MENU screen), the message line reads:

  Generating Events Log Report

  Printing begins and ends automatically. You may choose another report or exit from the menu. (See Exiting From Reports," below).

- If, from the PRINT SPLIT REPORT screen, you press [F2] (labeled "Daily Report") these two prompts appear:

  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 you press [F1] (labeled "Cancel Report") on any of the print report menus, the prompt disappears and the REPORT MENU will be displayed.

- After you supply the appropriate data for the report you want to generate, and have pressed [F8] (labeled "Enter Data") the message line reads:

  Generating [report name] . . .

- If CMS is managing calls when you request a report to be printed, the message line reads:

  Scheduling [report name] . . .

  When the report is actually being printed, "Scheduling" changes to "Generating."

EXITING FROM REPORTS

After the report you've selected is generated you will be returned to the PRINT REPORTS screen. You can either press another function key to select other reports or you can exit.

To exit from the REPORT MENU screen, press [F8] (labeled "Exit Reports") to return to the SYSTEM MENU (or CMS MAIN MENU).

Archiving is the process of copying historical data from the hard disk to 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 diskette with the MS-DOS copy command, and for erasing these files from the hard disk with 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 contains the information that identifies the lines, splits, and agents for which historical data have been saved. Up to four historical data files and one system tables file fit on a single 360K 5 1/4 inch diskette. The 1.44MB storage on a 3 1/2 inch diskette increases that storage four times.

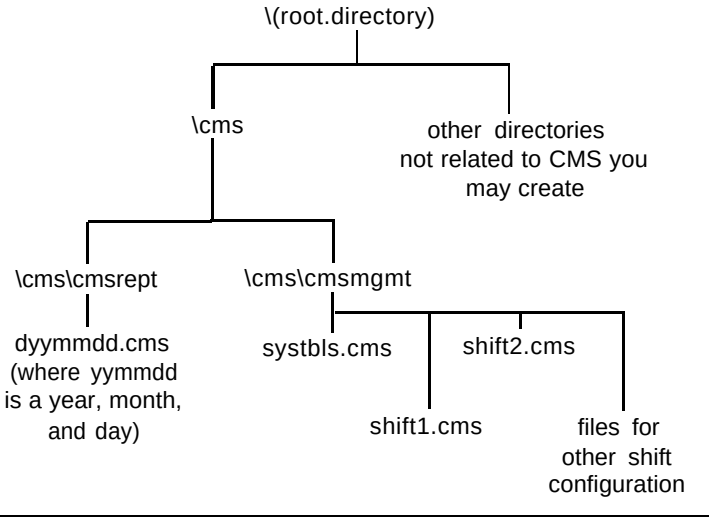
If you are using a 6300 WGS, you'll be backing up onto 3 1/2 inch diskettes; if you are using the PC 6300, you'll be backing up onto 5 1/4 inch diskettes.

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 to a diskette first, and then erase them from the hard disk. Copy the four oldest data files and the oldest system table to the 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 not in the cms directory on the hard disk, type

```
cd\cms
```

2 To get into the cmsmgmt directory, type

```
cd cmsmgmt
```

3 To copy the system tables file for the current date, type

```
copy c:systbls.cms a:syymmdd.cms
```

where yymmdd is the date. For example, to copy the system tables file on 04/19/87, copy it to a file called s870419.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 CMS, use Monday's date. If the change was made after CMS stopped on Monday, use Tuesday's date.

Copying Historical Data Files

To copy the historical data files, do the following:

1 Get into the cmsrept directory (\cms\cmsrept) according to steps 1 and 2 in the previous procedure.

2 Type a series of commands in the form

```
copy c:dyymmdd.cms a:
```

where yymmdd is the date on which data were collected. For example, if you want the historical data file for 04/19/87, you would copy the file d870419.cms.

To copy 10 days' data at a time, for instance, files from 07/20/86 through 07/29/86, type a command in this format:

```
copy c:d86072*.cms a:
```

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,

NOTE: You can also use the "delete" command, as follows:

```
delete c:dyymmdd.cms
```

(in place of "erase").

GENERATING HISTORICAL REPORTS

If you have transferred old CMS data from the hard disk onto 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 diskette onto the hard disk, so that you can then generate reports for that date.

> **NOTE:** Remember that system tables files and historical data files from earlier versions of CMS cannot be used with this version of CMS.

Saving the Current System Tables

You have to save the current system tables in a temporary file so that you don't lose them when you copy the historical system table files to the hard disk. To save the current system tables, do as follows:

1 If you are not in the cms directory on the hard disk, type

cd\cms

2 To get into the cmsmgmt directory, type

cd cmsmgmt

3 To copy the current system tables to a temporary file, type

copy systbls.cms temp

This copies (and saves) the current system tables to a file called "temp." (You can choose another name for the file if you want,) Remember to copy the current system tables back into systbls.cms in the cmsmgmt directory before you have CMS begin managing calls again.

Copying the Historical System Tables

You should still be in the cmsmgmt directory. To copy the system tables files for the date you want, type:

copy a:syymmdd.cms c:systbls.cms

where yymmdd is the date of the system tables file.

Copying the Historical Data Files

You should still be in the cmsmgmt directory. To copy the historical data files from the diskette to the hard disk, do as follows:

1 Get into the cmsrept directory by typing

cd\cms

and then

cd cmsrept

2 Type a series of commands in the form

copy a:dyytnmdd.cms c:

where yymmdd is the date of the data you want.

3 When you're finished copying data to the hard disk, type

cd\cms

Generating Reports

The system tables 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 under the heading "How to Generate Reports" in Section 7.

RESTORING DATA COLLECTION CONDITIONS

Now that you have the historical reports, you have to restore the hard disk to its previous condition. Otherwise, CMS cannot effectively store new data when it resumes managing calls. To do this, you erase the historical data from the hard disk–they remain saved on the diskette–and restore the current system tables 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 To get to the cmsrept directory, type

cd\cms

and then type

cd cmsrept

2 To erase a data file, type

erase c:dyymmdd.cms

where yymmdd is the date of the data file to be erased.

NOTE: You can also use the "delete" command, as follows:

delete c:dyymmdd.cms

(in place of "erase").

Restoring the Current System Tables

To restore the current system tables to their appropriate place in the cms directory, do the following:

1 To get to the cmsmgmt directory, type

cd\cms

and then type

cd cmsmgmt

2 To restore the system tables, type

copy temp systbls.cms

You should now have the historical reports you wanted, and CMS should be ready to store new data.

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 startup
- **Call Management Problems.** Identifies problems that can cause CMS to stop managing calls and suggests corrective action
- **System Errors.** Explains messages beginning **SYSERR** that may appear on your status screens and/or in the Events Log during CMS operation
- **Voice Announcement Unit Problems.** Suggests corrective action for problems that can prevent the voice announcement unit from operating properly with CMS
- **External Alert Problems.** Suggests corrective action for problems with the wall-mountable lamps CMS uses as external signals for exception alerts.
- **Printer Problems,** Identifies and suggests corrective action for problems that can prevent you from printing CMS screens or reports
- **Agent Problems.** Anticipates and suggests solutions to problems you and your agents are most likely to encounter as you begin to use CMS
- **Managing Calls if CMS is Disabled.** Tells you how to use your MERLIN II system components and features to manage calls until CMS is running again

The information on the following pages identities and suggests corrective action for problems that may occur when you are starting up CMS. The problems are grouped according to the kind of message they cause to appear in the information portion of the Initialization screen, as follows:

- Error messages
- Warning messages

Scan the pages to find the message that identifies your problem, and take the corrective action(s) described.

> **IMPORTANT:** Problems that generate error messages on the Initialization screen always bring the 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 if CMS is Disabled" at the end of this section of the manual.
>
> Problems that generate *warning* messages on the Initialization screen do *not* halt the startup procedure. While these problems do not prevent CMS from managing calls, they do adversely affect call management in various ways as indicated.

Error Messages

► ERROR—No Lines in CMS. ADMINISTER Lines.

Effect on Call Management: Until this problem is corrected, CMS cannot manage calls. See "Managing Calls if CMS is Disabled" 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** In sequence, press [F8], [F4], and [F3] to get the Administer Lines and Line Groups screen. **2** Follow the instructions under the heading "Administering Lines and Line Groups" in Section 4 of this manual to finish administering 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 CMS.

► ERROR—No Configuration Found. ADMINISTER System.

Effect on Call Management: Until this problem is corrected, CMS cannot manage calls, See "Managing Calls if CMS is Disabled" at the end of this section of the manual.

Possible cause	Corrective action
You omitted one or more steps when you built your shift configurations.	**1** In sequence, press [F8], [F4], and [F1] to get the Stored Shift Configurations screen. **2** Build at least one shift configuration according to the instructions in "Building or Editing Shift Configurations" in Section 4. **3** Restart CMS.

► ERROR—CMS Card Faulty or Not Found. CMS Cannot Manage Calls.

Effect on Call Management: Until this problem is corrected, CMS cannot manage calls. See "Managing Calls if CMS is Disabled" at the end of this section of the manual.

Possible cause	Corrective action
The CMS card is installed incorrectly.	**1** Press [F8] twice to exit to MS-DOS. **2** Turn off and disconnect the PC. **3** Make sure the CMS card is installed as described in the *lnstallation and Getting Started Guide for the Call Management System.* **4** Reconnect and turn on the PC. **5** Restart CMS.
The CMS card is faulty.	If the same message appears when you restart CMS, you may have a faulty CMS card. Contact your equipment supplier for assistance.

► ERROR—CU 1 Faulty or Disconnected. CMS Cannot Manage Calls.

Status lndicator: **CU 1** [flashing)

Effect on Call Management: Until this problem is corrected, CMS cannot manage calls. See "Managing Calls if CMS is Disabled" at the end of this section of the manual.

Possible cause	Corrective action
There's a loose connection between the CU 1 jack and the MERLIN II system control unit.	Make sure one end of the cable is securely plugged into the CU 1 jack at the back of the PC and the other end is securely plugged into the jack in the MERLIN II system control unit assigned to CU 1.
The cable is faulty.	Try switching the cables plugged into CU 1 and CU 2. Unplug the cable from the CU 1 jack and plug it into CU 2, and vice versa, If the CU 1 indicator on the screen stops flashing and the CU 2 indicator goes on, you know the problem is either a faulty cable or a faulty MERLIN II system component. Do *not* plug the cables back into their original jacks on the CMS card. Restart CMS. CMS can manage calls using only the CU 1 jack while you further isolate and correct the problem.
The jack in the MERLIN II system control unit assigned to CU 1 is faulty.	**1** Unplug the CU 1 cable from its jack in the MERLIN II system control unit and plug it into another attendant jack, The control unit jacks that can be attendant jacks are marked "ATT" on the Station Jacks section of the MERLIN II system Master Planning Form. **2** Administer the jack as an attendant jack following the instructions under the heading "Designate Attendant Positions" in "Step 3: Perform Basic Administration" in Section 4 of the *MERLIN II Communications System with Feature Module 2 Installation and Administration Manual.*
The CU 1 jack on the CMS card is faulty.	If none of the above actions corrects the problem, contact your equipment supplier for assistance.

► WARNING—CU 2 Faulty or Disconnected.

Status Indicator: **CU 2**

Effect on Call Management: CMS manages calls somewhat more slowly without CU 2. You may notice an increase in abandoned calls during periods of heavy incoming call traffic until you correct this problem.

Possible cause	Corrective action
There's a loose cable connection between the CU 2 jack on the CMS card and the MERLIN II system control unit.	Make sure the connections between the CU 2 jack on the CMS card at the back of the PC and the MERLIN II system control unit are secure.
Either the cable or the jack assigned to CU 2 on the MERLIN II system control unit is faulty.	When you can interrupt call management for a few minutes, switch the CU 1 and CU 2 cables around (unplug the cable from the CU 1 jack and plug it into the CU 2 jack, and vice versa). If the CU 2 indicator on the screen goes off and the flashing CU 1 indicator appears on the screen, the CU 2 jack on the CMS card is *not* faulty. Switch the cables back to their original jacks on the CMS card so that CU 1 works and CMS can resume managing calls. Then restart CMS and try to isolate the problem further.
The CU 2 jack on the CMS card is faulty.	If none of the above actions corrects the problem, contact your equipment supplier for assistance.

► WARNING—NO Main Split Assigned to One or More Line Groups.

Effect on Call Management: Calls coming in on lines with no main splits assigned to them go unanswered.

Possible cause	Corrective action
You have not finished assigning agent splits to line groups.	From the Initialization screen: **1** Press [F1] to get the Configuration screen. **2** In the Call Flow area, find the line group(s) (A-D) with no main split assigned. **3** Assign main splits as needed according to the instructions in "Dynamic Reconfiguration" in Section 5.

► 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 at least one empty line group.	From the Initialization screen: **1** Press [F1] to get the Configuration screen. **2** In the Call Flow area, find the line group(s) (A-D) with no lines and at least one agent split. • If you want to assign lines to an empty line group, you have to exit call management and follow the instructions in "Administering Lines and Line Groups" in Section 4. • If you want to reassign an agent split from an empty line group, follow the instructions in "Dynamic Reconfiguration" in Section 5 when call management begins.

► WARNING—One or More Main or Secondary Splits Has No Agent.

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 go to the secondary split as soon as the intraflow threshold is exceeded.

Possible cause	Corrective action
You have at least one empty split assigned to at least one line group.	From the Initialization screen: **1** Press [F1] to get the Configuration screen. **2** In the Call Flow area, find the split(s) with no agents. **3** Assign agents to the empty split(s) or remove the empty splits according to the instructions in "Dynamic Reconfiguration" in Section 5.

► 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.	From the Initialization screen: **1** Press [F1] 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 "Dynamic Reconfiguration" in Section 5, either turn intraflow off or assign a secondary split to the line group.

► **WARNING—Only x Day's Space Left for Storing History Data.**

Status Indicator: **LoStorage**

Possible cause	Corrective action
There's room on the hard disk for "x" days of historical data. This message appears when there is room for less than ten days' data.	Exit to MS-DOS and delete at least one day's data files. If you want to save your files, see Section 8, "Archiving Data."

► **WARNING—Out of Disk Space on Drive C:--NO Storage of History Data.**

Status Indicator: **NoStorage**

Possible cause	Corrective action
There's no room on the hard disk for new data.	Exit to MS-DOS and delete at least one day's data files. If you want to save your files, see Section 8, "Archiving Data."

► **WARNING—Message Unit Out of Service. Check Power and Cables.**

Status Indicator: **MSG**

Effect on Call Management: CMS cannot connect calls to the delay message. Callers hear ringing until an agent answers.

Possible cause	Corrective action
The voice announcement unit is not receiving power.	Make sure the voice announcement unit is plugged in and turned on.
There's a loose cable connection between the voice announcement unit and the PC.	Make sure all connections are secure on the cable running between the voice announcement unit and the PC.

► WARNING—Printer Not Ready. Using Prt Sc Key Will Halt CMS.

Status Indicator: **Don'tPrtSc**

Effect on Call Management: If you use the [Prt Sc] key when this message is displayed, CMS stops managing calls.

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.
	When the problem is corrected, you'll see the message **Printer Now Ready** on the error line. If you do not see this message, try the corrective actions again. If you still don't see the message, reboot the PC and restart CMS.

The information on the following pages identifies and suggests 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. Until you correct the problem, CMS cannot manage calls. 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 if CMS is Disabled" at the end of this section of the manual.

► ERROR—CU 1 Faulty or Disconnected. CMS Cannot Manage Calls.

Status Indicator: **CU 1** (flashing)

Audible Signal: A single short beep from the PC and a longer beep from the CMS card

Effect on Call Management: Until this problem is corrected, CMS cannot manage calls. See "Managing Calls if CMS is Disabled" 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 CU 1 jack and the MERLIN II system control unit.	Make sure one end of the cable is plugged securely into the CU 1 jack at the back of the PC and the other end is plugged securely into the jack assigned to CU 1 in the MERLIN II system control unit.
CU1 and CU2 are not connected to the same MERLIN II system control unit circuit pack.	Connect CU1 and CU2 to the same 408 or 008 analog circuit pack at the two ports designated as attendant ports by the MERLIN II system administrator (most probable ports are: 14/18 or 22/26). (continued)

Possible cause	Corrective action
The cable is faulty.	Try switching the cables plugged into CU 1 and CU2. Unplug the cable from CU 1 and plug it into CU 2, and vice versa. If the CU 1 indicator on the screen stops flashing and the CU 2 indicator appears on the screen, you know the problem is either a faulty cable or a faulty MERLIN II system component. Do *not* plug the cables back into their original jacks on the CMS card. Restart CMS. CMS can manage calls using only the CU 1 jack while you further isolate and correct the problem.
The jack assigned to CU 1 in the MERLIN II system control unit is faulty.	**1** Unplug the CU 1 cable from its jack in the MERLIN II system control unit and plug it into another attendant jack. The control unit jacks that can be attendant jacks are marked "ATT" on the Station Jacks section of the MERLIN II system Master Planning Form. **2** Administer the jack as an attendant jack following the instructions under the heading "Designate Attendant Positions" in "Step 3: Perform Basic Administration" in Section 4 of the *MERLIN II Communications System with Feature Module 2 Installation and Administration Manual.*
The CU 1 jack on the CMS card is faulty.	If none of the above actions correct the problem, contact your equipment supplier for assistance.

► **ERROR—CMS Card Faulty or Not Found. CMS Cannot Manage Calls.**

Status lndicator: **CU 1** (flashing) and **CU *2*** (on steady)

Audible Signal: A single short beep from the PC

Effect on Call Management: Until this problem is corrected, CMS cannot manage calls. See "Managing Calls if CMS is Disabled" at the end of this section of the manual.

Effect on Data Collection: When this problem occurs, data collection stops. Data on completed calls 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 card has become loose.	**1** Exit to MS-DOS, and turn off and disconnect the PC. **2** Make sure the CMS card is installed as described in the *Installation and Getting Started Guide for the Call Management System.* **3** Reconnect and turn on the PC. **4** Restart CMS.
The CMS 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 card comes on and stays on.

Effect on Call Management: Until this problem is corrected, CMS cannot manage calls. See "Managing Calls if CMS is Disabled" 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. ● If you cannot restart the PC , see the user's guide that came with your PC.

► **PROBLEM:** Calls coming in on some lines are not being processed properly by CMS.

Possible cause	Corrective action
The lines were not properly administered to the attendant jacks assigned to the PC.	To administer the lines, follow the instructions under the heading "Assigning Lines to the CMS (PC) Attendants" in "Step 2: Administering Your MERLIN II System for CMS" in the *MERLIN II Comunications System Installation and Getting Started Guide for the call Management System*.

► **PROBLEM:** The PC stops, restarts, and displays the MS-DOS prompt `c>`.

Effect on Call Management: Call management stops, but should resume shortly after you restart CMS.

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 CMS.

► **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 while CMS isn't working.

Effect on Data Collection: If CMS restarts during the same data collection hour, data for that hour are saved. Otherwise, data for the current hour are lost.

Possible cause	Corrective action
You pressed [↑] - [Prt Sc] when the printer was not ready.	See "Printer Not Ready" under the heading "Printer Problems" later in this section for a list of corrective actions. When the printer is fixed, CMS resumes managing calls. 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 restart CMS.

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 if CMS is still managing calls:

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 still 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, print a copy of the Events Log screen by pressing [↑] - [Prt Sc] .

1 If CMS has stopped managing calls: Try to view the Events Log screen to see what sequence of error messages was generated.

2 Reboot the PC by pressing the reset button below the disk drives on the front of the PC or by turning the PC off and then on again.

3 Try to restart CMS.
- If CMS restarts, check to see if it is managing calls correctly.
- If CMS is managing calls correctly, check CMS periodically for a reoccurrence of the problem.

4 If CMS does not restart, or if you get the same **SYSERR** again, you have to reinstall the CMS software. See "Step 3: Installing Your Hardware" and "Step 4: Installing Your Software" in the *MERLIN II Communications System Installation and Getting Started Guide.*

5 If CMS continues to have problems after you reinstall the software, call the CMS Hotline: 1-800-628-2888. Be sure to have handy a list of the system errors generated by the problem.

6 See "Managing Calls if CMS is Disabled" at the end of this section of the manual.

► WARNING—Message Unit Out of Service. Check Power and Cables.

Status Indicator: **MSG**

Effect on Call Management: Until this problem is corrected, CMS cannot connect calls to the delay message. Callers hear ringing until an agent answers.

Possible cause	Corrective action
The voice announcement unit is not receiving power.	Make sure the voice announcement unit is plugged in and turned on.
There's a loose cable connection between the voice announcement unit and the PC.	Make sure all the connections are secure on the cable running between the voice announcement unit and the PC.

► WARNING-Message Unit Problem, Check Message Length.

Status Indicator: **MSG**

Possible cause	Corrective action
The delay message is at least five seconds longer than the number of seconds entered for "Delay Message Length" on the Set Options screen.	Listen to and time the delay message. Then do one of the following: ● Record a new delay message. ● Enter the correct number of seconds for "Delay Message Length" on the Set Options screen.
The outside lines were not properly administered to the attendant jacks assigned to the PC; the lines assigned to CU1 and CU2 attendant ports do not match exactly. If, for any reason, the line assignments do not match, the voice announcement unit will not work correctly.	Have the MERLIN II system administrator check the line assignments for the two attendant ports assigned to CU1 and CU2. If they do not match, readminister the lines so that they do. If they do match, check the connections to the control unit to be sure that the lines are connected properly.

- No warnings or direct adverse effects; however, when exception thresholds are exceeded and this condition continues, CMS does not operate efficiently.
- **PROBLEM:** External Alert does not light when an exception occurs.

Possible cause	Corrective action
Alert is not connected to port for which it was administered or Alert number is not associated with any line button number on the Setting Exceptions screen	Check that the alert is connected to the proper port, or readminister to match the line port to which it is connected.
Faulty lamp	If alert is connected and administered correctly and is associated with the correct line button number, the lamp itself may need to be replaced. Replace the lamp.

- **PROBLEM:** External Alert stays on after all exceptions to which it has been assigned have been brought below the exception thresholds.

Possible cause	Corrective action
Heavy call traffic can cause a delay in turning the external alert off.	Check to be sure all exceptions have indeed stayed below their thresholds. If they have, simply wait. If the alert remains on more than 10 seconds after all exceptions to which the alert has been assigned stay below their thresholds, locate each station where a *console* is connected. Agents using consoles should not press the alert button; supervisors can use the button to test alert operation. **NOTE:** A *console* (such as the MERLIN II Display Console) shows all the line buttons for lines assigned to the system, including the alert line button. The alert line button has been assigned to the line jack to which the alert is connected. If agents whose consoles provide access to the alert line button lift the handset and press that button, the alert will light up. If the all connections and assignments are correct and all agents with access to the alert line button have their handsets on-hook, bring CMS down and then start it again.

► WARNING—Printer Not Ready. Using Prt Sc Key Will Halt CMS.

Status Indicator: **Don'tPrtSc**

Effect on Call Management: If you use the [Prt Sc] key when this message is displayed, CMS stops managing calls.

Effect on Data Collection: If CMS stops managing calls, all data collection stops, but it resumes normally when the problem is corrected. Data are saved for the portion of the hour that CMS was managing calls.

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 cm.
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, reboot the PC and restart CMS.

► Printer Not Ready. (When Printer Ready, Select a Labeled Function Key.)

Status Indicator: **Don'tPrtSc**

Effect on Call Management: Same as for previous problem. .

Effect on Data Collection: Same as for previous problem.

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, reboot the PC and restart CMS.

► 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	Corrective action
The agent isn't using the Available and ACW buttons correctly *or* the buttons may not have been programmed properly.	Refer the agent to the information under the heading "Announcing Availability for CMS Calls" in Section 6, "Handling CMS Calls," *and* check that the buttons have been administered properly.
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 "Dynamic Reconfiguration" in Section 5 or in the "Quick Reference Guide to Dynamic Reconfiguration" in Section 10.

► **PROBLEM:** An agent's properly programmed ACW and Available buttons do not respond correctly or agents are inconsistently put into the ACW or Available states.

Possible cause	Corrective action
Agent's line group is administered for Auto ACW and agent is touching the ACW and Available buttons.	If Auto ACW is in effect, agents should not touch the ACW button. Agent's may touch the Available button only after their voice terminals have been put into the ACW state automatically.
Auto ACW has not been administered correctly.	Check the ACW administration for the agent's line group, and readminister as necessary.

► **PROBLEM:** An agent is receiving the wrong CMS calls. For example, an agent in the Personal Travel split is receiving calls for the Corporate 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 "Dynamic Reconfiguration" in Section 5 or the "Quick Reference Guide to Dynamic Reconfiguration" in Section 16.

► **PROBLEM:** Agents continue to receive CMS calls after touching the ACW button to indicate they are unavailable for CMS calls.

Possible cause	Corrective action
The agents are touching the ACW button *after* they hang up.	Remind the agents to touch the ACW button *before* they hang up.

► **PROBLEM:** An agent's voice terminal rings when the call is for another agent, or it rings once and stops.

Possible cause	Corrective action
The agent has one or more CMS lines (or line pools) set to ring.	Remind the agent to set all CMS lines (or line pools) not to ring. Refer the agent to the information on line ringing options under the heading "Using MERLIN II System Features with CMS" in Section 6, "Handling CMS Calls."

► **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 has one or more CMS lines (or line pools) set to ring.	Remind the agent to set all CMS lines (or line pools) not to ring. Refer the agent to the information on line ringing options under the heading "Using MERLIN II System Features with CMS" in Section 6, "Handling CMS Calls."

► **PROBLEM:** Agents stationed close to each other have trouble determining whose voice terminal is ringing.

Possible cause	Corrective action
The agents' voice terminals have the same ringing pattern.	Remind the agents to personalize the ringing on their voice terminals. Refer them to the information on personalized ringing under the heading "Using MERLIN II Features with CMS" in Section 6, "Handling CMS Calls."

► **PROBLEM:** Agents have trouble locating calls they have put on hold.

Possible cause	Corrective action
The agents don't know that the green light next to a call they put on hold flashes more rapidly than the green light next to a call someone else puts on hold.	Refer the agents to the information on voice terminal lights under the heading "Using MERLIN II System Features with CMS" in Section 6, "Handling CMS Calls."

► **PROBLEM:** Agents sometimes find the light next to the Available button has gone off even though they did not press either the Available button or the ACW button.

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 the agents that any time CMS sends a call to a voice terminal and it goes unanswered, the light next to the Available button on that voice terminal goes off and CMS puts the agent in the logged out state.

► **PROBLEM:** All CMS agent stations ring part of one ring each time a call arrives.

Possible cause	Corrective action
Lines not set to No Ring	Set lines to No Ring

Managing Calls if CMS is Disabled

If CMS becomes disabled, you and your agents must answer and distribute calls using MERLIN II system features until the problem is solved and CMS resumes managing calls.

The following information assumes that you (the supervisor) will act as the administrator/attendant for your CMS lines until CMS is running again. If you designate someone else to be the administrator/attendant, give these pages to that person.

WHAT YOU SHOULD HAVE

To properly monitor CMS calls and act as attendant when necessary, you should have a MERLIN II System Display Console,

Your voice terminal must be plugged into one of the attendant jacks on the MERLIN II system control unit. The attendant jacks are the ones marked "ATT" on the "Station Jacks" section of your MERLIN II system Master Planning Form. If you can't find the Master Planning Form, see the information under the heading "Attendant Positions" in "Complete the System Configuration Form" in Section 2, "Planning the System," of the *MERLIN II Communications System with Feature Module 2 lnstallation and Administration Manual.*

Your voice terminal must also be designated an attendant console. This requires a MERLIN II system administration procedure described under the heading "Designate Attendant Positions" in "Step 3: Perform Basic Administration" in Section 4, "Administering the System," of the *MERLIN II Communications System with Feature Module 2 Installation and Administration Manual.*

If all the attendant jacks in the control unit are already occupied, unplug the cord from either the CU 1 jack or the CU *2* jack on the CMS card at the back of the PC, and plug it into the jack labeled Line on the bottom of your voice terminal. This automatically makes your voice terminal an attendant console with a button with lights for each CMS line and agent.

WHAT YOU SHOULD KNOW

First, you have to know how your MERLIN II system is configured. This information is found on the MERLIN II System Configuration Form and the Master Planning Form. If you have difficulty finding the information you need, ask the MERLIN II system administrator for help.

You and your agents also need to know the meaning of the lights next to the buttons on your voice terminals. See the information on voice terminal lights under the heading "Using MERLIN II System Features with CMS" in Section 6, "Handling CMS Calls."

WHAT YOU SHOULD DO

The CMS lines in your MERLIN II system are set either to square, to pooled with button access to line pools, or to pooled with dial access to line pools. What you do to manage calls differs somewhat depending on how your system is configured. If you don't know how the lines in your system are configured, see your MERLIN II System Configuration Form or ask the system administrator. Then go to the procedure below that pertains to your system.

> **NOTE:** If your system has Automatic Route Selection (ARS), go to "Pooled System: Dial Access."

Square System

Every agent's voice terminal has a separate line button for each CMS line the agent's split answers. Agents can tell from the lights next to the line buttons which lines are ringing, in use, or on hold. They should be able to manage the calls coming into their splits themselves.

To manage calls, do the following:

- Have the agents program the line buttons for CMS lines on their voice terminals for "immediate ring," See the information on line ringing options under the heading "Using MERLIN II System Features with CMS" in Section 6 of this manual.

  Now all calls coming in to the split will ring at every agent's voice terminal. Any available agent in the split can answer an incommg call.

- When incoming call traffic becomes too heavy for agents to manage efficiently, you (the attendant) can answer backlogged calls, ask the callers to wait, and place the calls on hold.

- Agents can tell from the lights next to the line buttons which calls you have put on hold. As agents become available, they can answer the held calls. You should suggest that agents *not* put calls on hold. Agents will then know that held calls were put on hold by you (the attendant) and not by another agent in the split.

Pooled System: Button Access

Agents must have a line pool button on their voice terminals for each line group their split answers. Then they can watch the lights next to the line pool buttons, recognize which line pools have ringing calls, and answer them. If you find that agents don't have a line pool button for each line group they cover, you (or the MERLIN II system administrator) can assign the appropriate line pools to agents' voice terminals using the administrator/attendant console at intercom 10. Just follow the procedure in "Assign Lines to Line Pools" under the heading "Step 3: Perform Basic Administration" in Section 4, "Administering the System," of the *MERLIN II Communications System with Feature Module 2 Installation and Administration Manual.*

To manage calls, do the following:

- Have the agents program their voice terminals for "immediate ring" on all pool buttons for CMS lines. (See the information on line ringing options under the heading "Using MERLIN II System Features with CMS" in Section 6 of this manual.) When a call comes in to a CMS line pool, it will ring at the voice terminal of every agent in the split assigned to that line group. Any available agent in the split can pick up a ringing call.

- If incoming call traffic becomes too heavy for the agents to manage efficiently, you (the attendant) can answer backlogged calls, ask the callers to wait, and put them on hold. You then have to monitor the lights next to the Auto Intercom buttons on your voice terminal, and transfer the held calls to agents as they become available. Agents in a pooled system *cannot* pick up held calls directly.

Pooled System: Dial Access

With dial access to line pools, agents have only the two main pool buttons on their voice terminals, They do not have individual line pool buttons for each of the CMS line groups they answer. They therefore *cannot* answer CMS calls

directly. You (the attendant) must answer all CMS calls and transfer them to available agents. This requires that you monitor the lights on your voice terminal very closely.

To manage calls, do the following:

- Have the agents leave their voice terminals set to "No Ring."
- Answer all incoming calls and transfer them to available agents.
- If no agent is available, ask the caller to wait and place the call on hold.
- When an agent becomes available, transfer the held call to the agent.

If you need additional information on any MERLIN II system feature, see the entry for that feature in the "Reference" section (Section 2) of the *MERLIN II System Manual.*

Overview

This section contains the following quick reference guides:

- Quick Reference Guide to Your PC Keyboard
- Quick Reference Guide to Entering and Editing Data
- Quick Reference Guide to Dynamic Reconfiguration
- Map of Screens for CMS Administration
- Map of Screens for Call Management

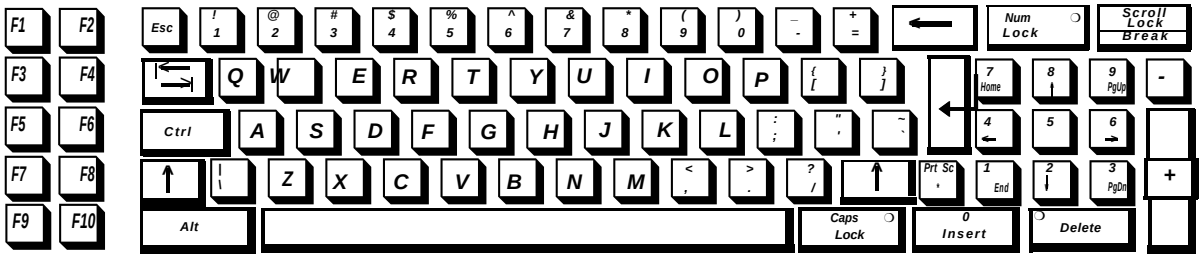
You may want to make copies of some or all of these guides and keep them handy while you administer and monitor CMS.

Quick Reference Guide to Your PC Keyboard

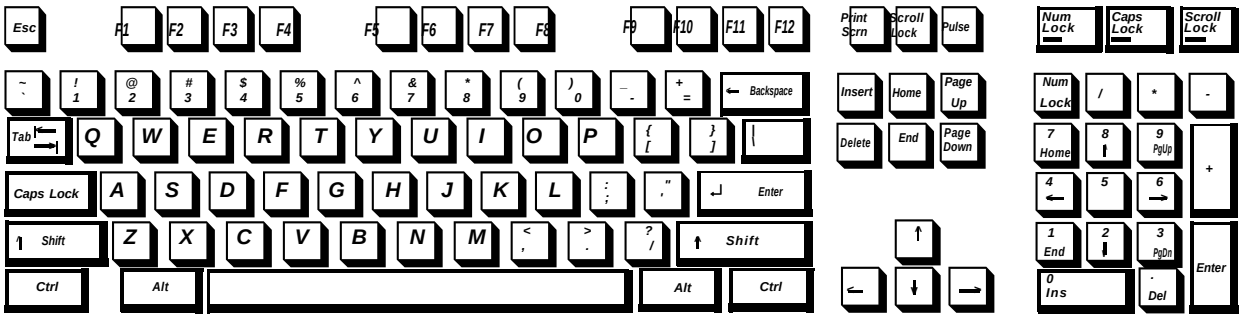
The instructions in this manual refer to the 6300 WGS keyboard. The type of keyboard you are using depends on the type of PC to which it is connected.

The function keys discussed in this guide are the same on both keyboards. The design differences between the two keyboards affect the position of the keys, but not their function. Also the tab, backspace, shift, and enter keys on the 6300 WGS keyboard have arrows and labels to identify them; the PC 6300 keyboard has only arrows. The cursor directional keys are same on both keyboards. Figure 10-1 shows the two keyboards that work with CMS.

FIGURE 10-1 PC 6300 and 6300 WGS keyboards.



PC 6300



6300 WGS

Quick Reference Guide to Entering and Editing Data

THE PROMPT

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.

USING THE KEYS

In many instances, both keyboards allow more than one key to perform the same function. The table below shows the function keys you use to cancel a prompt, move the cursor to different fields in a prompt, and enter data.

Press	Or	To
[F1] (Cancel Prompt)		Cancel a prompt, including any data you may have already entered in any field.
[F5] (Previous Field)	[↑] + [⇆] (the shift key and the tab key both at once)	Move to the beginning of the previous field.
[F6] (Next Field)	[⇆] (the tab key)	Move to the beginning of the next field.
[→] (the right arrow key on the numeric keypad)		Move one character to the right. Does not work in a blank field.
[←] (the left arrow key on the numeric keypad)	[←] (the backspace key)	Move one character to the left. Does not work in a blank field.
[F8] (Enter Data)	[↵] (the return key)	Indicate you have finished your response.

ENTERING DATA

Follow these guidelines when completing the fields in a prompt:

- You may use uppercase or lowercase letters.
- Some field entries can be numbers or special characters.
- Spaces are not allowed, use underscores. To get an underscores, press the shift key ([↑]), and then press the hyphen and underscores key in the top row of the keyboard.
- Press [F8] (labeled “Enter Data”), or [↵] PC to process the data you have entered.
- Your PC beeps and displays an error message if you skip a required field in a prompt and press [F8] or [↵] .

EDITING DATA

Follow the instructions in the table below to change entries.

To	Do this
Change a character in a field	Move the cursor to the incorrect character and type another character over it.
Add characters at the end of an entry	Press [→] after the last character and type additional characters.
Insert characters in an entry	Move the cursor to the first character you want to change and retype the entire entry from that character, (You *cannot* use [Insert] to insert a character between other characters.)
Replace a long entry with a shorter one	Type over the 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": **1** Move the cursor to "s" **2** Type "e" **3** Press the space bar. The letters "eph" disappear.

USING THE HELP SCREENS

For more information about any screen or prompt appearing on the monitor, press [F10] (labeled "Help"). A help screen that describes the screen or the prompt will appear.

To exit a help screen and return to your previous place, press any key. If you press a *function key* to exit a help screen, you will exit help and then perform the function of that particular function key.

Quick Reference Guide to Dynamic Reconfiguration

This guide shows what screens to select if you want to activate a different configuration or make changes in the current configuration. While CMS is running, you can:

- Reconfigure agent splits
- Change line group options
- Reconfigure call flow
- Use the Stored Shift Configurations screen to save your changes or to activate a different configuration

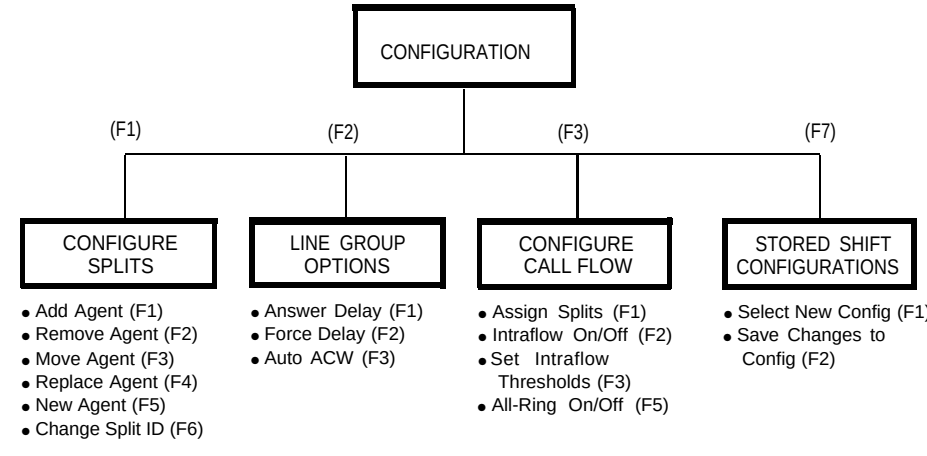
For detailed descriptions of these procedures, see "Dynamic Reconfiguration," in Section 5, "Supervising CMS."

You make changes in an operating CMS configuration from the Configuration screen. You can access this screen from:

- The Initialization screen, from which you start call management (This screen becomes the System Menu screen after you make your first configuration selection).
- Any of the status screens
- System Menu screen for call management

The screens and function keys used for dynamic reconfiguration are shown in Figure 10-2.

FIGURE 10-2 Screens and function keys for dynamic reconfiguration.



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.

Map of Screens for CMS Administration

FIGURE 10-3 Map of Screens for CMS Administration

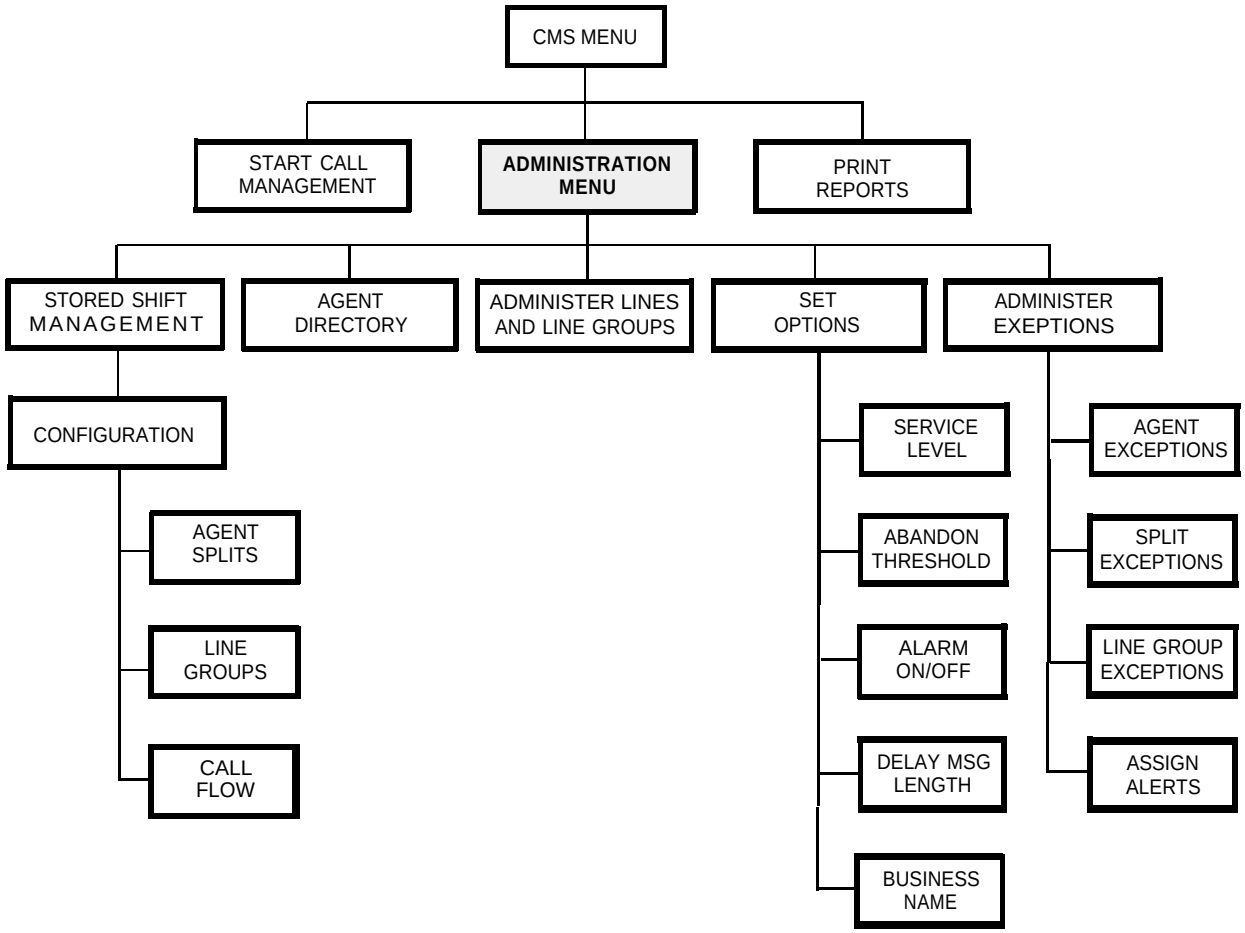
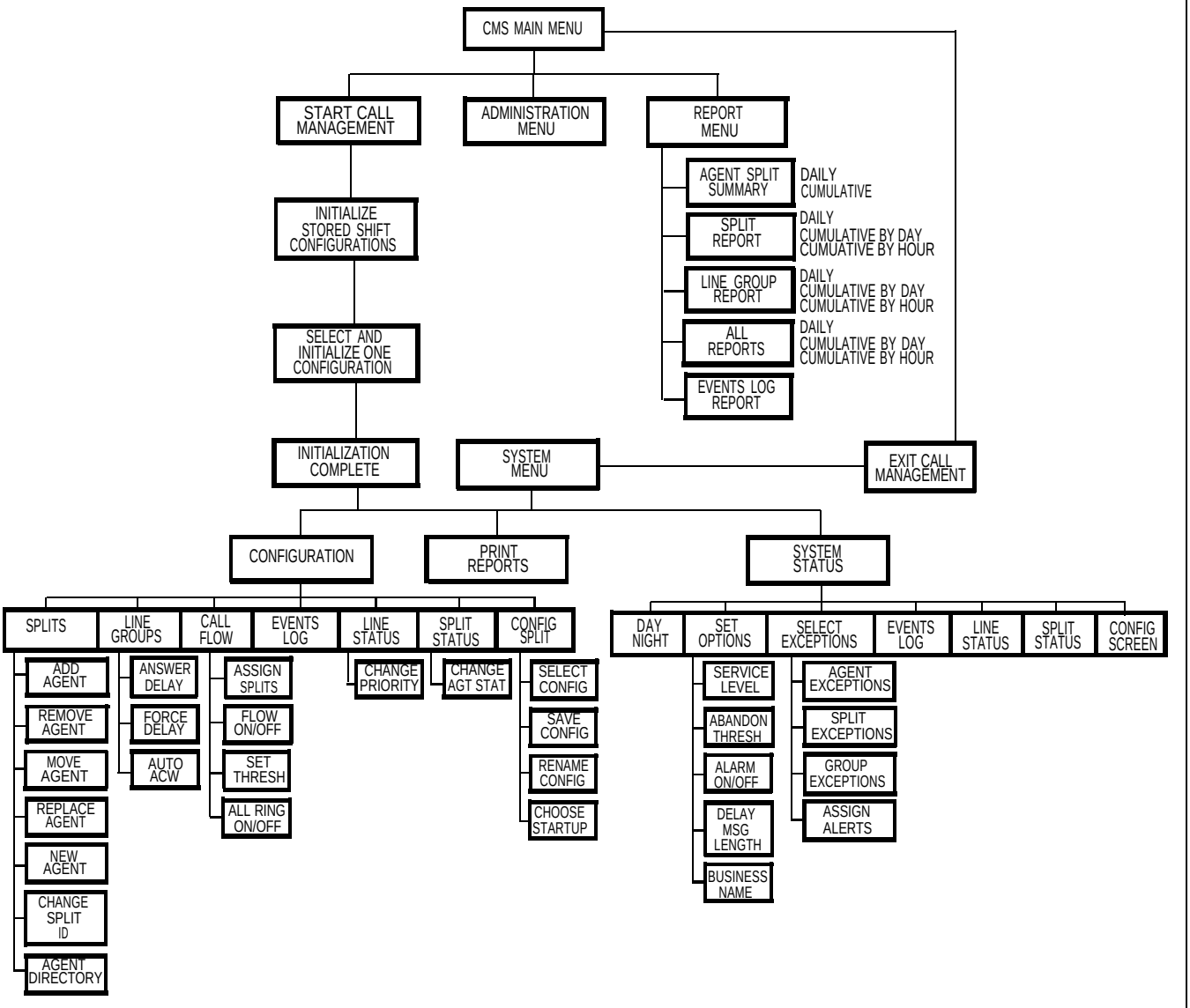


FIGURE 10-4 Map of Screens for Call Management



NOTE 1
Additional Call Management screens and function keys are provided to allow for easy navigation between configuration and system status displays as well as easy access to the Events Log.

NOTE 2
After initialization is complete and another menu is selected, the system menu screen can be used to select configurations review system sfatus screens, print reports, and exit call management.

Overview

This glossary defines these sets of expressions used in CMS.

- **CMS Terms.** Defines key terms used in this manual to describe the setup and operation of CMS. The list includes MERLIN II system terminology.
- **CMS Status Screens.** Explains the terms used to identify the various statistics presented in the System Status, Split-Status, and Line Status screens.
- **CMS Reports.** Describes the terms used to identify the information contained in the daily and cumulative reports for the Agent Split Summary, the Split Report, and the Line Group Report.

CMS Terms

Key words and phrases used in CMS are defined below,

Abandoned Call	A call that comes into CMS but is disconnected by the caller before being serviced by an agent.
Abandoned 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.
ACD (Automatic Call Distributor)	The general term for systems such as CMS that automatically answer incoming calls and distribute them to available agents.
ACD Call	An incoming call on a CMS line.
ACW (after-call-work) State	An agent-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 previous calls.
Agent Position	The 2-digit MERLIN II system intercom number for the voice terminal assigned to an agent.
Agent Split	A team of agents who handle the same types of incoming calls.
Alert	A signal, either a beep from the supervisor's PC or a wall-mounted light that turns on, to notify a CMS supervisor that an exception threshold for an agent, split, or a line group has been exceeded. Alarm beeping, if turned on by the administrator, also occurs for system errors and other screen messages.
All-Ring Operation	A CMS mode in which any call coming into an agent split rings simultaneously at the voice terminals of all agents in the split.
Answer Delay	The initial period of ringing in which an incoming call continues to ring if no agent is available. If an agent still is not available by the end of the answer delay period, the call is connected to the voice announcement unit.

Auto ACW (Automatic after-call-work) State	An administered state in which the agent receives no ACD calls. CMS automatically puts an agent's voice terminal into this state upon the completion of a call to allow the agent to finish work associated with previous calls. The Automatic ACW option controls the length of after-call-work time, from 0 to 999 seconds. If O time is designated for a line group, the Auto ACW feature is not in effect.
Auto Intercom Button	A voice terminal button that has been programmed to contact another voice terminal in the MERLIN II system. Lights beside the button show the current status (busy or idle) of the voice terminal that the button represents.
Available State	An agent-activated state in which the agent is idle and available to handle CMS calls. Agents in this state are not active on an ACD or other than ACD call, not in an after-call-work or logged out state, or have not yet answered a ringing ACD call.
Button Access to Line Pools	One of two optional settings for a MERLIN II system with pooled lines that determine how users access line pools. With Button Access, each line pool is assigned to its own button on users' voice terminals. Users simply press the appropriate button to access a particular line pool. The alternative arrangement is Dial Access to Line Pools.
CMS Hold Time	The time period beginning when CMS answers an incoming call and ending when the call is transferred to an available agent and rings at the agent's voice terminal. CMS hold time often includes delay messages.
Completed Call	A call on a CMS line that is answered by an agent, serviced, and disconnected.
Configuration, Shift	See Shift Configuration.
Dial Access to Line Pools	One of two optional settings for a MERLIN II system with pooled lines that determine how users access line pools. With Dial Access, users press a Pool Access button, then dial a code to access a particular line pool. The alternative arrangement is Button Access to Line Pools.
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 administrator's PC screen.
Exception Threshold	The point at which the administrator is to be notified that an exception has occurred; that is, a time limit, a certain number of calls on hold, or other type of threshold has been met or exceeded, and the administrator must make some adjustments to bring the exceptions below the set thresholds.
Exception Alert	A signal, either a beep from the supervisor's PC or a light from an external alert, to notify the CMS supervisor that an exception threshold has been met or exceeded.
External Exception Alert	A wall-mountable incandescent lamp that lights up and remains lit while the condition causing the exception alert is in effect. CMS can have up to four lamps, which are connected to MERLIN II system line jacks and administered for exception thresholds by line button number for agent splits and line group exceptions.
Force Delay	An answering option that causes callers to hear the entire delay message before being transferred to an available agent. If forced message delay is off, calls are transferred as soon as an agent becomes available, even if the message has not finished.
Initial Setting	The factory-set value for a system option which allows CMS to operate immediately after installation. The administrator may later improve system performance by replacing some initial settings with values more appropriate to the needs of his or her business.
Intraflow	Automatic transfer of waiting calls from the main split to the secondary split after a preset number of seconds. If no agent is available in the main split, a call that has waited the specified length of time is intraflowed to an available agent in the secondary split.
Intraflow Threshold	The number of seconds the oldest call waits in the main split before it is intraflowed (transferred) to an available agent in the secondary split.

Jack, Control Unit	One of several numbered receptacles on the MERLIN II system control unit into which connections for telephone lines and voice terminals are plugged.
Line Group	A group of interchangeable telephone lines on which CMS calls can be answered by the same team of agents.
Logged Out State	A state in which the agent receives no CMS calls and is not counted as logged in for reporting purposes. The CMS may be configured so that agents are placed in this state when CMS 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 for longer than a specified exception threshold.
Main Split	The agent split with primary responsibility for answering calls that come in on a particular line group.
Manual Signaling	A programmable MERLIN II system feature that allows a user to signal a co-worker audibly by pressing a button on his or her voice terminal.
Night Service	A mode of CMS 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	Calls not associated with ACD, such as outgoing calls, other than ACD incoming calls, intercom calls, and calls transferred to an agent by another person.
Pooled System	An arrangement of the MERLIN II system in which interchangeable lines are grouped together to form line pools. With Button Access, the user presses the voice terminal button assigned to a particular line pool to access that pool. With Dial Access, the user presses a Pool Access button, then dials the code assigned to the particular line pool.
Position, Agent	See Agent Position.
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.

Refused Call	A call that rings at an available agent's position, is not answered within the transfer return interval, and then returns to CMS. When a call is refused, the agent's position is automatically put into the logged out state.
Ringing	Two types of ringing are important 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 a voice terminal, from the time CMS transfers the call to an available agent until the agent lifts the handset.
Ringing Options	You can determine whether incoming calls ring immediately at a voice terminal or do not ring at all. You choose ringing options for line buttons and for Cover buttons for the Transfer-to-Split and All-Ring operation features on an agent's voice terminal. The ringing options are: ● *No Ring:* All CMS line on an agent's terminal should be programmed for No Ring to prevent all the CMS stations from ringing each time a new call enters the system. Instead, the PC provides the ring for each new call, answers it, and transfers it to the agent's voice terminal, which will ring. Lines or line pools used primarily for placing outgoing calls should be programmed for No Ring. ● *Immediate Ring:* Cover buttons for the Transfer-to-Split or All-Ring operation feature should be programmed for Immediate Ring. ● *Other:* Private lines or lines not assigned to CMS can be programmed as needed.
Secondary Split	The agent split assigned to answer calls on a particular line group if the agents in the main split are overloaded. 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, expressed in terms of the number of seconds it should take for an incoming call to be answered by an agent.
Serviced Call	A CMS call that has been connected to an agent for longer than the abandoned call threshold.

Shift Configuration	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.
Split, Agent	See Agent Split.
Supervisory Login/Logout	A feature that allows a supervisor to change an agent's work status (Available/ACW/Logged out) from the CMS PC via the Split Status screen. This can be done at any time during call management. It takes effect immediately, unless an agent is on an ACD call. When the call is complete, the new status goes into effect.
Transfer-to-Split	A feature that allows an agent to transfer calls to another split by pressing a button on his or her voice terminal. All voice terminals in the other split will ring. Agents in the other split pick up the call using the MERLIN II system Cover button feature.
Transfer Return Interval	The number of times a transferred call rings before returning to the voice terminal from which it was transferred.

The System Status, Split Status, and Line Status screens provide data that is continuously updated to help you monitor your CMS system. The following terms are used to distinguish between different types of calls:

- **Serviced vs. abandoned.** These terms distinguish between incoming calls that were or were not handled by an agent. "Serviced" calls come into CMS and are connected to an agent for a longer time than the abandoned call threshold. "Abandoned" calls come into CMS but are 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 call threshold.
- **Completed vs. not completed,** These terms describe the status of a call on a CMS line at a particular time. When the terms are used to describe CMS calls, "completed" calls are those that have been serviced by agents and then disconnected. Calls "not completed" 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" (other than 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. Some statistics, then, such as total holding time of a line, may show more than 60 minutes of activity within a given hour.
- **ACD vs. Other.** These terms distinguish between the types of incoming and outgoing calls on the MERLIN II system.

  ACD: Incoming calls to CMS lines which are answered by the CMS and transferred to an available agent are considered "ACD" (automatic call distributor) calls.

  Other: "Other" calls are all outbound calls (even if made on CMS lines), and all other non-ACD incoming calls—intercom calls, non-CMS outside line calls, and calls transferred to an agent by another person.

System Status Screen

This section explains the terms used to identify different types of information on the System Status screen.

> **NOTE:** If an agent answers an ACD call and then transfers it to another agent or to a nonagent, the statistics for that call are *not* included in the data shown on the System Status screen, except as "Other" calls.

LINE GROUP INFORMATION

Line Group	The first two columns list the letter to which a line group is assigned, and the line group ID.
Lines Busy	The number of lines in the line group that are either ringing, on hold, or connected.

	Lines Total	The total number of lines in the group.
	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.
	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.
	Flow	Intraflow is indicated by "On" or "Off". The secondary split can receive calls only if intraflow is on.
SPLIT INFORMATION	Split	The number and ID of each split.
	Agents ACD	The number of agents currently active on ACD calls. Active calls include both calls currently connected to an agent and calls the agent has placed on hold.
	Agents Avail	The number of agents currently available to receive ACD calls (that is, agents who are not active on any call, not in the ACD, ACW, or logged out state, or have not yet answered a ringing ACD call).
	Agents ACW	The number of agents currently in the after-call-work state.
	Agents Out	The number of agents currently in the logged out or night state, and not available to receive an ACD call.
	Agents Oth	The number of agents currently active on calls not related to ACD work such as outgoing calls, other than ACD incoming calls, intercom calls, and transferred calls. Active calls include calls currently connected to an agent and calls the agent has placed on hold.
	Waiting Num	The number of calls currently waiting in a split. This number includes calls which have not yet been answered by CMS, are connected to a delay message, or have returned unanswered to CMS after being transferred to another agent. It does not include calls which are ringing at an agent position or which were put on hold by an agent.

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 includes initial ringing time and CMS hold time. The waiting time ends when the call begins ringing at the position of the agent who answers it.

The following terms refer to data collected since the beginning of the hour.

Abandon Num	The number of abandoned calls for a particular split. Abandoned calls include those that were disconnected prior to being transferred to an agent and those that were answered by an agent but had a talk time less than the abandoned call threshold. Abandoned calls are credited to the main split, even if the call was abandoned after being intraflowed to the secondary split.
Abandon Delay	The average number of seconds an abandoned call spent in the system.
Intraflow In	The number of serviced calls intraflowed into a particular split from another split. Calls are credited to the split after they are completed.
Intraflow Out	The number of serviced calls originally meant for a particular split but intraflowed to a secondary split. Calls are credited to the split after they are completed.
Calls Handled Num	The total number of ACD calls serviced by a split. This includes completed calls only.
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.
Calls Handled ASA	The average speed of answer for completed calls, which 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. The waiting time for intraflowed calls is reflected in the average speed of answer for the secondary split, not the main split.
Serv Levl	The service level is the percentage of calls connected to an agent within the service level limit set by the system administrator. This includes completed calls only.

Split Status Screen

This section explains the terms used to identify different types of information on the Split Status screen. The statistics presented on this screen are collected on an hourly basis.

> **NOTE:** If an agent answers an ACD call and then transfers the call to another agent or to a nonagent, the statistics for the call are *not* included in the data shown on the Split Status screen.

AGENT STATUS

Pos-ID

The first two columns list the agent's position number, which is the MERLIN II system intercom number of the agent's voice terminal, and the agent's ID, an assigned "name" of up to five characters.

Status

The agent's current status, which can be one of the following conditions:

Available: The agent is currently available to accept an ACD call (the agent is not on a call and not in the after-call-work state).

ACD: The agent is busy on an ACD call or has placed an ACD call on hold; the associated line ID is displayed.

OtherCall: The agent is busy on a call not related to ACD work,

ACWork: The agent is in the after-call-work state and is not available to take calls.

LoggedOut: The agent is in the logged out state following the startup procedure or has placed himself in the logged out state, and is unavailable to take calls.

Night: The agent's voice terminal is on hook, and the CMS is in Night Service.

ACD Calls Num

The number of completed ACD calls the agent has serviced. This figure includes intraflowed calls.

ACD Calls AvgTlk

The average amount of time (in minutes and seconds) the agent has spent on each completed ACD call. This figure includes intraflowed calls.

ACD Calls AvgACW

The average amount of time (in minutes and seconds) the agent has spent in the primary after-call-work state following an ACD call. Only completed after-call-work sessions are used to calculate this average. Time spent on other than ACD ("other") calls while in the after-call-work state is not included.

ACD Calls Xfr

The number of ACD calls transferred by an agent.

ACD Calls Rfusd	The number of ACD calls that the agent did not answer.
Other Num	The number of completed other than ACD calls the agent has made or received.
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 placed the calls on hold.

SPLIT STATUS

The top right section of the screen summarizes calls waiting for all splits.

Waiting Num	The number of calls in a split that are ringing, connected to the delay message, or on hold waiting for an agent.
Waiting Old	The number of seconds the current oldest call has been waiting to be answered by an agent in a particular split.

CALL FLOW INFORMATION

The bottom right section of the screen shows how splits are assigned to line groups and whether intraflow is turned on for each split.

Line Status Screen

This section explains the terms used to identify different types of information on the Line Status screen. The statistics described on this screen are collected on an hourly basis.

LINE STATUS

Grp — The letter assigned to the line group.

Line — The number of the line(s) assigned to each group.

P — Line priority status. A "+" in this column indicates that the line is a priority line and will be answered before other, nonpriority lines.

Stat — The line wait status, which can be one of the following conditions:

Ring: Initial ringing; a call has seized the line, but CMS has not answered it yet.

Idle: The line is not in use.

Wait: CMS has answered the call on this line. The call is currently in the CMS hold state or transfer ring state (ringing at an agent's voice terminal).

Cnct: An incoming or outgoing call on this line is connected to an agent or nonagent. The call may be in progress or may have been put on hold at the voice terminal.

Calls Num — The number of calls coming in on a particular line. Both serviced and abandoned calls are included; calls connected to nonagents and outgoing calls on CMS lines are not included.

Calls HoldT — The total amount of time (to the nearest minute) calls are held on a given CMS line, measured from line seizure to disconnect. Serviced and abandoned calls are included; calls connected to nonagents and outgoing calls on CMS lines are not included.

LINE GROUP SUMMARY

A line group summary 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).

XX Busy — The number of lines in the line group that are currently in use for incoming or outgoing calls. Their status is "Ring," "Wait," or "Cnct. "

XX Total — The total number of lines in the line group.

XX Calls — The total number of completed ACD calls 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.

Waiting Num	The number of calls in a split that are ringing, connected to the delay message, or on hold waiting for an agent.
Waiting Old	The number of seconds the current oldest call has been waiting to be answered by an agent in a particular split.

CALL FLOW INFORMATION

The bottom right section of the screen shows how splits are assigned to line groups and whether intraflow is turned on for each split.

This section explains the terms used to identify data in the CMS reports generated from the Report Menu:

- The Daily Agent Split Summary Report shows data averaged/totaled over an entire day (midnight to midnight).
- The Cumulative Agent Split Summary Report shows data averaged/totaled over a specified number of days ranging from 2 to 93 days.
- The Daily Split Report and the Daily Line Group Report show data on an hour-by-hour basis.
- The Cumulative Split Report and the Cumulative Line Group Report show data on either a day-by-day or an hour-by-hour basis, depending on the method of tabulation chosen.

The Events Log, which can also be printed from the Report Menu, lists the 50 most recent exceptions and system messages. The information in this report may span several days or part of one day.

Daily Agent Split Summary

This report provides daily summary data on each agent in a given split.

> **NOTE:** If one or more agents serve in more than one split during a data collection period, be sure to provide a different ID for each agent for each split assignment. This ensures the accuracy of the data for each split; data from the hour in which the agent switched splits is credited to the split he or she is in at the end of the data collection period.

Agent	The agent's name: last name (up to 12 characters) and first name (up to 8 characters).
ACD CALLS Num ACD calls	The number of completed calls the agent serviced while logged into this split. The total includes intraflowed calls serviced by the agent. The Num ACD Calls should be identical to that shown in the Daily Split Report.
ACD CALLS 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, (The figure in the totals line under this column should be identical to the Avg Talk Time total in the Daily Split Report.)

ACD CALLS Avg After Call	The average amount of time (in minutes and seconds) the agent spent in the after-call-work state. The average does not include any time spent on the phone during an after-call-work state. (The figure in the totals line under this column should be identical to the Avg After Call total in the Daily Split Report.)
ACD CALLS Avg Work Time	The average amount of time spent on ACD-related work {the sum of Avg Talk Time and Avg After Call time).
ACD CALLS Num Xfr Calls	The number of ACD calls transferred by an agent.
ACD CALLS Num Rfusd Calls	The number of ACD calls refused by an agent.
OTHER Num Other Calls	The number of calls not related to CMS that are handled by the agent in the data collection period, The figure includes data from both Day and Night Service. (The figure in the totals line under this column should be identical to the Num Other Calls total in the Daily Split Report.)
OTHER Avg Talk Other	The average amount of time the agent spent on each calls not related to CMS work. The figure includes data from both Day and Night Service. (The figure in the totals line under this column should be identical to the Avg Talk Other total in the Daily Split Report.)
% ACD Time	The percentage of time the agent spent on ACD-related work (on CMS calls and in ‘the after-call-work state). The figure in the totals line under this column should be identical to the % ACD Time total in the Daily Split Report.
Total Time Staffed	The amount of time (to the nearest tenth of an hour) the agent was logged into a given split (and under a given ID) performing ACD-related work.

Cumulative Agent Split Summary

This report provides summary data on each agent in a given split over a specified period, from 2 to 93 consecutive days. The start and end date specified will be on the report.

The column headings in this report are the same as for the daily report; the totals under the headings will reflect the cumulative period of time specified. Also the Cumulative Agent Split Summary differs from the Daily Agent Split Summary as follows:

- Days for which no CMS data exists will not be included. A separate page at the completion of the report will contain a list of dates for which no CMS data exists.
- Hours for which a CMS agent did not work will not be included.

Daily Split Report

This report shows data for a particular split on an hourly basis. The column headings for the report table are explained below.

Time	The start time of each data collection hour. Hours in which no agents were logged into the split are not shown on the report.
ACD CALLS Avg Speed Ans	The average speed of answering for all calls answered by agents in the split during a given hour. The ASA is determined by dividing the wait time for all completed calls in the split (initial ringing plus CMS hold time plus transfer ringing) by the number of completed calls.
ACD CALLS Num Calls Aband	The number of ACD calls which were disconnected before reaching the abandoned call threshold determined by the administrator.
ACD CALLS Num ACD Calls	The total number of completed calls to agents during a given hour. Calls still in progress at the end of the hour are included in the next hour's data. The Num ACD Calls should be identical to that shown in the Daily Agent Split Summary.
ACD CALLS Flow In	The total number of completed calls intraflowed from another split into this split during a given hour. Intraflowed calls still in progress at the end of the hour are included in the next hour's data.

ACD CALLS Flow Out	The total number of completed calls intraflowed out of this split and answered by agents in another split during a given hour.
ACD CALLS 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. (The figure in the totals line under this column should be identical to the Avg Talk Time total in the Daily Agent Split Summary.)
ACD CALLS Avg After Call	The average time (in minutes and seconds) agents spent in the primary after-call-work state for each ACD call during a given hour. The average includes time only for completed ACW sessions following completed ACD calls. The average does not include time spent on the phone while in the ACW state. (The figure in the totals line under this column should be identical to the Avg After Call total in the Daily Agent Split Summary.)
ACD CALLS Num Xfr Calls	The number of ACD calls transferred by an agent.
OTHER CALLS Num Other Calls	The number of calls not related to CMS that are completed by agents in the split during a given hour. The total includes data from both Day and Night service. (The figure in the totals line under this column should be identical to the Num Other Calls total in the Daily Agent Split Summary.)
OTHER CALLS Avg Talk Other	The average amount of time (in minutes and seconds) spent on calls not related to CMS work by agents in the split during a given hour. The total includes data from both Day and Night service. (The figure in the totals line under this column should be identical to the Avg Talk Other total in the Daily Agent Split Summary.)
Avg Num Pos	The average number of agent positions (to the nearest "tenth of an agent") staffed during a given hour. The average is determined by dividing the total amount of time all agents in the split are logged in by 60 minutes.

% ACD Time	The percentage of time agents spent on ACD-related work (on CMS calls and in the after-call-work state). The figure in the totals line under this column should be identical to the % ACD Time total in the Daily Agent Split Summary.
Serv Levl	The percentage of completed calls that were connected to an agent in the split within the Service Level Limit. (The default value for the Service Level Limit is 20 seconds, but can be changed by the system administrator to a value from O-99 seconds.)

Cumulative Split Report (By Day or Hour)

This report provides summary data on a given split over a specified period, from 2 to 93 consecutive days. Statistics can be generated for a Cumulative Split Report to reflect cumulative days or cumulative hours.

Most of the column headings in this report are the same as for the daily report; the “Time” column heading will either be “Day” or “Hour” depending on which report has been selected.

Also the Cumulative Split Report differs from the Daily Split Report as follows:

- Night Service hours will not be included in the Cumulative Split Report by Hour. (A message to this effect will appear on the report.)
- Each line of data for a Cumulative Split Report by Day will be a daily summary; the date being summarized will be in the first column of the report.
- Days for which no CMS data exists will not be included. A separate page at the completion of the report will contain a list of dates for which no CMS data exists.

Daily Line Group Report

This report provides hour-by-hour data for a given line group, The report shows entries for each hour that the CMS is in either Day or Night Service mode during the 24hour period the report covers.

Time	The start time of the data collection hour.
ACD CALLS Calls Offered Night	The number of ACD calls which seized the lines of the line group during the given hour while the CMS was in Night Service. The figure does not include calls answered by nonagents.
ACD CALLS Calls Offered Day	The number of ACD calls which seized the lines of the line group during the given hour while the CMS was in Day Service. This total should be equal to sum of the Num Calls Aband and the Num Calls Handled (below). The figure does not include calls answered by nonagents.
ACD CALLS Num Calls Aband	The number of incoming calls to the line group which were abandoned while the CMS was in Day Service.
ACD CALLS Num Calls Handled	The number of completed incoming calls (including intraflowed calls) to the line group while the CMS was in the Day Service. Calls still in progress at the end of the data collection hour are included in the next hour's data.
ACD CALLS Hold Time Avg	The average amount of time (in minutes and seconds) each incoming call held a line. Average hold time is determined by dividing the cumulative hold time (measured from line seizure to line disconnect, for both abandoned and completed calls) by the number of calls offered. The average does not include calls answered by nonagents. Calls still in progress at the end of the data collection hour are included in the next hour's data.
ACD CALLS Hold Time Total	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 to both the Day and Night Services, but does not include times for calls answered by nonagents. (The figure in the totals line under this column is the total hold time for the day.)
XFR CALLS Num Xfr Calls	The number of calls successfully transferred by an agent while CMS was in the Day Service.
XFR CALLS Hold Time Avg	The average amount of time (in minutes and seconds) ACD calls continued to hold the line after being successfully transferred by an agent.

XFR CALLS Hold Time Total	The total amount of time (to the nearest minute) all lines were held (in use) by transferred calls.
OTHER CALLS Num Other Calls	The number of "other" calls which seized the lines of the line group during a given "hour. Calls still in progress at the end of the hour are included in the next hour's data.
OTHER CALLS Hold Time Avg	The average amount of time (in minutes and seconds) an "other" call held a CMS line.
OTHER CALLS Hold Time Total	The total amount of time (to the nearest minute) all lines were held (in use) by completed "other" calls. (The figure in the totals line under this column is the total hold time for "other" calls for the day.)
% All Lines Busy	The percentage of time in a given hour that all lines in the line group were simultaneously busy.

BUSIEST HOURS

The three data collection hours with the largest ACD Calls Total Hold Time values appear, in descending order, under the totals line.

Cumulative Line Group Report (by day or hour)

This report provides hour-by-hour data on a line group over a specified period, from 2 to 93 consecutive days. Statistics can be generated for a Cumulative Line Group Report to reflect cumulative days or cumulative hours, for each hour that CMS is in either Day or Night Service.

Most of the column headings in this report are the same as for the daily report; the “Time” column heading will either be “Day” or “Hour” depending on which report has been selected. The totals under the headings will reflect the cumulative period of time specified.

Also the Cumulative Line Group Report differs from the Daily Line Group Report as follows:

- Each line of data for a Cumulative Line Group Report by Day will be a daily summary; the date being summarized will be in the first column of the report.
- Days for which no CMS data exists will not be included. A separate page at the completion of the report will contain a list of dates for which no CMS data exists.

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