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# Call Management System

for MERLIN LEGEND™ Communications System

## **Supervisor's Guide**

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# About This Guide

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This guide assumes the Call Management System (CMS) has been initially installed and programmed. It provides the CMS Supervisor with information on each aspect of CMS operations and CMS programming for effective management, maintenance, and customization of CMS.

## **Documentation Conventions**

Several special symbols and typefaces appear in this manual. For example, keys that appear on your keyboard are shown like this:

[F1] (function key F1)

[↑] (up arrow)

[↓] (down arrow)

[←] (left arrow)

[→] (right arrow)

[⇆] (tab key)

[↵] (enter key)

When two keys must be pressed simultaneously, it is shown like this:

[↑] + [⇆] ] press the up arrow and tab key simultaneously).

Different typefaces are used throughout this guide:

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

**This bold typeface represents information you enter.**

*This italic typeface represents a system response:*

Sample screens from Bon Voyage Travel (a hypothetical business) are used throughout this guide. Explanatory material is often “keyed” to these screens with circled numbers (callouts) such as: ①. Refer to the callouts on the screens as you read the explanatory text.

In some instances, prompts that take up only one line on the display are represented in the text on two lines. When this is the case, a backslash (\) is used to show the break occurs in the text but not on the screens.

Prompt lines on screens show blanks (and a cursor) where you need to enter information. In the text, an underscore is used to identify where you enter information, as shown below.

ANSWER DELAY : Group Letter: \_ How Many Seconds: \_\_\_\_

PC responses may differ from the ones printed here, depending on the version of the MS-DOS® program you are using.

## **Related Documentation**

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Other documents are available to help you setup, use, and maintain CMS with the MERLIN LEGEND system. These documents are:

- *CMS Planning Guide and Forms*
- *CMS Installation and System Programming Guide*
- *CMS User's Quick Reference*
- *MERLIN LEGEND Communications System System Reference*

## **How to Order Documentation**

The CMS documents listed above come with the system. You can order additional copies of those documents or the related MERLIN LEGEND™ system documentation from the AT&T Customer Information Center. To order, find the order number in the table below and call the telephone numbers given on the inside front cover of this guide.

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| <u>Document</u>                            | <u>Order Number</u> |
|--|---------------------|
| <b>CMS</b>                                 |                     |
| Planning Guide and Forms                   | 585-214-050         |
| Installation and Programming Guide         | 585-214-010         |
| User's Quick Reference (packages of 15)    | 585-214-070         |
| <b>MERLIN LEGEND Communications System</b> |                     |
| System Reference                           | 555-610-110         |

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# Introduction to CMS

# 1

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This section provides a brief overview of the Call Management System (CMS), and the responsibilities of the CMS supervisor. A typical CMS application is shown using the example of an imaginary business called Bon Voyage Travel.

CMS is an automatic call distributor (ACD) that 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.

Your MERLIN LEGEND Communications System and CMS work together to meet your call management needs. Your AT&T account manager or authorized dealer configured MERLIN LEGEND and CMS configurations based on your particular call management needs. The implementor installed and initially programmed your system based on these configurations.

You, the CMS supervisor, should become familiar with the basic configuration of your system. As you observe how CMS manages your incoming call traffic on a day-to-day basis, you can begin to fine-tune your system for more efficient call management and more useful call-management reports. As your needs change, you will want to change the system's option settings to meet these needs.

## **CMS Supervisor's Responsibilities**

In many cases the MERLIN LEGEND system manager and the CMS supervisor are the same person; in other cases, the two roles may be assigned to different people. However, if different people are assigned to each role, the MERLIN LEGEND system manager and the CMS supervisor must work closely together to define the needs of both the MERLIN LEGEND system and CMS.

While the MERLIN LEGEND system manager is responsible for systemwide CMS options and features (such as line types, line assignments, and System Speed Dial codes), most of the CMS operation is the responsibility of the CMS supervisor. The primary function of CMS is to distribute incoming calls to available agents. If agents are not available, CMS cannot perform its primary function. Therefore, keeping agents available to answer calls is one of your main duties as the CMS Supervisor. Anything you can do to ensure agents are actively taking calls, not placing calls or doing anything other than CMS activities, is in the best interests of your call handling goals.

The CMS Supervisor's responsibilities include:

- Creating shift configurations of line groups and agent splits. (See Chapter 3, "Programming CMS Shift Configurations.")
- Changing system options and programming exceptions as business needs change. (See Chapter 4, "Changing System Options and Programming Exceptions.")
- Programming the attendant console and agent telephones and assisting agents in the use of the MERLIN LEGEND system features that they use to handle CMS calls. (See Chapter 5, "CMS Telephones and Telephone Programming.")
- Monitoring line status, split status, call traffic, and system problems during call management. (See "Monitoring Call Management" and "Dynamic Reconfiguration," in Chapter 6.)
- Generating reports. (See Chapter 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 Chapter 7, “Generating Reports,” for ongoing data collection and Chapter 8, “Archiving and Restoring Data,” for storing CMS report data.)

- Troubleshooting (See Chapter 9, “Troubleshooting.”)

## **Basic Terms and Key Concepts**

The terms and descriptions in this section provide the key to understanding how CMS works. 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.

### **Automatic Call Distributor**

CMS is the *automatic call distributor (ACD)* for the MERLIN LEGEND system. CMS distributes calls that come in on the MERLIN LEGEND system telephone lines assigned to CMS.

### **Lines and Line Groups**

The MERLIN LEGEND 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 example, the lines for incoming sales calls are in one line group and the lines for service calls in another. CMS accommodates up to a total of 28 lines assigned to up to four line groups.

### **Agents and Agent Splits**

Incoming calls are answered by *agents* who are assigned to *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. There can be 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.

### Shift Configuration

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.

### Main Splits and Secondary Splits

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.

### Intraflow and Intraflow Threshold

The sending of calls to agents in a secondary split is called *intraflow*. Intraflow can be turned on and off. 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*.

### Logged Out State and Available State

When call management begins for a shift, the agents in the shift configuration are in the *logged out state*. CMS keeps statistics on other calls made by agents who are logged out, but doesn't send calls to them, so the agents have to signal CMS that they are ready to receive calls (in *available state*). They do so by touching the programmed button labeled **Available** on their telephones (MERLIN LEGEND system telephones).

### After-Call-Work (ACW) 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 telephones. CMS does not send calls to agents who are in this 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.

### Automatic After-Call-Work (Auto ACW) State

The *automatic after-call-work (Auto ACW)* feature automatically places agents into the after-call-work state upon completion of an ACD call. During that time, agents receive no calls as they complete their work. The CMS supervisor can program a specific amount of time for this after-call-work state. 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

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. Also, agents will be placed in the logged out state if they fail to answer calls transferred to them by CMS.

### Supervisory Login/Logout

The CMS supervisor can change an agent's work state from the CMS PC or the supervisor's console. From the Split Status Information screen, the supervisor simply enters the agent's ID at the appropriate prompt and enters the new status (Logged out/Available/ACW). From the console, the supervisor presses the agent's Inside Auto Dial button then a programmed feature button for the desired work state.

### Call Management

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

1. CMS looks for an available agent in the main split assigned to the line group for the incoming call.
2. If an agent is available, CMS answers the call and transfers it to the agent who has been available the longest.
3. 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 transferred to the agent.
4. If no agent has become available and the delay message is finished, CMS puts the call on hold.
5. As soon as an agent is available, CMS transfers the oldest waiting call to the agent.
6. 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).

## Answer Delay, Force Delay, and Priority Lines

The CMS supervisor can modify the basic *call management* 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 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.

## **A Typical CMS Application**

The following example shows how Bon Voyage Travel Agency, an imaginary business, uses CMS to manage revenue-producing incoming call traffic.

### **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 general, Bon Voyage's customers fall into one of three groups: those who plan personal travel, those who plan charter group travel, and those who plan corporate travel. To handle these three types of calls and to manage the frequent overflow of calls, the agency divides the customer telephone lines into four line groups and organizes agents into four splits, as shown in Figure 1-1.

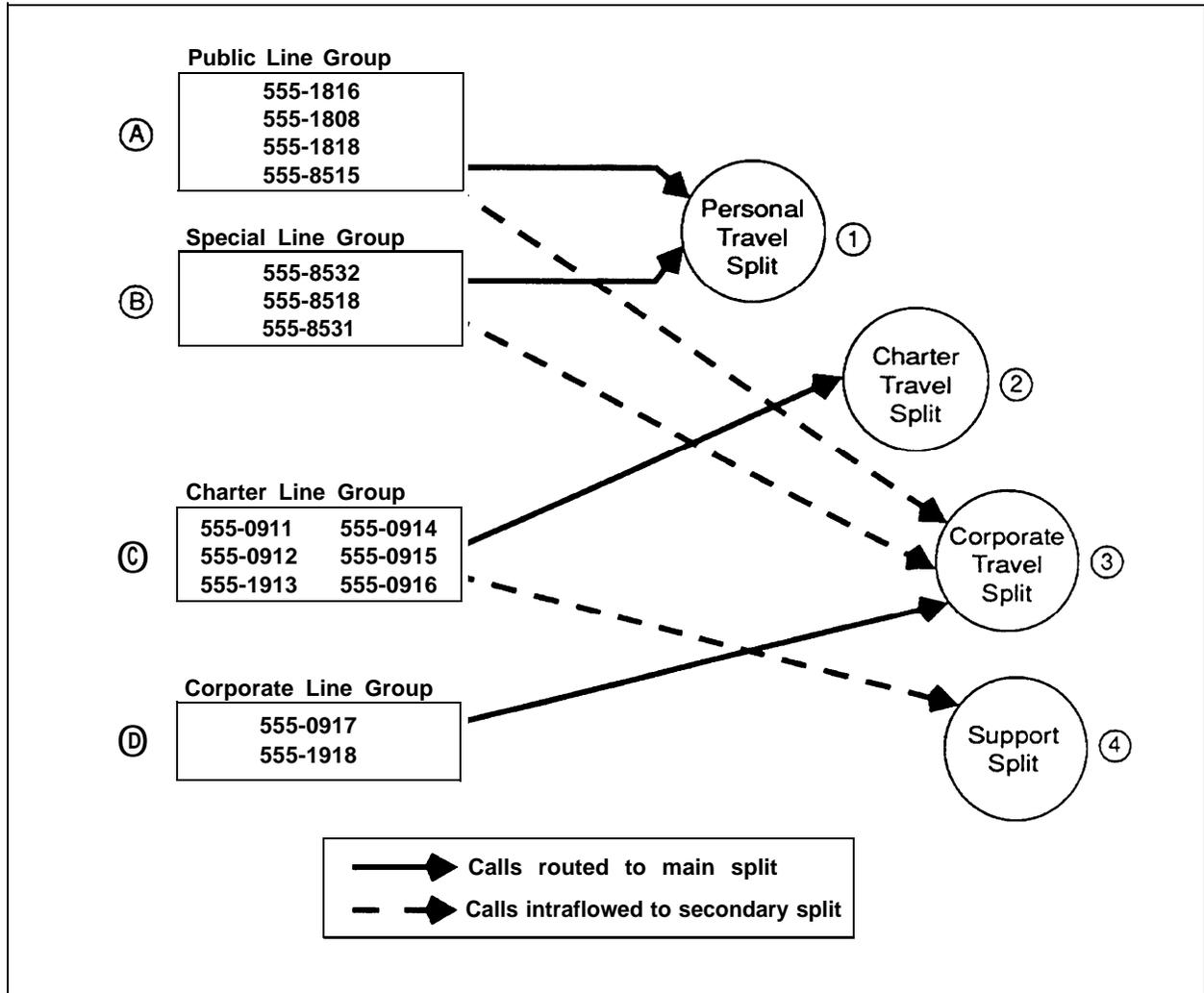


Figure 1-1. Bon Voyage Travel's CMS

The following description of each split and its line groups is keyed to the figure with circled numbers (callouts).

①

### **Personal Travel Split**

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* ① and the *Special line group* ②. The Public line group consists of four lines (555-1 816, 555-1808, 555-1818, and 555-851 5), 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.

②

### **Charter Travel Split**

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 the *Charter line group* ③ which consists of six numbers: 555-0911, 555-0912, 555-1913, 555-0914, 555-0915, and 555-0916. Occasionally a customer who has previously made travel arrangements through a holiday club may 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, or Transfer-to-Queue, is explained in detail later in this guide and in the *CMS Installation and System Programming Guide*.)

③

### **Corporate Travel Split**

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* ④. The telephone numbers for the Corporate line group are 555-0917 and 555-1918.

Since both the Personal Travel split and the Corporate Travel split handle individual trips, the Corporate Travel split serves as a *secondary split* (a backup split) to handle call overflow from the Personal Travel split.

④

### **Support Split**

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 Charter Travel split when call traffic is heavy on the lines in the Charter line group ©. That is, the Support split becomes a secondary split covering the Charter line group.

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

## **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 LEGEND Communications System. However, some phones and outside lines are *not* assigned to the Call Management System. They operate outside of CMS.

Agents *and* non-agents use the lines *not* assigned to CMS for all outgoing calls and all non-revenue-producing incoming calls. It is recommended that CMS lines not be used to place outgoing calls or to accept non-revenue producing incoming calls.

Because this guide focuses on the operation of CMS, it refers to the components of Bon Voyage Travel's MERLIN LEGEND system that are not assigned to CMS only when necessary to clarify some point about CMS 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.

## **Day-to-Day Operation of CMS**

Your day-to-day interaction with CMS primarily involves monitoring system status during call management and using dynamic reconfiguration to make any needed changes in the configuration being used to manage calls.

The following example illustrates how the CMS supervisor at Bon Voyage Travel interacts with the system during a typical day.

At 9 a.m. each business day, Pat P. 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 LEGEND system Group Page feature to ask the agents in some splits to touch the **Available** button on their telephones to signal they are available to begin answering calls. Another split is using a line group with Auto After Call Work; they automatically become available when the calls start coming in.

Pat makes several changes to the current configuration 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 Charter line group. Pat uses the Group Page feature to tell the agents in the Support split that they may now receive calls for the Charter line group. The Support split is a secondary split for the Charter 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 **[N] + [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 different screens, 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.

When Pat notices that three calls are waiting in the Personal Travel main split, and there have been several abandoned calls, he turns on intraflow to allow waiting calls to be sent to the Corporate Travel split (the secondary split for the Personal line group). Pat also increases the answer delay (the length of time calls ring before CMS answers them) so callers spend a little less time on hold and any long distance charges on their line could be reduced.

Pat has a new agent in the Corporate Travel split. Yesterday, Pat spent time with the new agent, explaining the telephone 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 joins the call using the Barge In feature or by pressing the line button for the agent's call. (A tone is heard when the call is joined.) 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 the business.

If the Events Log Report lists many occurrences of the all lines busy exception, it signifies that many people hear a busy signal when they call. Pat can use exception information like this to decide if more lines should be added to some line groups.

---

# Using Your PC with CMS

# 2

---

This chapter gives instructions for using your PC for the CMS Supervisor's activities. The basic operations described here are starting CMS, setting the time and date, and entering and editing data. For further information about the operation of your PC, refer to the manuals provided with your PC.

## **Starting CMS**

---

The first step in using CMS is to start the program. The first CMS screen that appears is the CMS Main Menu (Figure 2-1). This menu is the gateway to CMS programming and to running call management. To start CMS and display the CMS Main Menu:

1. Turn on the computer.

*CMS starts automatically from the autoexec.bat file, and displays the CMS Main Menu*

2. To select an item from the Main Menu, press the appropriate function key (for example, **[F4]** to program, or administer, CMS).

```
Bon Voyage Travel                                CMS  CMS R3.0 5:47p 03/04

  CALL MANAGEMENT SYSTEM (CMS)
  FOR THE AT&T MERLIN LEGENDS
  (c) 1991 by AT&T

  MAIN MENU

  F1 - Start Call Management

  F4 - Administer CMS
      (Agents, Lines, Configurations )

  F5 - Print Reports

  F8 - Exit to DOS

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

---

Figure 2-1. CMS Main Menu

## **Setting the Date and Time**

CMS uses the date and time from MS-DOS. The date and time are important parts of your daily CMS statistics and must be represented correctly on your PC screen. To change either the date or the time, follow the procedures below. (When in CMS, you can check the time and date by looking at the upper 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:

1. When the CMS Main Menu appears upon starting CMS, press **[F8]** (Exit to DOS).
2. When the DOS prompt appears, type `date` then press **[↵]**.

*The following message appears on your screen:*

*(Example):*

```
Current date is mm - dd - 19yy
Enter new date: (mm-dd-yy)
```

*The current date is displayed, where Day= day of the week, mm = month, dd = day, and yy = year.*

3. If the date is correct, press **[↵]**.  
If the date is incorrect, type in the correct date (for example, 4-08-19XX) then press **[↵]**. XX represents the year.
4. To return to CMS, at the prompt, type `cms`.

*The CMS Main Menu screen appears.*

## **Set the Time**

---

To check or change the time on your PC:

1. When the CMS Main Menu appears upon starting CMS, press [F8] (Exit to DOS).
2. When the DOS prompt appears, type `time` and press [↵]

*The following message appears on your screen:  
(Example):*

```
Current time is HH:MM:SS. XX
Enter new time:
```

*where HH = hour, MM = minute, SS = second, and XX = one hundredths of a second.*

3. If the time is correct, press [↵] .

If the time is incorrect, type in the correct hour and minute (for example, `19:03` then 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.

4. To return to CMS, at the prompt, type `cms` .

*The CMS Main Menu screen appears.*

## CMS Screen Layouts

This section describes the layout of CMS screens. If you have questions about MS-DOS, the layout of your keyboard, or other information about your PC, refer to the accompanying manuals.

Figure 2-2 shows a typical CMS screen layout.

```

1  Bon Voyage Travel                                ADMIN CMS R3.0  4:11p 03/04

      AGENT SPLITS                                LINE GROUP OPTIONS
      Split  Agent  Split  Agent  Num Answer Force Auto
            Pos ID      Pos ID      Group Lines Delay Delay ACW
1 PERS
2 CHART
3 CORP
4 SUPPT
5 -
6 -

2  CALL FLOW
      Splits  Intra  Spl  Flow All
      Gp Main Sec Flow  1  Thresh Ring
      A  -  -  off  2  30s off
      B  -  -  off  3  30s off
      C  -  -  off  4  30s off
      D  -  -  off  5  30s off
      6  30s off

3  Configuration #2 - CONFIG_2
4  You cannot cancel this prompt. Answer 'Y' or 'N'
5  CLEAR AGENTS: Are You Sure? (Y/N):
      F Cancel          F Previous F Next          F Enter
      1 Prompt         5 Field  6 Field          8 Data
    
```

Figure 2-2. Typical CMS Screen

The following types of information 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 LEGEND system control unit, or the connections between CMS and the voice announcement unit and/or printer. For information on resolving problems, see Chapter 8, “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 programming instead of call management. *REPT* appears when you use the Print Reports screen.
- CMS Release number.
- 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 that 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.

- ⑤ **Function keys.** The labels at the bottom of the screen tell you the current meaning of the function keys on your keyboard. The function keys are used for different activities on each screen (except `[F10]`, which is always access to a help screen). When you press a function key, a new screen or a prompt appears. When a prompt appears, the function key labels change to permit data entry functions.

## Entering and Editing Data

You can enter and edit data only on certain CMS screens. These screens display the data entry prompt and the editing function keys. For example, the Shift Configuration screen shown in Figure 2-2 is not an editing screen. If we press [F2] (Line Groups) on that screen, CMS highlights the Line Groups section of the screen with a box (Figure 2-3).

```

Bon Voyage Travel
ADMIN CMS R3.0 3:13p 03/04

AGENT SPLITS
Split Agent Split Agent
Pos ID Pos 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
Num Answer Force Auto
Group Lines Delay Delay ACW
A PUBLC 4 5s off 20s
B SPECL 3 5s off 30s
C CHART 6 5s off 10s
D CORP 2 5s off 15s

CALL FLOW
Spl Thrsh Ring
Gp Main Sec Flow 1 10s off
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 - DAY

F Answer F Force F Auto F10 - Help
1 Delay 2 Delay 3 ACW F Config
7 Screen
    
```

Figure 2-3. Line Groups Screen

The Line Groups screen is also not an editing screen. However, pressing any of the function keys on that screen brings up an editing screen on which we can enter specific line group information. Figure 2-4 shows the Answer Delay editing screen that appears when we press [F1] (Answer Delay) on the Line Groups screen.

```

Bon Voyage Travel
ADMIN CMS R3.0 3:25P 03/04

AGENT SPLITS
Split Agent Pos ID Split Agent Pos 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 Lines Num Answer Force Auto
      Delay Delay ACW
A PUBLCL 4 5s off 20s
B SPECL 3 5s off 30s
C CHART 6 5s off 10s
D CORP 2 5s off 15s

CALL FLOW
Spl Thresh Ring
Gp Main Sec Flow 1 10s off
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 - DAY

ANSWER DELAY: Group Letter: How Many Seconds:
F Cancel FPrevious F Next F Enter
1 Prompt 5 Field 6 Field 8 Data
    
```

Figure 2-4. Answer Delay Editing Screen

## Editing Prompt and Function Keys

On each editing screen, an editing prompt appears on the line above the function keys. The cursor moves to the first field of the editing prompt and the function keys change to provide editing capabilities. For the Answer Delay editing screen, the prompt is:

ANSWER DELAY: Group Letter: \_ How Many Seconds: \_\_\_\_

The editing function keys for this screen and all editing screens are:

|          |            |         |         |
|----------|------------|---------|---------|
| F Cancel | F Previous | F Next  | F Enter |
| 1 Prompt | 5 Field    | 6 Field | 8 Data  |

To enter data at the prompt, simply type in the entry for the field where the cursor is located. To move to the next prompt field, press **[F6]**. To save the entry and return to the normal function keys, press **[F8]**. To cancel the prompt at any time and return to the normal function keys, press **[F1]**.

### **Guidelines for Entering Data**

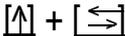
When entering data at a prompt, note the following guidelines:

- CMS accepts uppercase or lowercase letters. In the examples in this manual, entries are usually shown in lowercase letters. On the computer screen, almost all entries appear as uppercase letters, even if entered as lowercase letters. (However, the system displays agent names and the business name exactly as you type them.)
- Some fields require numbers or special characters. Spaces are not allowed, so use an underscore instead. To enter an underscore, use the shift of the hyphen, located in the top row of the keyboard.
- Press **[F8]** (Enter Data), **[Return]**, or **[↵]** when you finish typing an entry to tell the computer to process the data you have entered. The cursor can be in any field when you press these keys.
- The computer beeps and displays an error message if you have skipped a required field in a prompt and pressed **[F8]**, **[Return]**, or **[↵]**.
- The computer also beeps and displays an error message if you make an invalid entry, such as entering a letter instead of a number. Reenter the correct data and continue.

## Alternate Editing Keys

In addition to the editing function keys, other keys perform some of the same tasks. Table 2-1 shows these alternate keys.

Table 2-1. CMS Editing Keys

| <u>Press</u> | <u>Or</u>   | <u>To</u>                                    |
|--------------|---|--|
| [F1]         |  | Cancel a prompt.                             |
| [F5]         |  | Move to the beginning of the previous field. |
| [F6]         |  | Move to the beginning of the next field.     |
| [F8]         |  | Indicate you have finished your response.    |

## Simple Editing Procedures

After you have entered data, you may need to change the entries. CMS screens include simple editing capabilities as described in Table 2-2.

Table 2-2. Editing Procedures

| <u>To</u>                         | <u>Do this</u>  |
|-----------------------------------|---|
| Change a character in a field     | Move the cursor to the incorrect character and type another character over it.  |
| Add characters at 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 <i>cannot</i> use [ <u>Insert</u> ] to insert a character between other characters. ) |

---

Replace a long entry with a shorter entry

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.

---

### **Getting Help**

---

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 can exit help and then perform the function of that particular function key.

### **Leaving CMS**

---

You can leave CMS at any time by using the function keys. The exact procedure changes depending on the screen on which you are working. In general, pressing [F7] or [F8] returns you to the previous level of screens. Once you are at the CMS Menu, *make sure you have saved your changes*. Once you have, simply turn the computer off.

---

# Programming CMS Shift Configurations

# 3

---

This chapter describes the tasks involved in changing your CMS shift configurations, including:

- Building and editing shift configurations (assigning splits and line groups and programming call flow)
- Saving shift configurations
- Programming shift configurations
- Selecting a start-up configuration
- Backing up shift configurations.

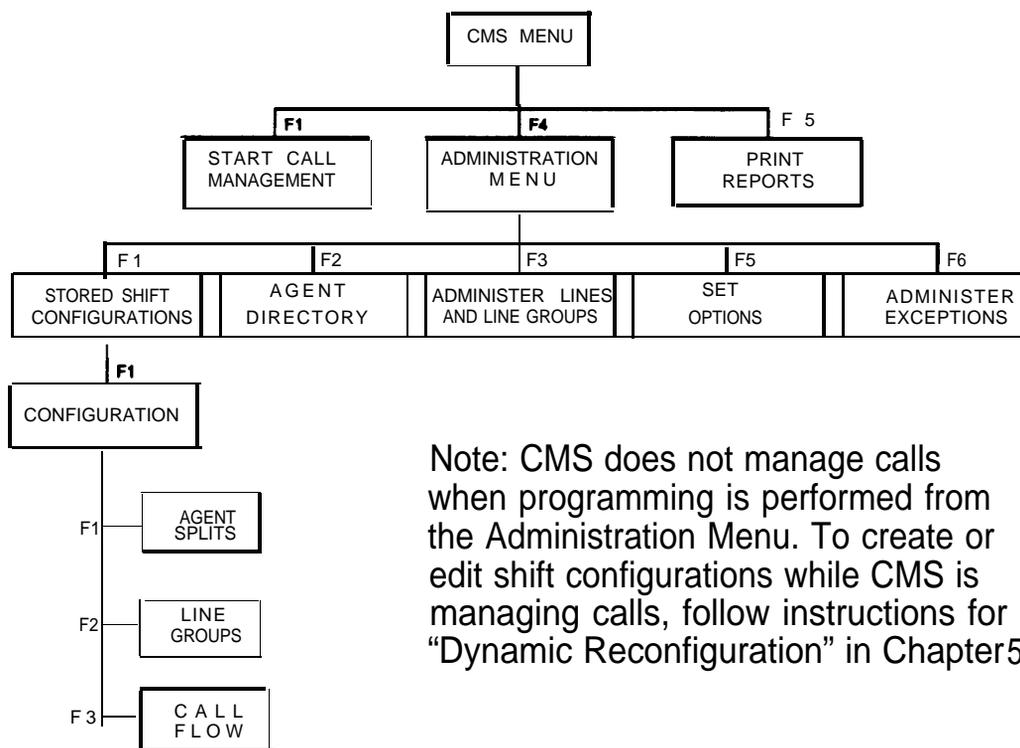
The shift configuration determined by you and your AT&T Account Manager during the system planning process is set up and CMS is managing calls. Use this section only if you want to change the basic configuration and stop managing calls during programming. If, however, you do not want to make changes at this time, go to Chapter 5, "Supervising CMS," where you can go through the steps needed to begin operations. If you want to make changes to the shift configurations while CMS is managing calls, go to Chapter 5 and follow the instructions for "Dynamic Reconfiguration." Before building additional configurations or changing established configurations, review "CMS Requirements and Capacities" in *CMS Planning Guide*, then go on to the next section in this chapter.

Be sure to record your changes on the appropriate planning forms, found in the back cover pocket of this guide.

Figure 3-1, “A Map for CMS Configuration Screens,” shows the relationship between the various screens used in CMS programming.

To use the map, determine which function you wish to perform, then, starting with the CMS Main Menu, press the indicated function keys to move down the map to the desired action. For example, to configure line groups, press the following keys in order:

1. [F4] -To select the Administration Menu.
2. [F1] -To go to the Stored Shift Configurations screen.
3. [F1] -To select a configuration to build or edit.
4. [F2] -To configure line groups.



---

**Figure 3-1. Map for CMS Configuration Screens**

## **Creating or Changing Shift Configurations**

---

Creating or changing shift configurations involves these activities:

- Assigning agents to splits
- Programming 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, regardless of availability), and Auto ACW (the number of seconds after a completed call that an agent is automatically in the after-call-work state)
- Programming call flow (assigning main and secondary splits, programming intraflow, and if you want, designating AH-Ring operation for some splits).

Before you can create or change a shift configuration, your lines and line groups must have been identified and programmed by your AT&T implementor or Authorized AT&T Dealer.

Refer to the *CMS Agent Splits Planning Form* to see how your splits were assigned to your line groups. “

**NOTE:**

Your CMS does not manage calls while you are using these procedures. To edit an active shift configuration, follow the instructions in “Dynamic Reconfiguration” in Chapter 5. CMS must be running under Call Management to use dynamic reconfiguration.

To create or change a shift configuration, follow these steps:

1. From the CMS Main Menu, press **[F4]** (Admin CMS).

*The Administration Menu (Figure 3-2) appears.*

```
Bon Voyage Travel                                ADMIN CMS R3.0 3:27p 03/04

                                Administration Menu
                                F1 Build/Edit Shift Configurations
                                F2 Build Agent Directory (Names and IDs)
                                F3 Administer Lines and Line Groups
                                F5 Set Options
                                F6 Select Exception Thresholds to be Monitored
                                F8 Exit From the Administration Module

                                SELECT ADMINISTRATION FUNCTION

                                F Config  F Agent  F Lines/          F Set    F Select          F10 - Help
                                1 List   2Directry 3 Groups        5Options 6Exceptns        F Exit
                                                                8 Admin
```

**Figure 3-2. Administration Menu**

- 2. At the Administration Menu, press **[F1]** (Config List).  
*The Stored Shift Configurations screen (Figure 3-3) appears.*

### 3-4 Creating or Changing Shift Configurations

|                   |          |           |                            |          |       |
|-------------------|----------|-----------|----------------------------|----------|-------|
| Bon Voyage Travel |          |           | ADMIN CMS R3.0 1:25p 07/19 |          |       |
| AGENT DIRECTORY   |          |           |                            |          |       |
| Last Name         | First    | ID        | Last Name                  | First    | ID    |
| Anders            | Harry    | HARRY     | Middon                     | Beth     | BETH  |
| Baker son         | Tom      | TOM       | O'Rourke                   | Walter   | WALT  |
| Bakerson          | Tom      | TOM2      | Pantilly                   | Ernie    | ERNIE |
| Chanleys          | Diane    | DI        | Patrick                    | Bob      | BOB   |
| Chapman           | Charlie  | CHUCK     | Peters                     | Norman   | NORM  |
| Claren            | Clifford | CLIFF     | Piers                      | Benjamin | BEN   |
| Clover            | Ward     | WARD      | Price                      | Sherman  | SHERM |
| Easttree          | Clint    | CLINT     | Reynolds                   | Nancy    | NANCY |
| Fielding          | Sally    | SALLY     | Rice                       | Diana    | DIANA |
| Fielding          | William  | BILL      | Rice                       | Ronald   | RON   |
| Hall              | Benny    | BENNY     | Turner                     | Carla    | CARLA |
| Honelly           | BillyJoe | BJ        | Turtone                    | Ike      | IKE   |
| Kiley             | Gene     | GENE      | Turtone                    | Tina     | TINA  |
| Kloner            | Maxwell  | MAX       | Weiss                      | Debra    | DEB   |
| Mailer            | Sam      | SAM       |                            |          |       |
|                   |          |           | F10 - Help                 |          |       |
| F Add             | F Remove | F Change  | F Config                   | F Admin  |       |
| 1 Agent           | 2 Agent  | 3Agt Info | 7 Splits                   | 8 Menu   |       |

**Figure 3-3. Stored Shift Configurations Screen**

3. From the Stored Shift Configurations screen, press **[F1]** (Select Config).

*The function keys change and the following prompt is displayed:*

```
SELECT CONFIGURATION: Config #: _
```

4. To edit an existing configuration, enter the number of that configuration. To build a new configuration, enter a number labeled `UNUSED`.
5. Press **[F8]** (Enter Data).

*The Configuration screen appears with the shift configuration you selected.*

If you are editing an existing shift configuration, the fields are populated with the shift configuration parameters. You can change these parameters by overwriting previously entered data.

Figure 3-4 is an example of a Configuration screen for building a new configuration. Notice that all areas on the screen that have to do with splits are either blank or display hyphens. The factory settings for the line group options and call flow are also displayed.

```

Bon Voyage Travel                                ADMIN CMS R3.0 3:35p 03/04

          AGENT SPLITS                          LINE GROUP OPTIONS
Split  [Agent]                               Num  Answer Force Auto
      [Pos ID]                               Group Lines Delay Delay ACW
1 PERS                                     A PUBLC 4    5s   off  20s
2 CHART                                    B SPECL 3    5s   off  30s
3 CORP                                     C CHART 6    5s   off  10s
4 SUPPT                                    D CORP  2    5s   off  15s
5 -
6 -

                                          CALL FLOW
                                          Flow All
                                          Splits Intra  Spl Thresh Ring
Gp Main Sec Flow    1   30s off
A  -  -  off    2   30s off
B  -  -  off    3   30s off
c  -  -  off    4   30s off
D  -  -  off    5   30s off
                                          6   30s off

Configuration #2 - CONFIG_2

F Splits  F Line  F Call  F Clear  F Config  F10 - Help
1         2 Groups 3 Flow  5 Agents  7 List   8 Admin
  
```

**Figure 3-4. New Configuration Screen**

- Under “Agent Splits” on the left side of the screen:
  - Split numbers 1 through 6 are displayed.
  - Agents are unassigned.

- Under “Line Group Options” in the upper right corner of the screen:
    - Answer delay is set to 5 seconds.
    - Force delay is turned off.
    - Automatic After-Call-Work is set to 0 seconds (off).
  - Under “Call Flow” in the lower right corner of the screen:
    - Main and secondary splits are unassigned (indicated by hyphens).
    - Intraflow is turned off.
    - Intraflow thresholds are set to 30 seconds.
    - All-Ring is turned off.
6. Determine which, if any, of the factory settings you want to change. Make the changes as instructed in the following sections of this chapter:
- **Assigning Splits.** Add, move, or remove agents in the splits in a configuration.
  - **Assigning Line Group Options.** Program how you want CMS to control the answering of calls.
  - **Programming Call Flow.** Assign splits to groups, set intraflow thresholds, turn intraflow on or off, and designate splits for All-Ring operation (optional).
7. Press **[F7]** (Config Screen) to return to the Configuration screen.
8. Choose an activity from the Configuration screen or press **[F7]** to return to the Stored Shift Configurations screen.
9. Choose an activity from the Stored Shift Configurations screen or press **[F8]** to return to the Administration Menu.

## **Assigning Splits**

---

Assigning agents to splits is the first step in building a configuration. The list of agents on the Agent Directory screen is your *master list* of agents. Follow the instructions below to assign agents to splits.

**NOTE:**

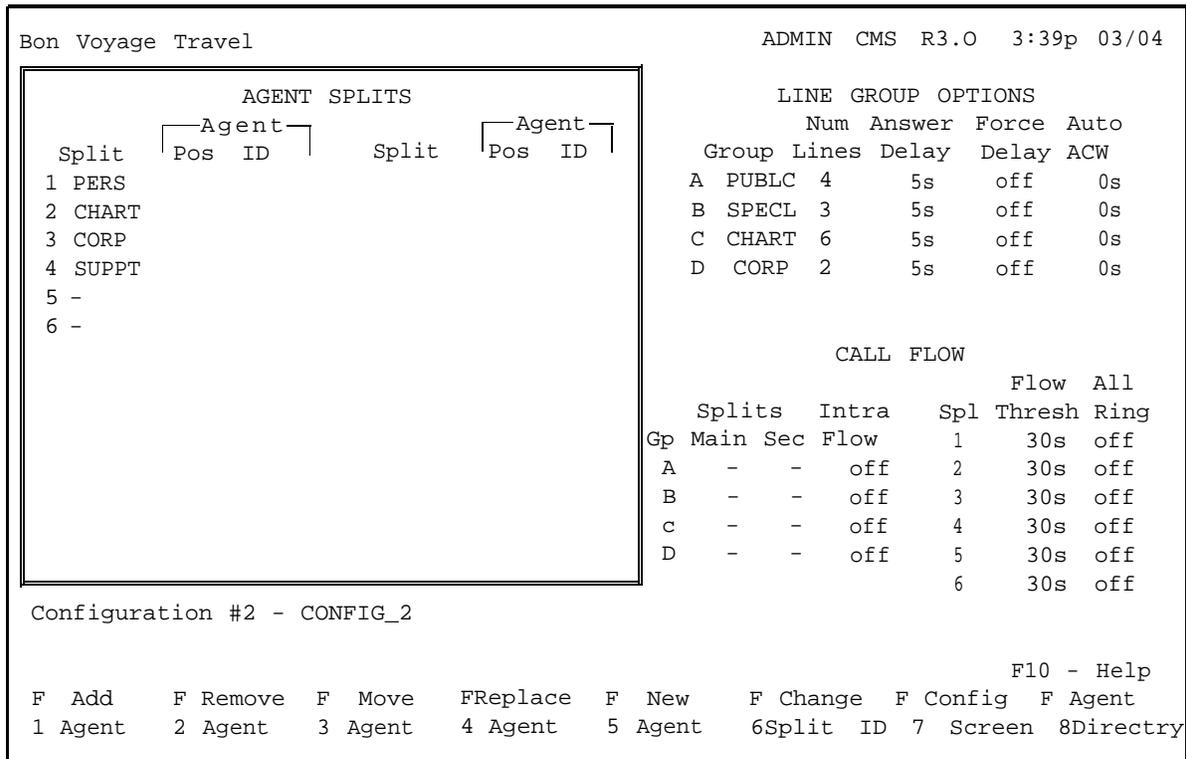
If you want to add an agent who is not listed on the agent directory screen, use the new agent activity ( [F5] ). The agent will simultaneously be added to the split and the Agent Directory.

Be sure to add the agent to the *Agent Directory P/arming Form* and *Agent Split Planning Form*, found in the back cover pocket of this guide.

1. From the Configuration screen, press [F1] (Splits).  
*The Split Configuration screen (Figure 3-5) appears.*
2. Follow the instructions given for each activity listed below.

**HINT:**

You can move between the Agent Directory and the Split Configuration screens by pressing [F8] (Agent Directory) from the Split Configuration screen, or [F7] (Config Splits) from the Agent Directory.



**Figure 3-5. Split Configuration Screen**

## Add Agent

1. To add an agent to a split, press [F1] (Add Agent). You can now assign any agent listed on the Agent Directory screen to a split. A split may have up to 28 agents.

*The prompt line is displayed as follows:*

ADD AGENT: ID: \_\_\_\_\_ Pos #: \_\_\_ Split #: \_

2. Enter an agent ID.

3. Enter an unused position (extension) number between 10 and 67. **DO NOT** use extension numbers assigned to the CMS PC.
4. Enter a split number (1 through 6). You may have up to six splits.
5. Press [F8] (Enter Data) to save your data and return to the Split Configuration screen.
6. Repeat steps 1 through 5 to add another agent, or press [F7] to return to the Configuration screen.
7. Choose an activity from the Configuration screen or press [F7] to return to the Stored Shift Configurations screen.
8. Choose an activity from the Stored Shift Configurations screen or press [F8] to return to the Administration Menu.

### **Remove Agent**

1. To choose this activity, press [F2] (Remove Agent). You can now remove an agent from a split. (The agent entry remains listed on the Agent Directory screen.)  
*The prompt line is displayed as follows:*  
REMOVE AGENT : ID: \_\_\_\_\_
2. Enter an agent ID and press [F8] (Enter Data) to save data and return to the Split Configuration screen.  
*You are prompted to enter y or n to confirm your request.*
3. Repeat steps 1 and 2 to remove another agent or press [F7] to return to the Configuration screen.
4. Choose an activity from the Configuration screen or press [F7] to return to the Stored Shift Configurations screen.
5. Choose an activity from the Stored Shift Configurations screen or press [F8] to return to the Administration Menu.

### Move Agent

1. To choose this activity, press **[F3]** (Move Agent). You can now shift an agent from one split to another or from one extension to another.

*The prompt line is displayed as follows:*

```
MOVE AGENT : ID: _____ New Pos #: ____ New Split #: ____
```

2. Enter an agent ID.
3. Enter a new position (extension) number, or press **[F6]** (Next Field) to skip this field. If you skip this field, the agent keeps the same extension number.
4. Enter the number of the agent's new split.
5. Press **[F8]** (Enter Data) to save data and return to the Split Configuration screen.
6. Repeat steps 1 through 5 to move another agent or press **[F7]** to return to the Configuration screen.
7. Choose an activity from the Configuration screen or press **[F7]** to return to the Stored Shift Configurations screen.
8. Choose an activity from the Stored Shift Configurations screen or press **[F8]** to return to the Administration Menu.

### Replace (Substitute) Agent

To substitute one agent for another at a particular position (extension), both agents must exist in the Agent Directory.

1. To choose this activity, press **[F4]** (Replace Agent).

*The prompt line is displayed as follows:*

```
REPLACE AGENT : Pos # : ____ New Agent ID: _____
```

2. Enter the extension number of the agent you want to replace.
3. Enter the agent ID of the agent you want in the extension.

4. Press **[F8]** (Enter Data) to save data and return to the Split Configuration screen.  
*The agent originally assigned to that extension is removed.*
5. Repeat steps 1 through 4 to replace another agent or press **[F7]** to return to the Configuration screen.
6. Choose an activity from the Configuration screen or press **[F7]** to return to the Stored Shift Configurations screen.
7. Choose an activity from the Stored Shift Configurations screen or press **[F8]** to return to the Administration Menu,

### **New Agent**

1. To choose this activity, press **[F5]** (New Agent). You can now 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.  
The prompt line is displayed as follows:*

```
NEW AGENT :   Last Name: _____ \  
First: _____ ID: _____ Pos: ___ Split #: _
```

2. Complete the 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 LEGEND system extension number (1 0 through 67)

**(Do Not** use extension numbers assigned to the CMS PC.)

*Split:* a number from 1 through 6

Remember, IDs must be unique.

3. Press **[F8]** (Enter Data) to save data and return to the Split Configuration screen.  
*The new agent is added to the Agent Directory and is assigned to a split.*
4. Repeat steps 1 through 3 to add another agent or press **[F7]** to return to the Configuration screen.
5. Choose an activity from the Configuration screen or press **[F7]** to return to the Stored Shift Configurations screen.
6. Choose an activity from the Stored Shift Configurations screen or press **[F8]** to return to the Administration Menu.

### **Change Split ID**

1. To choose this activity, press **[F6]** (Change Split ID). You can now assign or change the ID for a split. Split IDs make it easier to identify splits on screens and in reports. Although each split ID must be unique, a split and a line group can have the same ID.  
*The prompt line is displayed as follows:*  
  
CHANGE SPLIT ID: Split #: \_ New Split ID: \_\_\_\_\_
2. Enter a split number from 1 through 6.
3. Enter a new split ID (up to 5 letters, numbers, or special characters).
4. Press **[F8]** (Enter Data) to save data and return to the Split Configuration screen.
5. Repeat steps 1 through 4 to change another split ID or press **[F7]** to return to the Configuration screen.
6. Choose an activity from the Configuration screen or press **[F7]** to return to the Stored Shift Configurations screen.
7. Choose an activity from the Stored Shift Configurations screen or press **[F8]** to return to the Administration Menu.

## Agent Directory

1. To view the Agent Directory, press [F8] (Agent Directry) from the Configuration screen or press [F2] (Agent Directry) from the Administration Menu.

*An Agent Directory screen like the one shown in Figure 3-6 appears.*

You can refer to this screen while building a shift configuration, or you can change agent information.

|                   |           |           |                            |          |            |
|-------------------|-----------|-----------|----------------------------|----------|------------|
| Bon Voyage Travel |           |           | ADMIN CMS R3.0 1:25p 07/19 |          |            |
| AGENT DIRECTORY   |           |           |                            |          |            |
| Last Name         | First     | ID        | Last Name                  | First    | ID         |
| Anders            | Harry     | HARRY     | Middon                     | Beth     | BETH       |
| Bakerson          | Tom       | TOM       | O'Rourke                   | Walter   | WALT       |
| Bakerson          | Tom       | TOM2      | Pantilly                   | Ernie    | ERNIE      |
| Chanleys          | Diane     | DI        | Patrick                    | Bob      | BOB        |
| Chapman           | Charlie   | CHUCK     | Peters                     | Norman   | NORM       |
| Claren            | Clifford  | CLIFF     | Piers                      | Benjamin | BEN        |
| Clover            | Ward      | WARD      | Price                      | Sherman  | SHERM      |
| Easttree          | Clint     | CLINT     | Reynolds                   | Nancy    | NANCY      |
| Fielding          | Sally     | SALLY     | Rice                       | Diana    | DIANA      |
| Fielding          | William   | BILL      | Rice                       | Ronald   | RON        |
| Hall              | Benny     | BENNY     | Turner                     | Carla    | CARLA      |
| Honelly           | Billy Joe | BJ        | Turtone                    | Ike      | IKE        |
| Kiley             | Gene      | GENE      | Turtone                    | Tina     | TINA       |
| Kloner            | Maxwell   | MAX       | Weiss                      | Debra    | DEB        |
| Mailer            | Sam       | SAM       |                            |          |            |
|                   |           |           |                            |          | F10 - Help |
| F Add             | F Remove  | F Change  | F Con fig                  |          | F Admin    |
| 1 Agent           | 2 Agent   | 3Agt Info | 7 Splits                   | 8 Menu   |            |

**Figure 3-6. Agent Directory Screen**

2. If you want to make changes to the Agent Directory, press the function key for the activity you want to perform (add agent, remove agent, or change agent information).
3. Perform the activity as described on the following pages.

**NOTE:**

Record any changes you make on the *Agent Directory Planning Form*, found in the back cover pocket of this guide.

4. Press **[F7]** (Config Splits) to return to the Configuration screen, or press **[F8]** (Admin Menu) to return to the Administration Menu.

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 returns you to the first page of the Agent Directory.

### **Adding Agents to the Agent Directory**

**NOTE:**

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 provide separate tracking of the agent’s statistics in each split. For example, Tom works in split 1 and split 4, depending on the call traffic. Tom’s supervisor added him to the directory twice. Once with the ID TOM1 and again as TOM4.

To add an agent to the Agent Directory do the following:

1. From the Agent Directory screen, press **[F1]** .

*The function keys change and the following prompt appears:*

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

2. Enter the agent’s last name at the prompt (up to 12 letters, numbers, or special characters, such as \* or #).

3. Enter the agent's first name at the prompt (up to 8 letters, numbers, or special characters).
4. Enter the agent's ID at the prompt (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 letters.

5. Press **[F8]** (Enter Data).

### Removing Agents from the Agent Directory

#### **IMPORTANT:**

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 Chapter 8, "Archiving and Restoring Data."

To remove an agent from the Agent Directory, do the following:

1. From the Agent Directory screen, press **[F2]**.

*The function keys change and the following prompt appears:*

```
REMOVE AGENT : ID _____
```

2. Enter the agent's ID.

*A confirmation prompt like the one shown below appears:*

```
REMOVE AGENT : ID: TOM2 (Baker son, Tom) ? (Y/N) : ____
```

3. Type **y** to confirm your request or **n** to deny it.
4. Press **[F8]** (Enter Data).

## **Changing Agent Information**

To change agent information in the Agent Directory, do the following:

1. From the Agent Directory screen, press **[F3]** (Change Agt Info).

*The function keys change and the following prompt appears:*

```
CHANGE AGENT INFO : ID: _____ Last Name: _____ \  
First: _____
```

2. Enter the agent's ID.
3. Move to the field(s) you want to change. Information will not change in the fields left blank.
4. Press **[F8]** (Enter Data).

## **Assigning Line Group Options**

You can program 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)

Descriptions and programming procedures for these options are given on the following pages.

To program line group options:

1. From the Configuration screen, press **[F2]** (Line Groups).

*A box appears around the Line Group Options portion of the screen and the Line Group Options function keys are displayed (Figure 3-7).*

2. Follow the instructions in this section for the options you want to program.

### **NOTE:**

Record any changes you make on the *CMS Options Planning Form*, found in the back cover pocket of this guide.

```

Bon Voyage Travel
ADMIN CMS R3.0 3:57p 03/04

AGENT SPLITS
Split Agent Agent
  Pos ID  Pos ID
1 PERS
2 CHART
3 CORP
4 SUPPT
5 -
6 -

LINE GROUP OPTIONS
Num Answer Force Auto
Group Lines Delay Delay ACW
A PUBLC 4 5s off 0s
B SPECL 3 5s off 0s
C CHART 6 5s off 0s
D CORP 2 5s off 0s

CALL FLOW
Splits Intra Spl Flow All
Gp Main Sec Flow 1 Thresh Ring
A - - off 2 30s off
B - - off 3 30s off
c - - off 4 30s off
D - - off 5 30s off
6 30s off

Configuration #2 - CONFIG_2

F Answer F Force F Auto
1 Delay 2 Delay 3 ACW
F10 - Help
F Config
7 Screen
    
```

**Figure 3-7. Line Group Options Screen**

## Changing Answer Delay

If an agent is not available when a call first rings, CMS allows the call to ring for a certain number of seconds before it answers the call and connects it to the voice announcement unit. If an agent becomes available during that period, the call is transferred immediately to the available agent, not the voice announcement unit. *Answer delay* is the number of seconds CMS waits before it answers a call. The factory setting for answer delay is 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:

- 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.
- 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 change the answer delay, do the following:

1. From the Line Group Options screen, press [F1] (Answer Delay).

*The editing function keys appear with this prompt:*

ANSWER DELAY :    Group Letter: \_    How Many Seconds: \_\_

2. Enter a group letter (A-D).
3. Enter the number of seconds (0 through 99) a call should ring for that group before CMS answers.

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

4. Press [F8] (Enter Data).

*The Line Group Options screen reappears and the answer delay for the specified line group is updated.*

5. Repeat steps 1 through 4 to adjust the answer delay for another group, or press [F7] to return to the Configuration screen.
6. Choose an activity from the Configuration screen or press [F7] to return to the Stored Shift Configurations screen.
7. Choose an activity from the Stored Shift Configurations screen or press [F8] to return to the Administration Menu.

### Changing 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 are not transferred to an agent until callers have heard the entire message, even if an agent is free. If it is off, they are 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 connect directly to the voice announcement. This means that callers hear the delay message even when agents are available.

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

To change force delay, do the following:

1. From the Line Group Option screen, press **[F2]** (Force Delay).

*The Force Delay editing keys appear with this prompt:*

```
FORCE DELAY :   Group Letter:  _
```

2. Type in the group letter for the line group you want to program.
3. Press **[F8]** (Enter Data),  
*The setting toggles automatically to on or off, depending on the setting before you made the change. (The factory setting is off.)*
4. Repeat steps 1 through 4 to adjust the force delay for another group, or press **[F7]** to return to the Configuration screen.
5. Choose an activity from the Configuration screen or press **[F7]** to return to the Stored Shift Configurations screen.
6. Choose an activity from the Stored Shift Configurations screen or press **[F8]** to return to the Administration Menu.

### Programming Automatic After-Call-Work (ACW)

The automatic after-call-work option provides for hands-free operation allowing 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 a programmed period of time. When that time has elapsed, auto ACW makes an agent available to receive calls.

The agent remains in the ACW state for the number of seconds programmed for that line group (1–999). During the ACW period, the agent can complete the necessary paper work related to that call without pressing the **ACW** or **Available** buttons on the telephone. When the agent completes the paper-work related to the previous call, he or she can manually override the automatic ACW state by pressing the Available button on the telephone.

To program Auto ACW, do the following:

1. From the Line Group Options screen, press **[F3]** (Auto ACW).

*The following prompt appears near the bottom portion of the screen:*

```
AUTOMATIC ACW: Group Letter: _ Seconds:___
```

2. Enter a group letter (A through D) for the group to be programmed.
3. Enter the number of seconds (0 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.

4. Press **[F8]** (Enter Data).
5. Repeat steps 1 through 5 to program auto ACW for another line group, or press **[F7]** to return to the Configuration screen.
6. Choose an activity from the Configuration screen or press **[F7]** to return to the Stored Shift Configurations screen.
7. Choose an activity from the Stored Shift Configurations screen or press **[F8]** to return to the Administration Menu.

### **Programming Call Flow**

---

The way CMS routes incoming calls to agents is called *call flow*. Call flow programming includes the following:

- Assigning a main split and an optional secondary split for each line group
- Turning Intraflow on or off
- Setting an Intraflow threshold for each split
- Designating splits for All-Ring operation (optional).

To program call flow, you should understand *main* and *secondary* splits, *intraflow* and *intraflow threshold*. If you are unclear about these aspects of CMS, refer to the Glossary.

#### **NOTE:**

Record any changes you make on the CMS Options Planning Form, found in the back cover pocket of this guide.

### **How Intraflow Works**

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 in the main split for the answer delay interval you established (see “Line Group Options,” page 3-17).
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 present) 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.

Once the call is transferred to an agent the caller will hear ringing.

5. If there is no agent available in the secondary split, the call remains waiting in the main split. The call is 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).

If an agent becomes available at any step, CMS immediately transfers the call to that agent.

### **Programming Considerations**

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 it 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 can be no agents in other splits to receive intraflow calls. Therefore, there are no secondary splits and you would not need to program for intraflow in that shift configuration.

Consider these points when establishing your intraflow 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.

### Programming Instructions

1. From the Configuration screen, press **[F3]** (Call Flow).  
*The Call Flow Configuration screen (Figure 3-8) is displayed.*
2. Press the key for the task you want to perform. Instructions for each task are given on the following pages.

```

Bon Voyage Travel                                ADMIN CMS R3.0 4:03p 03/04

          AGENT SPLITS                          LINE GROUP OPTIONS
          Agent                                Num Answer Force Auto
          Pos ID                               Group Lines Delay Delay ACW
Split    Pos ID      Split    Pos ID
1 PERS
2 CHART
3 CORP
4 SUPPT
5 -
6 -

A PUBLC 4      5s  off  0s
B SPECL 3      5s  off  0s
C CHART 6      5s  off  0s
D CORP  2      5s  off  0s

          CALL FLOW
          Splits  Intra  Spl  Flow  All
          Gp Main Sec Flow  Thresh Ring
A - - off  1  30s off
B - - off  2  30s off
C - - off  3  30s off
D - - off  4  30s off
          5  30s off
          6  30s off

Configuration #2 - CONFIG 2

          F10 - Help
F Assign  F Flow  F Set
1 Splits  2 On/Off 3 Thresh          FALL-Ring          F Con fig
          5 On/Off          7 Screen
    
```

**Figure 3-8. Call Flow Configuration Screen**

### Assigning Splits

To choose this activity,

1. Press **[F1]** (Assign Splits). You can now assign main splits and secondary splits to line groups.

*The prompt is displayed as follows:*

```
ASSIGN SPLITS :   Line Group Letter: _ Main Split #: _\  
Secondary Split #: _
```

Initially, all splits are unassigned; choose which split answers calls for each line group.

If you do not want to assign a secondary split, leave that field unchanged.

To remove a secondary split already assigned to the line group, type a hyphen in that field.

2. Enter a line group letter (A through D).
3. Enter the number of the main split (1 through 6) that is to answer calls for the line group. (If the field is left blank, it remains unchanged.)
4. Enter a secondary split number, or enter a hyphen if you do not want to assign a secondary split for intraflow. (If the field is left blank, it remains unchanged.)
5. Press **[F8]** (Enter Data).
6. Repeat steps 1 through 5 to assign a split to another line group, or press **[F7]** to return to the Configuration screen.
7. Choose an activity from the Configuration screen or press **[F7]** to return to the Stored Shift Configurations screen.
8. Choose an activity from the Stored Shift Configurations screen or press **[F8]** to return to the Administration Menu.

### Turning Flow On/Off

Main and secondary splits must be identified in the Call Flow section of the Configuration screen for intraflow to work.

To choose this activity:

1. Press **[F2]** (Flow On/Off). You can now turn intraflow on or off for a particular line group.

*Each line group's intraflow status appears in the Intraflow column of the Call Flow area of the screen. The prompt is displayed as follows:*

```
CHANGE INTRAFLOW :   Line Group Letter:  _
```

2. Enter a line group letter (A through D).
3. Press **[F8]** (Enter Data).

*The intraflow designation for that line group automatically changes from Off to On or vice versa.*

4. Repeat steps 1 through 3 to turn intraflow on or off for another line group, or press **[F7]** to return to the Configuration screen.
5. Choose an activity from the Configuration screen or press **[F7]** to return to the Stored Shift Configurations screen.
6. Choose an activity from the Stored Shift Configurations screen or press **[F8]** to return to the Administration Menu.

### Setting the Intraflow Threshold

To choose this activity:

1. Press **[F3]** (Set Thresh). You can now 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.

*The prompt is displayed as follows:*

```
SET INTRAFLOW THRESHOLD:  Split #:  _\  
Threshold (seconds) :  ____
```

2. Enter a split number (1 through 6).
3. Enter the number of seconds from 0 through 999.
4. Press **[F8]** (Enter Data).
5. Repeat steps 1 through 4 to set the intraflow threshold for another split, or press **[F7]** to return to the Configuration screen.
6. Choose an activity from the Configuration screen or press **[F7]** to return to the Stored Shift Configurations screen.
7. Choose an activity from the Stored Shift Configurations screen or press **[F8]** to return to the Administration Menu.

### **Turning All-Ring On/Off**

You can program certain splits so that each call rings at all agents' telephones and an available agent closest to a telephone can answer the call. (In normal CMS operation, a call rings at only one agent's telephone.) All-Ring operation is useful for splits in which agents are not always near their telephones.

#### **NOTE:**

All-Ring operation is dependent on both your CMS configuration *and* your MERLIN LEGEND system programming.

#### **NOTE:**

When All-Ring operation is in effect, agents can not log in or out. That is, all phones will ring regardless of agent availability.

To make an All-Ring split:

1. Assign a "ghost" agent as the only member of the split. Your MERLIN LEGEND system administrator must give you an unused extension number for your "ghost" agent.
2. See that your "real" agents have Cover buttons on their telephones that correspond to (cover) the "ghost agent's" extension number.

### 3. 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 the *CMS Agent Splits Planning Form* to see which of your splits, if any, should be All-Ring. This form should be in the pocket of the back cover of this guide.

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 setting up an All-Ring split, see the discussion of this topic in “Agent Splits” under the general heading “Planning the Call Management System” in the CMS Planning Guide.

For more detailed information on how “real” agents use a Cover button to pick up calls to a “ghost” agent in an AH-Ring split, see “Using a Cover Button” and “Answering Calls in All-Ring Operation” in Chapter 5, “CMS Telephones and Telephone Programming,” in this manual.

To choose this activity:

1. Press **[F5]** (All-Ring On/Off). You can now change a split from automatic call distributor (ACD) to All-Ring 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.

*The promp is displayed as follows:*

```
CHANGE ALL-RING OPERATION : Split #: _
```

2. Enter a split number (1 through 6).
3. Press **[F8]** (Enter Data).
4. Repeat steps 1 through 3 to change another split to All-Ring or ACD operation, or press **[F7]** to return to the Configuration screen.
5. Choose an activity from the Configuration screen or press **[F7]** to return to the Stored Shift Configurations screen.
6. Choose an activity from the Stored Shift Configurations screen or press **[F8]** to return to the Administration Menu.

## **Clearing Agents**

---

To clear agents from a configuration:

1. From the Configuration screen, press **[F5]** (Clear Agents).

This clears all agents from a shift configuration.

*The prompt appears as follows:*

```
CLEAR AGENTS : Are you sure? (Y/N) : _
```

2. Type **y** or **n** and press **[F8]** (Enter Data).

**NOTE:**

If you accidentally clear agents from a configuration, you can restore them.

1. Press **[F7]** (Config List), to select the Stored Shift Configurations screen.

2. Press **[F1]** (Select Config).

*A prompt asks if you want to save your previous editing changes (which includes clearing the agents).*

3. Type **n** to restore the cleared agents.

3. Choose another activity from the Configuration screen or press **[F7]** to return to the Stored Shift Configurations screen.

4. Choose an activity from the Stored Shift Configurations screen or press **[F8]** to return to the Administration Menu.

## **Saving a 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 the configuration number. You can store the last edited configuration in a previously unused configuration or store it in place of another configuration.

For example, you could change configuration 1 and replace the original with the updated copy. If you want to keep the original shift 1 configuration as well as the updated copy, you can store the copy in an unused configuration number by following the procedure outlined below.

1. From the Configuration screen, press **[F7]** (Config List).

*The Stored Shift Configurations screen (Figure 3-9) appears.*

2. Press **[F2]** (Save Config) on the Stored Shift Configurations screen.

*The word (changed) appears next to the configuration you last edited and the prompt appears as follows:*

```
SAVE CONFIGURATION : Into Config #: _
```

3. Press **[F8]** (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]** (Enter Data) to save the edited configuration under a different configuration number.

*The prompt appears as follows:*

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

*where x is a number 1 through 6 and NAME is the name of the configuration.*

*The number and name of the configuration you changed appears in this prompt.*

```
Bon Voyage Travel                                ADMIN CMS R3.0 4:17p 03/04

                                STORED SHIFT CONFIGURATIONS

                                1 - DAY (startup default)
                                2 - CONFIG_2
                                3 - UNUSED
                                4 - UNUSED
                                5 - UNUSED
                                6 - UNUSED

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

**Figure 3-9. Stored Shift Configurations Screen**

4. Type **y** to confirm your request or **n** to cancel it.

5. Press **[F8]** (Enter Data).

*The function keys change.*

6. Choose another activity from the Stored Shift Configurations screen or press **[F8]** to return to the Administration Menu.

## **Naming or Renaming a Shift Configuration**

---

When your CMS was installed, at least one shift configuration was built for you. You can have a total of six different configurations or call handling patterns in your CMS. If you do not name the configurations when you begin to build them, the system automatically supplies the name “Config x,” where x is the number of the configuration (1 through 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 extension, 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 Chapter 6.

To name or rename a configuration:

1. Press **[F3]** (Rename Config) on the Stored Shift Configurations screen.

*The prompt appears as follows:*

```
RENAME CONFIGURATION :   Config #: _ New Name: _
```

2. Enter the configuration number (1 through 6)

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

**NOTE:**

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.

4. Press **[F8]** (Enter Data).

*The function keys change.*

5. Choose another activity from the Stored Shift Configurations screen or press **[F8]** to return to the Administration Menu.

## **Selecting a Startup Configuration**

You should select one of the six shift configurations to be invoked automatically during the CMS startup procedure. However, if you want to choose a configuration each time you begin managing calls, do not select a startup configuration at this time.

To choose this activity:

1. From the Stored Shift Configurations screen, press **[F4]** (Choose Startup).

*The prompt appears as follows:*

```
CHOOSE STARTUP CONFIGURATION : (Enter '-' for none) \  
Config #: _
```

2. 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.

3. Press **[F8]** (Enter Data).

*The words (startup default) appear next to the configuration you selected.*

4. Choose another activity from the Stored Shift Configurations screen or press **[F8]** to return to the Administration Menu.

## **Backing Up and Restoring Shift Configurations**

You should routinely make a backup copy of your shift configurations. That way the most current version is available 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:**

You should copy the system tables each time you make a change in your shift configurations. The most current system tables are then available to interpret each day's historical data. Both the shift configurations and system tables fit on one floppy diskette.

## **Backing Up Shift Configurations**

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

1. From the CMS Main Menu, press **[F8]** (Exit to DOS).
2. Insert the diskette labeled "CMS Backup" into disk drive A.
3. At the DOS prompt, type the following commands to change to the cmsmgmt directory (a subdirectory within the CMS directory) on the hard disk.

```
cd c:\cms\cmsmgmt [↵]
```

4. To get into the cmsmgmt directory on the floppy diskette, type the following commands.

```
a: [↵]  
cd a: \cms\cmsmgmt [↵]
```

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

```
copy c: shift*.cms a: [←]
```

6. To copy the system tables onto the floppy diskette, type

```
copy c:systbls.cms a: [←]
```

7. Remove the data backup disk when the light on disk drive A goes out.
8. Write the current date on a label and attach it to the duplicate.
9. To return to the cms directory on disk drive C, type these commands:

```
c: [←]  
c: cd\cms [←]
```

### **Restoring Shift Configurations**

If you ever lose a shift configuration (for instance, if you clear a configuration by accident), restore the desired configuration (or all configurations) from the duplicate as follows:

1. Repeat steps 1 through 4 in the previous procedure.
2. To restore all your shift configurations from the duplicate onto the hard disk, type:

```
copy a: shift*.cms c: \cms\cmsmgt [←]
```

To restore a single shift configuration from the duplicate, type:

```
copy a: shiftX.cms c: \cms\cmsmgt [←]
```

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

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

```
copy a:systbls.cms c: \cms\cmsmgt [←]
```

4. Remove the data backup disk when the light on disk drive C goes out.

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

---

# Changing System Options and Programming Exceptions

# 4

---

This chapter explains how you can program your CMS to meet the call management needs of your particular business by:

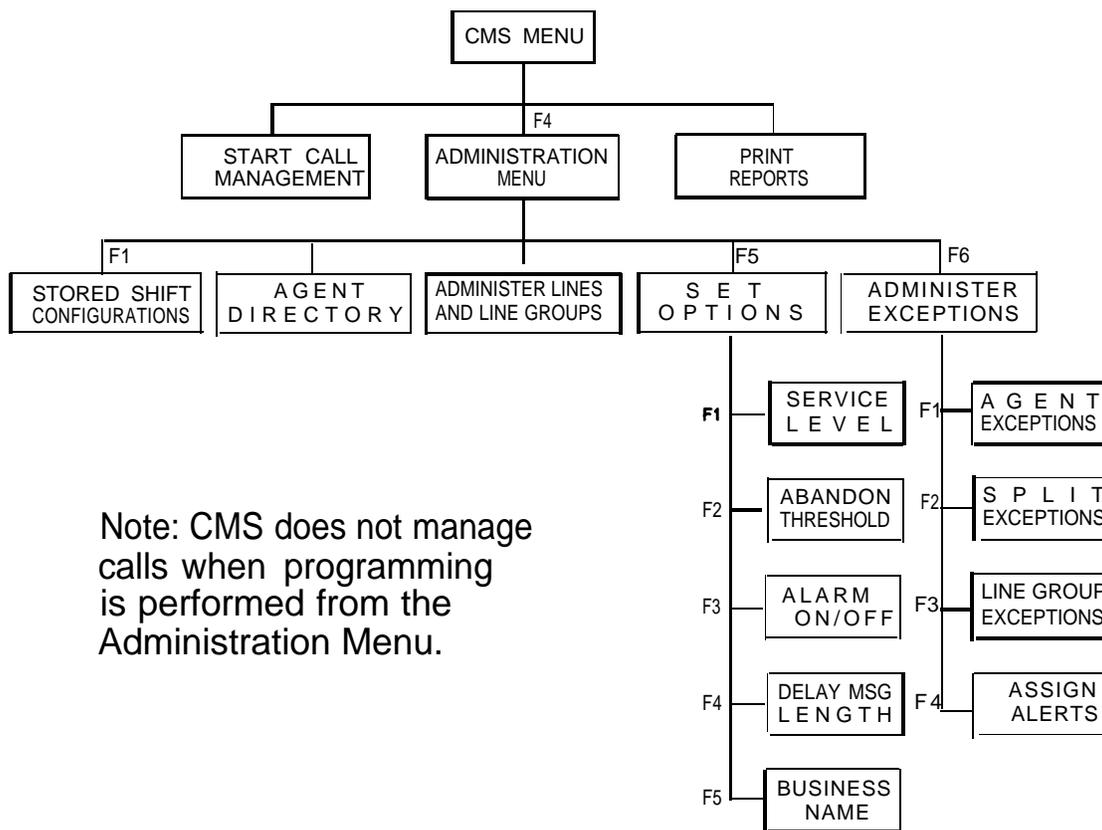
- **Changing Options.** Define your business name, service threshold, abandoned call threshold, and message length. You can also set your PC to beep whenever an unusual or undesirable situation occurs.
- **Programming Exceptions.** Select and program the exceptions (such as talk time and refused calls) that are appropriate for your business.

System options and exceptions were determined by you and your AT&T Account Manager during the system planning process. Use this section only if you want to change the basic configuration and stop managing calls during programming. If, however, you do not want to make changes at this time, go to Chapter 5, "Supervising CMS," where you can go through the steps needed to begin operations. If you want to change options and exceptions while CMS is managing calls, go to Chapter 5 and follow the instructions for "Dynamic Reconfiguration."

Figure 4-1, "A Map for CMS Options and Exceptions," on page 4-2 shows the relationship between the various screens used in this aspect of CMS programming.

To use the map, determine which function you wish to perform, then, starting with the CMS Main Menu, press the indicated function keys to move down the map to the desired action. For example, to turn the alarm on or off, press the following keys in order:

1. [F4] -To select the Administration Menu.
2. [F5] -To go to the Set Options screen.
3. [F3] -To turn the alarm on or off.



---

**Figure 4-1. Map for CMS Options and Exceptions**

## **Changing System Options**

You may reset several system options. Initial settings are in effect for these options until you define new values. The options are listed below (with factory settings in parentheses):

- Service Level Limit (20 seconds)
- Abandoned Call Threshold (10 seconds)
- Audible Alarm ('on')
- Delay Message Length (10 seconds)
- Business Name

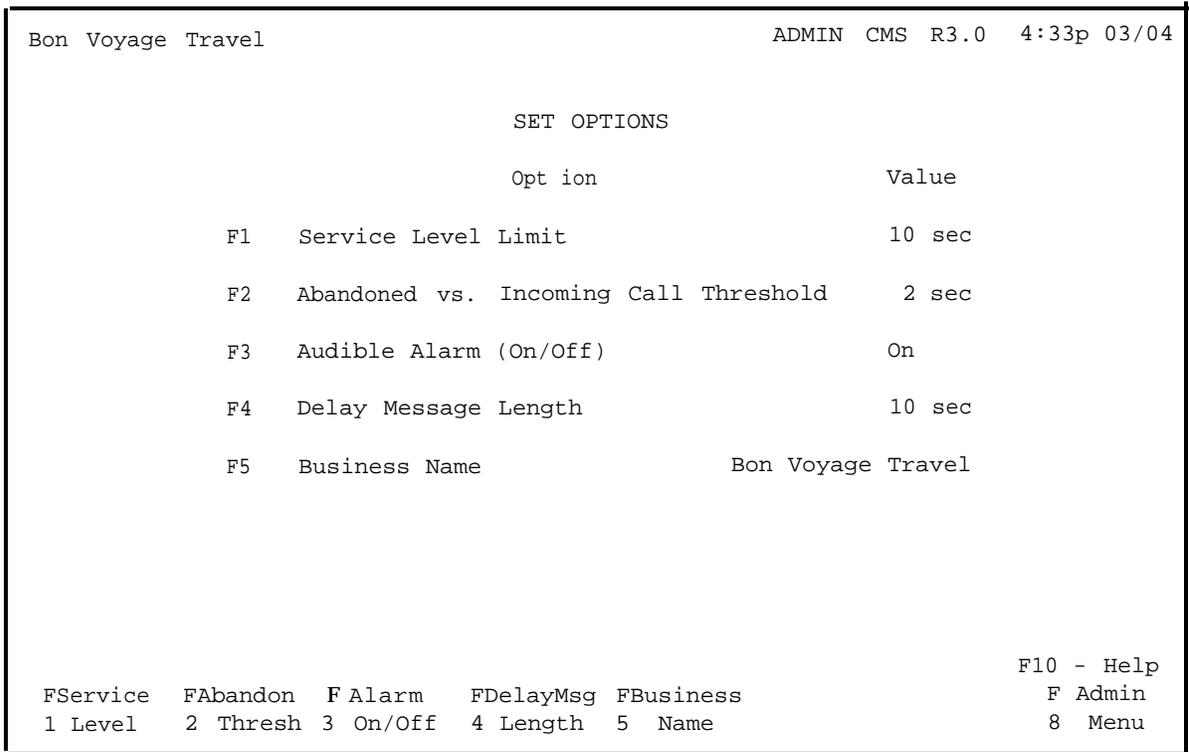
To begin changing system options, do the following:

1. From the CMS Main Menu, press **[F4]** (Admin CMS).

*The Administration Menu appears.*

2. From the Administration Menu, press **[F5]** (Set Options).

*The Set Options screen (Figure 4-2) appears. This is the screen used to select system options.*



**Figure 4-2. Set Options Screen**

The function keys appearing on this screen are:

- [F1] (Service Level). Used to adjust the Service Level Limit value.
- [F2] (Abandon Thresh). Used to adjust the Abandon vs. Incoming Call Threshold value.
- [F3] (Alarm On/Off). Used to turn the Audible Alarm on or off.
- [F4] (DelayMsg Length). Used to adjust the Delay Message Length value.
- [F5] (Business Name). Used to enter or change your Business Name.
- [F8] (Admin Menu). Used to return to the Administration Menu.

### **Adjusting the 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 9070 of the CMS calls within 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 factory setting, 20 seconds, may be too long or too short for your requirements and you may want to adjust it.

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.

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. To reset the service level limit:

1. From the Set Options screen, press **[F1]**. (Service Level). You can now adjust the Service Level value.

*The prompt is displayed as follows:*

```
SERVICE LEVEL: Calls should be serviced within \  
n seconds. n:  ___
```

The percentage of calls within the value chosen will be displayed on the reports.

2. Enter a number 1 through 999.
3. Press **[F8]** (Enter Data).

*The prompt clears and the function keys change.*

4. Choose another activity from this screen or press **[F8]** to return to the Administration Menu.

### **Adjusting the 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. If a CMS agent services a call in an amount of time *less than* this threshold, CMS considers the call abandoned. 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 may want to set a low abandoned call threshold, realizing that the possibility of mistaking an abandoned call "for a "real" call, or vice versa can increase.

You should evaluate the factory setting (10 seconds) for the abandoned call threshold in light of these factors. If you decide to reset the value, you should have a good idea of how long your agents spend on each call to reduce the possibility of mistaking "real" for abandoned calls. You may have to do some experimenting.

To adjust the Abandoned Call Threshold value:

1. From the Set Options screen, press [F2] (Abandon Thresh). You can now adjust the Abandoned Call Threshold value.

*The prompt is displayed as follows:*

ABANDON THRESHOLD: Seconds:     

2. Enter a number 1 through 99.

3. Press **[F8]** (Enter Data).

*The prompt clears and the function keys change.*

4. Choose another activity from this screen or press **[F8]** to return to the Administration Menu.

### **Setting the Audible Alarm**

When the audible alarm is on, your PC beeps 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. The alarm is helpful since it alerts you to potential problems, should you not be looking at your PC screen.

To turn the alarm off:

1. From the Set Options screen, press **[F3]** (Alarm On/Off).

*When **On** the PC beeps, and when **Off** the PC doesn't beep.*

Each press of the key sets the alarm to off or on.

2. Press **[F8]** (Enter Data).

*The prompt clears and the function keys change.*

3. Choose another activity from this screen or press **[F8]** to return to the Administration Menu.

### **Adjusting the 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 can manage within a given period of time. For this reason you may 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 factory setting for the message length option is 10 seconds.

To change the delay message length:

1. From the Set Options screen, press **[F4]** (Delay Msg Length). You can now adjust the Delay Message Length value.

*The prompt is displayed as follows:*

```
SET DELAY MESSAGE LENGTH : Seconds: -
```

2. Enter a number 1 through 99.
3. Press **[F8]** (Enter Data).

*The prompt clears and the function keys change.*

4. Choose another activity from this screen or press **[F8]** to return to the Administration Menu.

### **Entering Your Business Name**

You can enter the name of your business (up to 20 characters) in this field so that it appears on all CMS screens and reports. You can use both capital and lower case letters. The system does not, however, accept the space character. Use the underscore character () to designate a space.

To enter your business name,

1. From the Set Options screen, press **[F5]** (Business Name). You can now enter your Business Name.

*The prompt line is displayed as follows:*

```
ENTER BUSINESS NAME : _____
```

2. Enter a business name (up to 20 characters) including underscores.

3. Press **[F8]** (Enter Data).

*The prompt clears and the function keys change.*

4. Choose another activity from this screen or Press **[F8]** to return to the Administration Menu.

## **Programming 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 "Changing System Options," page 4-7.

External lamps or bells can also be used as alerts to visually notify agents when certain exceptions occur (see page 4-26).

Exceptions are an important management tool as they free you to do more productive work. Instead of constantly monitoring system status on your PC, you can set certain 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 unus-

able 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 could mean 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, possible 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**

To select exceptions:

1. From the CMS Main Menu, press **[F4]** (Admin CMS).

*The Administration Menu appears.*

2. From the Administration Menu, press **[F6]** (Select Exceptns).

*The Exception Settings screen (Figure 4-3), appears.*

| Bon Voyage Travel           |           | ADMIN CMS R3.0 11:20p 03/25 |          |       |      |               |     |
|-----------------------------|-----------|-----------------------------|----------|-------|------|---------------|-----|
| EXCEPTION SETTINGS          |           |                             |          |       |      |               |     |
| Exception                   | On/Off    | S p l i t / L i n e         |          |       |      | G r o u p - , |     |
|                             |           | 1/A                         | 2/B      | 3/C   | 4/D  | 5             | 6   |
| AGENTS                      |           |                             |          |       |      |               |     |
| Talk Time >= xxx sec        | off       | -                           | -        | -     | -    | -             | -   |
| After Call Work >= xxx min  | off       | -                           | -        | -     | -    | -             | -   |
| ACW Time Limit >= xxx min   | off       | -                           | -        | -     | -    | -             | -   |
| Refused Call                | off       |                             |          |       |      |               |     |
| SPLITS                      |           |                             |          |       |      |               |     |
| # Abandon Calls >= xx       | off       |                             |          |       |      |               |     |
| # Calls Waiting >= xx       | off       | 3/1                         | 2/1      | 2/1   | -/-  | -/-           | -/- |
| Oldest Call Wait >= xxx sec | off       | 10s/2                       | 5s/2     | 3s/2  | -/-  | -/-           | -/- |
| Avg Speed Answer >= xxx sec | off       | 12s/-                       | 3s/-     | 10s/- | -/-  | -/-           | -/- |
| LINE GROUPS                 |           |                             |          |       |      |               |     |
| All Lines Busy >= xxx sec   | off       | 5s/-                        | 4s/-     | 4s/-  | -/-  |               |     |
| Line Hold Time >= xx min    | off       | -                           | -        | -     | -    |               |     |
| Line Hold Time <= xx sec    | off       |                             |          |       |      |               |     |
| ALERTS                      |           |                             |          |       |      |               |     |
| Alert Line Button Numbers   |           | 1: 29                       | 2: 30    | 3: -  | 4: - |               |     |
|                             |           |                             |          |       |      | F10 - Help    |     |
| F Agent                     | F Split   | F Group                     | F Assign |       |      | F Admin       |     |
| 1Exceptns                   | 2Exceptns | 3Exceptns                   | 4 Alert  |       |      | 8 Menu        |     |

**Figure 4-3. Exception Settings Screen**

Use this screen to turn exceptions on or off and set exception thresholds for each split or line group.

From this screen you may also assign line button numbers to external wall-mountable lamps or bells 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 is lit or the bell rings whenever the corresponding exception occurs. External alerts are discussed in detail starting on page 4-26.

Initially, all exceptions are set to *Off* and all thresholds are blank.

The function keys appearing on the Exception Settings screen are:

- **[F1]** (Agent Exceptns). Used to select exceptions for agents: talk time, ACW time, agent logout ACW, and refused call.
- **[F2]** (Split Exceptns). Used to select exceptions for splits: abandoned calls, calls waiting, oldest call waiting, and average speed of answer.
- **[F3]** (Group Exceptns). Used to select exceptions for line groups: all lines busy, line hold time - rein, and line hold time - max.
- **[F4]** (Assign Alert). Used to assign alerts to line button numbers.

Exceptions are divided into three types—agent, split, and line group. General instructions for programming 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 program.

To program exceptions, do as follows:

1. Press the function key for the type of exception you want to program—agents, splits, or groups. Alert assignments are discussed later in this section.

*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 program. For example, you could press **[F2]** (Call Waiting) on the Split Exceptions screen.

if you decide not to program that exception, press **[F1]** (Cancel Prompt) to cancel the prompt.

3. Enter **on** in the “On/Off” field of the prompt to turn the exception on, or enter **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, enter 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 using the tab or appropriate function key:
5. Enter an alert number or a hyphen in the field to the right of the slash. See page 4-26 for more on alerts and alert assignments.
  6. Press **[F8]** (Enter Data) after you make an entry in the last field.
  7. Press a different function key to program another exception on that screen.
  8. Press **[F8]** (Admin Exceptns) to return to the Exception Settings screen.
  9. Press **[F8]** (Admin Menu) when you finish programming exceptions.

### **Agent Exceptions**

---

Agent exceptions let you monitor agent activity. 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.

Press **[F1]** (Agent Exceptns) from the Administer Exceptions screen to select the Agent Exceptions screen (Figure 4-4). The box in the screen indicates the four agent exceptions: talk time, after call work, agent logged out, and refused calls.

## Changing System Options and Programming Exceptions

| Bon Voyage Travel           |        | ADMIN CMS R3.0 11:22p 03/25 |          |       |      |           |     |           |            |
|-----------------------------|--------|-----------------------------|----------|-------|------|-----------|-----|-----------|------------|
| EXCEPTION SETTINGS          |        |                             |          |       |      |           |     |           |            |
| Exception                   | On/Off | S p l i t / L i n e         |          |       |      | G r o u p |     |           |            |
|                             |        | 1/A                         | 2/B      | 3/C   | 4/D  | 5         | 6   |           |            |
| <b>AGENTS</b>               |        |                             |          |       |      |           |     |           |            |
| [Talk Time >= xxx sec       | off    | -                           | -        | -     | -    | -         | -   | -         |            |
| After Call Work >= xxx min  | off    | -                           | -        | -     | -    | -         | -   | -         |            |
| ACW Time Limit >= xxx min   | off    | -                           | -        | -     | -    | -         | -   | -         |            |
| Refused Call                | off    | -                           | -        | -     | -    | -         | -   | -         |            |
| # Abandon Calls >= xx ,     | off    | -                           | -        | -     | -    | -         | -   | -         |            |
| # Calls Waiting >= xx       | off    | 3/1                         | 2/1      | 2/1   | -/-  | -/-       | -/- | -/-       |            |
| Oldest Call Wait >= xxx sec | off    | 10s/2                       | 5s/2     | 3s/2  | -/-  | -/-       | -/- | -/-       |            |
| Avg Speed Answer >= xxx sec | off    | 12s/-                       | 3s/-     | 10s/- | -/-  | -/-       | -/- | -/-       |            |
| <b>LINE GROUPS</b>          |        |                             |          |       |      |           |     |           |            |
| All Lines Busy >= xxx sec   | off    | 5s/-                        | 4s/-     | 4s/-  | -/-  | -         | -   | -         |            |
| Line Hold Time >= xx min    | off    | -                           | -        | -     | -    | -         | -   | -         |            |
| Line Hold Time <= xx sec    | off    | -                           | -        | -     | -    | -         | -   | -         |            |
| <b>ALERTS</b>               |        |                             |          |       |      |           |     |           |            |
| Alert Line Button Numbers   |        | 1: 29                       | 2: 30    | 3: -  | 4: - | -         | -   | -         |            |
| F Talk                      | F ACW  | F Agent                     | FRefused |       |      |           |     |           | F10 - Help |
| 1 Time                      | 2      | 3 Logout                    | 4 Call   |       |      |           |     |           | F Admin    |
|                             |        |                             |          |       |      |           |     | 8Exceptns |            |

Figure 4-4. Agent Exceptions Screen

### 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.

1. From the Agent Exception screen, press **[F1]** (Talk Time).

*The following prompt appears:*

```
TALK TIME(seconds):  ON/OFF ?  _  \
Split 1:  -  2:  -  3:  -  4:  -  5:  -  6:  -
```

2. Enter `on` or `off`. Press **[F6]** (Next Field) to keep the current value.
3. 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.

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

*The prompt clears and the function keys change.*

5. Choose another activity from this screen, or press **[F8]** (Admin Exceptns) to return to the Exception Settings screen.
6. Press **[F8]** (Admin Menu) when you finish programming exceptions.

*The following is an example of a message that appears when the exception threshold is met:*

```
*** Split 1 - Agent TOM - Talk Time >= 180 sec
```

### 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.

1. Press **[F2]** (ACW).

*The following prompt appears:*

```
ACW (minutes) :   ON/OFF ?_ _ \  
Split 1: - 2: - 3: - 4: - 5: - 6:-
```

2. Enter `on` or `off` Press **[F6]** (Next Field) to keep the current value.
3. Enter a number of minutes (1 through 999) for each split. To leave the exception turned off for a split, enter a hyphen.
4. Press **[F8]** (Enter Data) after the last field.

*The prompt clears and the function keys change.*

5. Choose another activity from this screen, or press **[F8]** (Admin Exceptns) to return to the Exception Settings screen.
6. Press **[F8]** (Admin Menu) when you finish programming exceptions.

*The following is an example of a message that appears when the exception threshold is met:*

```
*** Split 3 - Agent BEN - After Call Work >= 5 min
```

### **ACW Time Limit**

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

1. Press **[F3]** (Agent Logout).

*The following prompt appears:*

```
AGENT OUT (minutes) : ON/OFF ? ____ \  
Split 1: - 2: - 3: - 4: - 5: - 6:-
```

2. Enter **on** or **off** at the ON/OFF? prompt, or press **[F6]** (Next Field) to keep the current value.
3. Enter a number of minutes (1 through 999) for each split. To leave the exception turned off for a split, enter a hyphen.
4. Press **[F8]** (Enter Data) after the last field.

*The prompt clears and the function keys change.*

5. Choose another activity from this screen, or press **[F8]** (Admin Exceptns) to return to the Exception Settings screen.
6. Press **[F8]** (Admin Menu) when you finish programming exceptions.

*The following is an example of a message that appears when the exception threshold is met:*

```
*** Split 2 - Agent MAX - Logged Out - ACW >= 5 minutes
```

### Refused Call

If you turn on this exception, CMS notifies you whenever an agent refuses a call.

1. Press **[F4]** (Refused Call).

*The following prompt appears:*

```
REFUSED CALLS :   ON /OFF?  ____
```

2. Enter **on** or **off**.

3. Press **[F8]** (Enter Data).

*The prompt c/ears and the function keys change.*

4. Choose another activity from this screen, or press **[F8]** (Admin Exceptns) to return to the Exception Settings screen.

5. Press **[F8]** (Admin Menu) when you finish programming exceptions.

*The followings an example of a message that appears when the exception threshold is met:*

```
*** Split 2 - Agent SAM - Refused Call
```

### 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. Some split exceptions can be used to activate an external lamp.

Pressing **[F2]** (Split Exceptns) from the Exception Settings screen selects the Split Exceptions screen (Figure 4-5). The box indicates the split exceptions: abandoned calls, calls waiting, oldest call, and average speed of answer.

```

Bon Voyage Travel                                ADMIN CMS R3.0 11:23p 03/25
                                EXCEPTION SETTINGS
                                I - - S p l i t / L i n e   G r o u p - ,
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
ACW Time Limit >= xxx min off
Refused Call              off
-----SPLITS-----
# Abandon Calls >= xx      off
# Calls waiting >= xx      off      3/1    2/1    2/1    -/-    -/-    -/-
Oldest Call Wait >= xxx sec off     10s/2  5s/2   3s/2   -/-    -/-    -/-
Avg Speed Answer >= xxx sec off     12s/-  3s/-   10s/-  -/-    -/-    -/-
All Lines Busy >= xxx sec  off      5s/-   4s/-   4s/-   -/-
Line Hold Time >= xx min   off
Line Hold Time <= xx sec   off
ALERTS
Alert Line Button Numbers      1: 29 2: 30 3: - 4: -
                                F10 - Help
FAbandon  F Calls  F Oldest  F Avg
1 Calls   2Waiting 3 Call   4 Speed
                                F Admin
                                8Exceptns
    
```

Figure 4-5. Split Exceptions Screen

## 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 the current hour reaches or exceeds the threshold you set.

1. Press **[F1]** (Abandon Calls).

*The following prompt appears:*

```

# ABANDON CALLS:  ON/ OFF ?  ___  \
Split 1:  -  2:  -  3:  -  4:  -  5:  -  6:  -
    
```

2. Enter `on` or `off` to turn this exception on or off, or press `[F6]` (Next Field) to keep the current value.
3. 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, enter a hyphen.
4. Press `[F8]` (Enter Data).

*The prompt clears and the function keys change.*

5. Choose another activity from this screen, or press `[F8]` (Admin Exceptns) to return to the Exception Settings screen.
6. Press `[F8]` (Admin Menu) when you finish programming exceptions.

*The following is the exception message that appears when the exception threshold is met:*

```
*** Split 2 - # Abandoned Calls >= 5
```

### **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, and calls in the main split that are eligible for intraflow to the secondary split. With 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.

1. Press `[F2]` (Calls Waiting).

*The following prompt appears:*

```
# CALLS WAITING:  ON/OFF ? (#/a)  1:-  /-  2:-  /-  \  
3:-  / 4:-  /-  5:-  /-  6:-  /-
```

The symbols `(#/a)` are shown to remind you that the threshold value for the number of calls is entered before the slash, and the alert number (if any) is entered after the slash.

2. Enter `on` or `off` to turn this exception on or off, or press **[F6]** (Next Field) to keep the current value.
3. 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 (1 through 99). If you do not want to activate this exception for a particular split, enter a hyphen.
4. Enter an alert number or a hyphen in the field to the right of the slash. (See page 4-26 for more on alerts.)
5. Press **[F8]** (Enter Data).

*The prompt clears and the function keys change.*

6. Choose another activity from this screen, or press **[F8]** (Admin Exceptns) to return to the Exception Settings screen.
7. Press **[F8]** (Admin Menu) when you finish programming exceptions.

*The following is an example of a message that appears when the exception threshold is met:*

```
*** Split 1 - # Calls Waiting >= 2
```

*An alert, if assigned, is activated when the threshold is met.*

### **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.

1. Press **[F3]** (Oldest Call).

*The following prompt appears:*

```
OLDEST CALL : ON/OFF ? ____ (s/a) 1:- /- 2:- /- 3:- /- \  
4:- /-5:- /- 6:- /-
```

2. Enter `on` or `off` press **[F6]** (Next Field) to keep the current value.

3. 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, enter a hyphen.
4. Enter an alert number or a hyphen in the field to the right of the slash. (See page 4-26 for more on alerts.)
5. Press **[F8]** (Enter Data).

*The prompt clears and the function keys change.*

6. Choose another activity from this screen, or press **[F8]** (Admin Exceptns) to return to the Exception Settings screen.
7. Press **[F8]** (Admin Menu) when you finish programming exceptions.

*The following message appears when the exception threshold is met:*

```
*** Split 2 - Oldest Call Waiting >= 5 sec
```

*An alert, if assigned, is activated when the threshold is met.*

### **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 for the current hour. You can assign an external alert to this exception.

1. Press **[F4]** (Avg Speed).

*The following prompt appears:*

```
AVG SPEED ANS : ON/OFF? ____ (s/a) 1:- /- 2:- /- \  
3 :- /- 4:- /- 5:- /- 6:- /-
```

The symbols (s/a) are shown to remind you that the threshold value (in seconds) is entered before the slash, and the alert number (if any) is entered after the slash.

2. Enter `on` or `off` press **[F6]** (Next Field) to keep the current value.
3. If you want to enter threshold values, enter, to the left 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, enter a hyphen,
4. Enter an alert number or a hyphen in the field to the right of the slash. (See page 4-26 for more on alerts.)
5. Press **[F8]** (Enter Data).

*The prompt clears and the function keys change.*

6. Choose another activity from this screen, or Press **[F8]** (Admin Exceptns) to return to the Exception Settings screen.
7. Press **[F8]** (Admin Menu) when you finish programming exceptions.

*The following message appears when the exception threshold is met:*

```
*** Split 3 - Avg Speed Answer >= 10 seconds
```

*An alert, if assigned, is activated when the threshold is met.*

### **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.

Press **[F3]** (Group Exceptns) from the Exception Settings screen to select the Line Group Exceptions screen (Figure 4-6). The box indicates the line group exceptions which include all lines busy, line hold time maximum, and line hold time minimum.

```

Bon Voyage Travel                                ADMIN CMS R3.0 11:24p 03/25
                                EXCEPTION SETTINGS
                                I - S p l i t / L i n e   G r o u p _ 1
                                On/Off  1/A    2/B    3/C    4/D    5    6
Exception
AGENTS
Talk Time >= xxx sec                off
After Call Work >= xxx min          off
ACW Time Limit >= xxx min           off
Refused Call                         off
SPLITS
# Abandon Calls >= xx                off      -      -
# Calls Waiting >= xx               off      3/1    2/1    2/1    -/-    -/-    -/-
Oldest Call Wait >= xxx sec         off     10s/2  5s/2   3s/2   -/-    -/-    -/-
Avg Speed Answer >= xxx sec         off     12s/-  3s/-   10s/-  -/-    -/-    -/-
--LINE GROUPS--
All Lines Busy >= xxx sec           off      5s/-  4s/-   4s/-   -/-
Line Hold Time >= xx min            off
Line Hold Time <= xx sec            off
ALERTS
Alert Line Button Numbers           1: 29  2: 30  3: -   4: -

F Lines  FHoldTime FHoldTime
1 Busy   2Maximum 3Minimum

                                F10 - Help
                                F Admin
                                8Exceptns
    
```

Figure 4-6. Line Group Exceptions Screen

### Lines Busy (All Lines Busy)

The all lines busy exception refers to the number of seconds all lines in a line group are busy within the current hour. 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. You can assign an external alert to this exception.

1. From the Line Groups Exception screen, press **[F1]** (Lines Busy).

*The following prompt appears:*

```

ALL LINES BUSY:  ON /OFF?  ____  (s/a)  A:-  /-  B:-  /-  \
C:-  /-  D:-  /-
    
```

The symbols (s/a) are shown to remind you that the threshold value (in seconds) is entered before the slash, and the alert number (if any) is entered after the slash.

2. Enter `on` or `off` to turn this exception on or off, or press `[F6]` (Next Field) to keep the current value.
3. 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, enter a hyphen.
4. Enter an alert number or a hyphen in the field to the right of the slash. See page 4-26 for more on alerts and alert assignments.
5. Press `[F8]` (Enter Data).

*The prompt clears and the function keys change.*

6. Choose another activity from this screen, or press `[F8]` (Admin Exceptns) to return to the Exception Settings screen.
7. Press `[F8]` (Admin Menu) when you finish programming exceptions.

*The following is an example of a message that appears when the exception threshold is met:*

```
*** Group A - All Lines Busy >= 5 seconds
```

*An alert, if assigned, is activated when the threshold is met.*

### **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, not just the amount of time it has been “on hold.” 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.

1. From the Line Group Exceptions screen, press **[F2]** (HoldTime Maximum).

*The following prompt appears:*

```
MAXIMUM HOLDDTIME (minutes) :   ON/OFF?  ____  \  
Line Group A: - B: - C: - D: -
```

2. Enter **on** or **off** to turn this exception on or off, or press **[F6]** (Next Field) to keep the current value.
3. 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, enter a hyphen.
4. Press **[F8]** (Enter Data).

*The prompt clears and the function keys change.*

5. Choose another activity from this screen, or press **[F8]** (Admin Exceptns) to return to the Exception Settings screen.
6. Press **[F8]** (Admin Menu) when you finish programming exceptions.

*The following message appears when the exception threshold is met:*

```
*** Group A - Line XXXXX Hold Time >= 3 minutes
```

### **HoldTime 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 indicate a problem with the line.

1. Press **[F3]** (HoldTime Minimum).

*The following prompt appears:*

```
MINIMUM HOLDDTIME (seconds) :   ON/OFF ?  ____  \  
Line Group A: - B: - C: - D: -
```

2. Enter `on` or `off` to turn this exception on or off, or press `[F6]` (Next Field) to keep the current value.
3. 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, enter a hyphen.
4. Press `[F8]` (Enter Data).

*The prompt clears and the function keys change.*

5. Choose another activity from this screen, or press `[F8]` (Admin Exceptns) to return to the Exception Settings screen.
6. Press `[F8]` (Admin Menu) when you finish programming exceptions.

*The following message appears when the exception threshold is met:*

```
* * * Group A - Line XXXXX - Hold Time <= 10 seconds
```

### **Assigning External Alerts to Exceptions**

External exception alerts provide a signal that alerts you to unusual or undesirable situations affecting splits or line groups. External alerts are wall mountable and in full view or hearing range of the CMS supervisor and, possibly, the agents. They provide a visual and/or audible alert by lighting up or sounding whenever an exception to which they are assigned is occurring. For example, 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 maybe 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 is activated as long as at least one exception is triggered.

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

General instructions for installing external alerts are given in the following list. In-depth instructions for programming from the CMS Administration screen are given in the remainder of this section.

1. Line button numbers for the alerts are assigned to line ports on the MERLIN LEGEND system control unit by the MERLIN LEGEND system manager.
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 step 5, the CMS supervisor has to match the line button number to its corresponding alert number.

4. From the CMS Administration screen, the CMS supervisor presses **[F4]** (Assign Alert) to display the Exception Alerts screen with the following prompt:

```
ALERT LINE BUTTON NUMBER : 1: ____ 2: ____ 3: ____ \
4: ____
```

5. The CMS supervisor matches the assigned line button numbers (1 through 32) to their corresponding alert numbers (1 through 4), and enters the data. Line button numbers are shown in the CMS Line Button Planning Form.

**NOTE:**

During this activity CMS cannot be managing calls. CMS must be in administration mode during external alert assignment.

6. The CMS supervisor sets exception thresholds for various groups and splits.
7. The CMS supervisor 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 programming procedures are complete, alerts may be assigned to specific exceptions (from the Exception Settings screen) while CMS is managing calls.

### **Conditions for Assigning Alerts**

Generally, assigning alerts to line button numbers is the first step in programming 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 system programming (CMS must not be 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 programming.
- The appropriate exception setting parameters to which the alert(s) is assigned has been entered in the “SPLITS” and “LINE GROUPS” screen fields.
- The exception threshold is set.

## Assigning Alerts to Line Buttons

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

1. Press **[F4]** (Assign Alert) from the Exception Settings screen.

*The Alert Line Button Number prompt near the bottom of the Exception Settings screen (where the arrow is pointing in Figure 4-7).*

| Bon Voyage Travel           |        | ADMIN CMS R3.0 11:43p 03/25 |       |         |      |         |     |
|-----------------------------|--------|-----------------------------|-------|---------|------|---------|-----|
|                             |        | EXCEPTION SETTINGS          |       |         |      | Group   |     |
|                             |        | I - Split / Line            |       |         |      | 5       | 6   |
| Exception                   | On/Off | 1/A                         | 2/B   | 3/C     | 4/D  |         |     |
| AGENTS                      |        |                             |       |         |      |         |     |
| Talk Time >= xxx sec        | off    | -                           | -     |         |      |         |     |
| After Call Work >= xxx min  | off    | -                           | -     |         |      |         |     |
| ACW Time Limit >= xxx min   | off    | -                           | -     |         |      |         |     |
| Refused Call                | off    |                             |       |         |      |         |     |
| SPLITS                      |        |                             |       |         |      |         |     |
| # Abandon Calls >= xx       | off    | -                           | -     |         |      |         |     |
| # Calls Waiting >= xx       | off    | 3/1                         | 2/1   | 2/1     | -/-  | -/-     | -/- |
| Oldest Call Wait >= xxx sec | off    | 10s/2                       | 5s/2  | 3s/2    | -/-  | -/-     | -/- |
| Avg Speed Answer >= xxx sec | off    | 12s/-                       | 3s/-  | 10s/-   | -/-  | -/-     | -/- |
| LINE GROUPS                 |        |                             |       |         |      |         |     |
| All Lines Busy >= xxx sec   | off    | 5s/-                        | 4s/-  | 4s/-    | -/-  |         |     |
| Line Hold Time >= xx min    | off    |                             |       |         |      |         |     |
| Line Hold Time <= xx sec    | off    |                             |       |         |      |         |     |
| ALERTS                      |        |                             |       |         |      |         |     |
| Alert Line Button Numbers   |        | 1: 29                       | 2: 30 | 3: -    | 4: - |         |     |
| ALERT LINE BUTTON NUMBER:   |        | 1: 26                       | 2: 27 | 3: -    | 4: - |         |     |
| F Cancel                    |        | F Previous                  |       | F Next  |      | F Enter |     |
| 1 Prompt                    |        | 5 Field                     |       | 6 Field |      | 8 Data  |     |

**Figure 4-7. Alerts Prompt**

In this example, the first alert number field has been assigned to line button number 26. Line button number assignments can be found on the “CMS Line Button Planning Form,” a copy of which you can find in the back cover pocket of this guide.

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.

The function keys used on the screen are:

- [F1] (Cancel Prompt). Used to cancel the prompt for this operation.
- [F5] (Previous Field). Used to move back to a previous field in the prompt.
- [F6] (Next Field). Used to move to the next field in the prompt.
- [F8] (Enter Data). Used to enter the data just entered.

2. Press either [F5] (Previous Field) or [F6] (Next Field) to move to the alert number field (1, 2, 3, or 4) to which you are assigning a line button number.
3. Enter the line button number in the selected alert number field. Refer to the “CMS Line Button Planning Form” for the list of line button assignments.

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

**NOTE:**

If the alert has been assigned to either a split or line group exception, a line number must be assigned under alerts.

4. When you are finished assigning line button numbers (or entering hyphens), press [F8] (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 Exception Settings screens are displayed. Figure 4-8 shows line button number 26 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 is not actually connected to the MERLIN LEGEND system control unit.

| Bon Voyage Travel           |           | ADMIN CMS R3.0 11:52p 03/25 |          |       |      |               |     |            |
|-----------------------------|-----------|-----------------------------|----------|-------|------|---------------|-----|------------|
| EXCEPTION SETTINGS          |           |                             |          |       |      |               |     |            |
| Exception                   | On/Off    | S p l i t / L i n e         |          |       |      | G r o u p - - |     |            |
|                             |           | 1/A                         | 2/B      | 3/C   | 4/D  | 5             | 6   |            |
| AGENTS                      |           |                             |          |       |      |               |     |            |
| Talk Time >= xxx sec        | off       |                             |          |       |      |               |     |            |
| After Call Work >= xxx min  | off       |                             |          |       |      |               |     |            |
| ACW Time Limit >= xxx min   | off       |                             |          |       |      |               |     |            |
| Refused Call                | off       |                             |          |       |      |               |     |            |
| SPLITS                      |           |                             |          |       |      |               |     |            |
| # Abandon Calls >= xx       | off       | -                           | -        | -     | -    | -             | -   | -          |
| # Calls Waiting >= xx       | off       | 3/1                         | 2/1      | 2/1   | -/-  | -/-           | -/- |            |
| Oldest Call Wait >= xxx sec | off       | 10s/2                       | 5s/2     | 3s/2  | -/-  | -/-           | -/- |            |
| Avg Speed Answer >= xxx sec | off       | 12s/-                       | 3s/-     | 10s/- | -/-  | -/-           | -/- |            |
| LINE GROUPS                 |           |                             |          |       |      |               |     |            |
| All Lines Busy >= xxx sec   | off       | 5s/-                        | 4s/-     | 4s/-  | -/-  |               |     |            |
| Line Hold Time >= xx min    | off       |                             |          |       |      |               |     |            |
| Line Hold Time <= xx sec    | off       | -                           | -        | -     | -    |               |     |            |
| ALERTS                      |           |                             |          |       |      |               |     |            |
| Alert Line Button Numbers   |           | 1: 26                       | 2: 27    | 3: -  | 4: - |               |     |            |
|                             |           |                             |          |       |      |               |     | F10 - Help |
| F Agent                     | F Split   | F Group                     | F Assign |       |      |               |     | F Admin    |
| 1Exceptns                   | 2Exceptns | 3Exceptns                   | 4 Alert  |       |      |               |     | 8 Menu     |

Figure 4-8. Exception Settings Screen

## Changing or Removing Line Button Assignments

You should not remove a line button assignment unless you are sure of the following:

- The alert is not assigned to an exception.
- The alert number field does not have a number assigned and instead has a hyphen.

**NOTE:**

CMS cannot manage calls during this activity.

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

1. Press either **[F5]** (Previous Field) or **[F6]** (Next Field) to select the alert number field (1, 2, 3, or 4) from which you want to remove a line button number.
2. Enter a hyphen in the appropriate alert number field.
3. When you are finished, press **[F8]** (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 all the conditions for assigning alerts have been met (see “Conditions for Assigning Alerts,” on page 4-35). To change an alert line button number, do as follows:

1. Press either **[F5]** (Previous Field) or **[F6]** (Next Field) to select the alert number field (1, 2, 3, or 4) to which you want to assign 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]** (Enter Data) to enter the data.

### **Assigning Exceptions and External Alerts 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. See the specific agent, split, or line group procedures for more information.

**NOTE:**

Assign the alert to the port *before* assigning it to an exception.

---

# CMS Telephones and Telephone Programming

# 5

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This chapter includes information on the telephones used for CMS and how they work with your system. Step-by-step telephone programming instructions are given so that you can change the way the phones work with CMS as the needs of your business change. You may want to use MERLIN LEGEND system features with CMS. The most helpful features are explained in this chapter. For a full list of MERLIN LEGEND features, refer to the *MERLIN LEGEND Communications System Reference*.

Refer to the following documents for more information on the telephones used with CMS:

- *MERLIN LEGEND Communications System Analog Direct-Line Consoles Operator's Guide* for the supervisor's telephone (MERLIN II System Display Console)
- *MERLIN LEGEND Communications System Digits//ISDIV Direct-Line Consoles Operator's Guide* for agents' MLX telephones
- *MERLIN LEGEND Communications System Analog Multiline Telephones User's Guide* for agents' analog phones.

## CMS Supervisor's Telephone

The CMS Supervisor's telephone (MERLIN\* II System Display Console) is shown in Figure 5-1. The labels on the telephone in the figure reflect the set-up of our imaginary business, Bon Voyage Travel.

The circled numbers in Figure 5-1 refer to the description-of each part of the phone, given on the following pages.

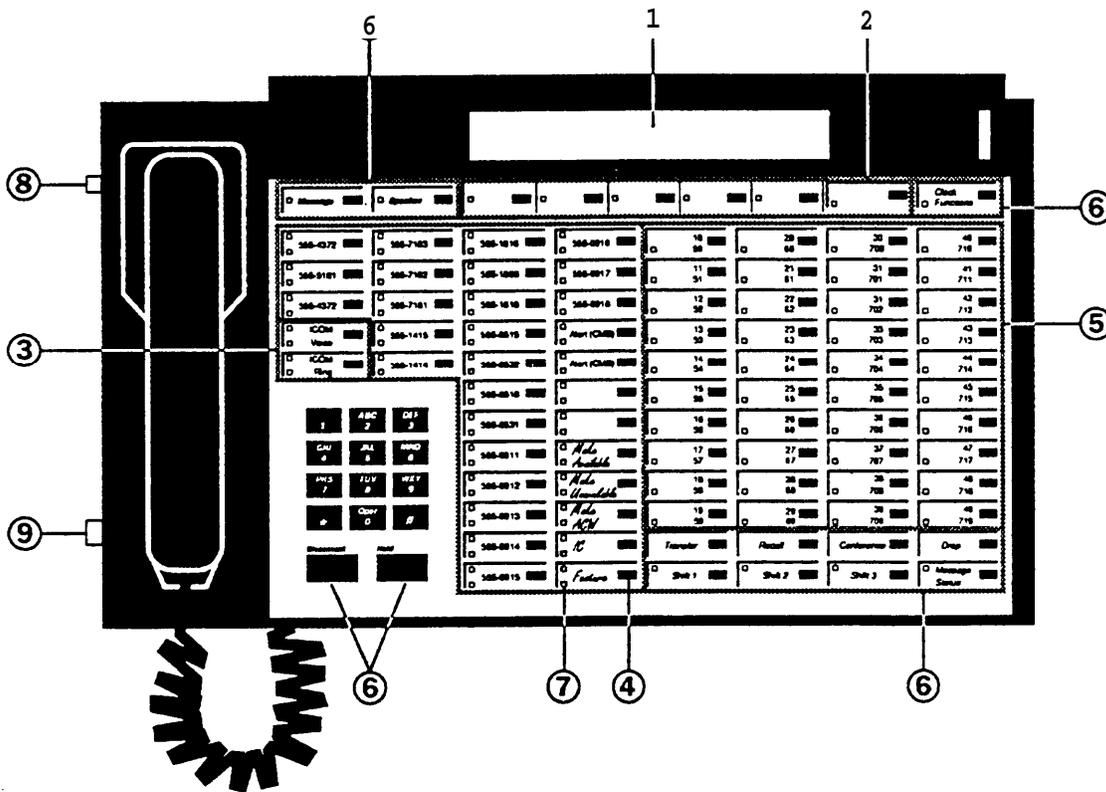


Figure 5-1. CMS Supervisor's Telephone

### ① **Display**

The telephone display shows the time and date and provides information that helps you handle calls and program the telephones in your system.

### ② **Display Buttons**

These buttons are used for control of display and time-keeping functions.

### ③ **ICOM or SA Buttons**

Two line buttons are labeled ICOM (Intercom) or SA (System Access) depending on how your telephone system is set up. If your telephone has ICOM buttons, they are used for placing inside calls only. If your telephone has SA buttons, you can place either inside or outside calls on any SA button.

### ④ **Line Buttons**

Each line assigned to CMS (up to 28) is associated with a line button which is assigned to CMS and attendant ports. Your system may also have buttons for lines *not* associated with CMS, such as personal lines or lines for outgoing calls.

The lights next to the line buttons show the status of each line. For more information about the lights on the telephone, see page 5-9.

Any button not used for CMS or other phone lines can be programmed for MERLIN LEGEND system features. System features most commonly used with CMS are described on pages 5-22 through 5-30. Programming instructions and codes are given on pages 5-31 through 5-34.

For a complete list of MERLIN LEGEND features, see the *MERLIN LEGEND Communications System System Reference*.

#### NOTE:

A **Coverage Inhibit** button is necessary if you will be using the Fallback Plan.

## ⑤ **DSS (Direct Station Selector) Buttons**

The DSS (Direct Station Selector) buttons let you contact any agent by touching the button assigned to the agent's extension. The lights next to the buttons indicate which agents are busy on calls and which are not.

Up to 3 agent telephones can be assigned to a DSS button. Use the **Shift** buttons to select the first, second, or third extension on each button.

## ⑥ **Dedicated Feature Buttons**

These buttons are factory-programmed and can only be used for the activities specified on the buttons. See "Call Handling" later in this chapter for information on how to use the **Transfer**, **Recall**, **Conference**, and **Drop** buttons.

### **Disconnect**

Press this button to get the same telephone line you were using without hanging up the handset.

### **Hold**

Press this button to put a call on hold.

### **Shift Buttons**

If you have more than one agent telephone assigned to each DSS button, use the **Shift** buttons to specify which extension on that button you want to monitor or reach. For example, if you want to reach extension 50, you would press [Shift 2] then the **DSS** button for extension 50, which is shared with extension 10. The light next to each **Shift** button indicates which shift is active.

### **Message Status**

Press this button to monitor the busy/not busy (on a call/not on a call) status of your agents when your phone is in supervisor mode. (See page 5-6 for more on the supervisor mode and page 5-9 for the meaning of telephone lights.)

### **Message**

The light next to this button is turned on by the attendant, or receptionist, when a message is waiting. When this light is on, call the attendant for the message.

### **Speaker**

Press this button to talk on a call without lifting the handset.

### **Clock Functions**

Use this button to set the alarm, timer, day, and date.

## ⑦ **Programmable Buttons**

Any unused line button can be programmed for MERLIN LEGEND system features. The features shown here may be the most useful to the CMS supervisor. They may have been programmed when your phone was installed. You can change these buttons if you want to. For a complete list of MERLIN LEGEND features, see the *MERLIN LEGEND Communications System System Reference*.

### **Agent Status Buttons**

You can change agent status from the telephone using the ***Make Available (ESS2)***, ***Make ACW (ESS1)***, and ***Make Logged Out (ESS Off)*** buttons. For instructions, see page 5-7.

### **Group Page**

If this button is programmed, you can use it each time Call Management begins, telling agents to log in. For more about the Group Page feature see page 5-7.

### **Barge In**

This feature helps you join calls to assist CMS agents. For more about this feature see page 5-8.

### **Coverage Inhibit**

This button must be programmed if you will be using the Fallback Plan. For more about the Fallback plan, see page 9-28.

### **Feature Button**

To activate features not programmed on line buttons, press the **Feature** button, then dial the code for the feature you want to use. Some MERLIN LEGEND features are described on pages 5-22 to 5-30.

### **⑧ T/P Switch**

Slide this switch to enter and exit programming mode.

### **⑨ Speaker/Ring Volume Control**

Slide this switch to adjust the speaker phone and ringer volume.

## **Supervisor's Mode**

---

Your CMS supervisor's phone can operate as a normal phone or as a "supervisor" phone. In the normal mode, the lights next to the DSS buttons show whether the agent is using his or her phone. (If the light is on, the agent is using the phone. ) *In normal mode, you can not change agent status, or monitor agent status. You can only monitor whether or not the agent is using his or her phone.*

In the supervisor mode, the lights next to the DSS buttons show the agent's work status—Available, Logged Out, or After Call Work (see Table 5-1 on page 5-9). You can also change agent status from your phone if it is in supervisor mode (see page 5-7).

To enter supervisor mode:

- Press [Feature] [3] [2] [Hold]

To exit supervisor mode:

- Press [Feature] [3] [2] [Drop]

### NOTE:

If you want to see whether an agent is using his or her phone while your phone is in supervisor mode:

- Press [Message Status]

*The light next to [Message Status] will go on. The lights next to the DSS buttons will go on when the agent is on the phone, off when the agent is not on the phone.*

To monitor agent work status again:

- Press [Message Status]

*The light next to [Message Status] will go off. The lights next to the DSS buttons will show the agents' work states, not whether they are on the phone.*

## Changing Agent Status

You can change agent status from the CMS PC or the supervisor's telephone.

To change agent status from the PC, press [F8] from the Split Status screen and follow the prompts as described on page 6-22.

To change agent status from the supervisor's telephone, press the appropriate button on the telephone (**Make Available**, **Make ACW**, or **Make Logged Out** -sometimes called **ESS2**, **ESS1**, and **ESS Off**) then press the DSS button for the agent whose status you want to change. If these buttons are not programmed on your telephone, refer to pages 5-33 and 3-34 for feature codes.

### NOTE:

Your phone must be in supervisor mode to change agent status.

## Group Page

Group Paging is used to direct Speakerphone Paging to all phones associated with the CMS, or to individual splits. You may want to use Group Page each time Call Management begins, telling agents to log in. Up to 6 paging

groups with up to 10 telephones can be assigned. A telephone can belong to more than one paging group. All 6 groups can be paged simultaneously using the Page All feature. When the extension number for a paging group is dialed using any **SA** or **ICOM** button, the announcement is heard over the speakerphones on all telephones assigned to the group. If the extension dialed is for the Page All Group, the announcement is heard on speakerphones throughout the system.

### **Barge-In**

The Barge-in feature helps the CMS supervisor join calls to assist CMS agents. If you want to add this feature to your telephone, it must be done through centralized telephone programming at the system console. See the MERLIN LEGEND system manager.

To use Barge-In:

1. Dial the agent or press the DSS button for the agent.
2. Press [Barge-In] or [Feature] [5] [8]

*A tone will be heard by the agent and the CMS caller when you join the call.*

### **Lights**

The line and DSS lights on your telephone tell you which lines and agents are busy, as shown in Table 5-1.

Table 5-1. Line/DSS Lights on the Supervisor's Telephone

| Light Type                                      | Light Status         | Meaning  |
|---|----------------------|--|
| <b>Line Button Lights</b>                       | Steady red           | You are automatically connected to this line when you lift the handset or turn on the headset. |
|   | Steady green         | Someone is using this line.  |
|   | Steady red and green | You are using this line.   |
|   | Blinking green       | An incoming call is on this line.  |
|   | Slow flashing green  | A co-worker has placed a call on hold on this line.  |
|   | Fast flashing green  | You placed a call on hold on this line.  |
| <b>DSS Button Lights (in supervisor's mode)</b> | On                   | The agent is Available.  |
|   | Off                  | The agent is logged out.   |
|   | Flash                | The agent is in After Call Work state.   |
| <b>DSS Button Lights (in normal mode)</b>       | On                   | The agent is on a call.  |
|   | Off                  | The agent is not on a call,  |

**NOTE:**

When you press [Message Status] while in supervisor mode, the lights next to the DSS buttons show whether the agent at that extension is on a call as shown below:

- **Light on-** The agent is on a call.
- **Light off-** The agent is not on a call.

## **Agent Phones**

---

Your agents may use multiline analog or MLX telephones. **Available** and **ACW** (workstate) buttons must be programmed on these telephones. Sometimes these buttons are called ESS2 and ESS1. Single line sets may not be used with CMS.

The agent phones may also have Inside Auto Dial and/or Notify buttons, and Cover buttons for the Transfer-to-Split and All-Ring Operation features. These and other optional features are described in the “Using MERLIN LEGEND Features with CMS” section of this chapter. If you want to change or add features to your agents’ phones, see page 5-31 for programming instructions. This section will only describe the *basic* agent phone set up.

CMS lines and/or line pools were assigned by the MERLIN LEGEND system implementor when your CMS was installed. If you need help adding another agent phone to your CMS, refer to the *CMS Installation and Programming Guide*, or call your AT&T account executive or your AT&T authorized dealer.

### **NOTE:**

Optional headsets and headset adapters are available for hands-free call handling. Instructions for the use of the headsets for MLX and analog phones are given in the “Call Handling” section of this chapter.

### **NOTE:**

Table 5-2, in the “Call Handling” section of this chapter, shows the meaning of the telephone lights and ringing patterns.

## **Line Buttons**

---

The line buttons on your agents’ phones work differently depending on whether your system is set for Hybrid/PBX or Key operation.

**Key** system phones have a line button for each CMS and non-CMS line assigned to the phone. These buttons are labeled with phone numbers and used for handling outside calls.

**Hybrid/PBX** system phones *do not* have line buttons for each incoming line, but may have a line button for a non-CMS line. Agents use buttons labeled “SA” for both inside and outside calls, and must dial an access number (usually 9) before dialing outside the system.

### **Work State Buttons (Available, ACW)**

Each agent must have both an Available and an ACW (After Call Work) button on his or her phone. (See page 5-31 for programming instructions. ) Agents use these buttons to:

- Announce availability to receive calls when call management begins.
- Place themselves in one of the following work states during call management:

**Available.** Ready to receive CMS calls.

**After-Call-Work.** Not available to receive calls, because doing paperwork associated with a prior CMS call.

**Logged Out.** Neither available for calls, nor doing after call work.

#### **NOTE:**

CMS automatically logs out agents:

- When the system starts up
- When a new configuration is selected
- When the agent is moved or added to the configuration
- When the agent has been in the ACW state longer than the programmed threshold allows
- When the agent refuses a call (doesn't answer within the programmed number of rings).

### **Announcing Availability**

Agents announce their availability to answer CMS calls by pressing the Available button on their phones. (The light next to the button goes on. )

When an agent is unavailable to answer calls, he or she can press the ACW button and do after call paperwork (the ACW light turns on) or he or she can press the Available button (so that no lights are lit).

In other words, the light next to the Available and ACW buttons tell the work state of the agent. If the Available light is on, the agent is available to receive a call, or is active on a call. If the ACW light is on, the agent is in the After-Call-Work state. If neither light is on, the agent is logged out.

### **Automatic ACW**

The Automatic After-Call-Work (Auto ACW) state is an enhancement to the ACW state. With auto ACW the agent does not have to touch the telephone buttons to determine work states, except to log in and log out. The After-Call-Work state occurs automatically upon completion of a call, and continues until the time programmed for the auto ACW state has passed (1–999 seconds). When the specified time has passed, the agent is automatically available to receive the next incoming call for that line group. The agent can, however, return to the Available state at any time by pressing [Available].

If programmed, 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 the ACW state for the programmed 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 programmed for the agent's line group for finishing paperwork connected with the previous CMS call.

## **Call Handling**

---

This section gives instructions for basic handling of CMS calls, including use of optional headsets.

Instruct agents on the meaning of their telephone lights and ringing patterns, as shown in Table 5-2.

**Table 5-2. Agent Phone SA/Intercom Lights and Ringing Patterns**

---

| <b>Lights</b>                      | <b>Ring</b> | <b>Meaning</b>  |
|------------------------------------|-------------|---|
| Steady red                         |             | You are connected to this line when you lift the handset.             |
| Steady red and green               |             | You are using this button.  |
| Flashing green                     | 3 rings     | An incoming CMS call or a transferred call is on this button.         |
|                                    | 1 ring      | An inside non-CMS call is on this button.                             |
| Fast flashing green                |             | The agent at this extension has placed a call on hold on this button. |
| Steady red and fast flashing green | 3 rings     | A transferred call is returning to this extension.                    |

### NOTE:

Several optional MERLIN LEGEND features can greatly enhance the call-handling capabilities of your CMS. Refer to the “Using MERLIN LEGEND Features with CMS” section for a discussion of these features.

## Answering CMS Calls

When a CMS call comes in, 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 can receive CMS calls only if the light next to the button labeled “Available” is on.
- Even though all lines and line pools to CMS should be programmed for “no ring,” when the CMS distributes a call to an available agent, the agent’s telephone rings.

### 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 telephone.

To answer a ringing call, the agent should:

- Lift the handset, or press [Speaker] , or use the headset.

*The agent is connected to the CMS call.*

If a CMS agent does not answer a CMS call within several rings the call returns to CMS and is sent to another agent. (The system manager determines the number and programs the Transfer Return feature accordingly. ) The agent that did not answer the call is automatically placed in the logged out state (the light next to his or her **Available** button goes off), and the computer statistics show that the agent refused a call. The agent cannot receive any more CMS calls until he or she announces availability again by touching [Available].

When the call is finished, the agent should:

- Hang up the handset.

**NOTE:**

If agents need to complete paperwork connected with a previous CMS call, they must touch [ACW] *before* hanging up, unless Auto ACW is in effect.

Instruct the agents to hang up within 4 seconds after completing a CMS call. If they do not, the Split Reports may count the off-hook time as time spent on “Other” (non-CMS) calls.

### **Answering Non-CMS Calls**

To answer non-CMS calls, agents should:

1. Press the line button where the green light is flashing.
2. Lift the handset, or press [Speaker], or use the headset.

### **Answering Extension Calls**

To answer extension calls, agents should:

1. Press the line button where the green light is flashing.
2. Lift the handset, or press [Speaker] , or use the headset.

### **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 one or more special lines *not* associated with CMS to agents’ telephones so agents can place calls to people outside the MERLIN LEGEND system.

**NOTE:**

Agents will not be available to receive incoming CMS calls while active on an outside call.

To place an outside call on a specific line, an agent should:

1. Touch the SA or line button for a line not associated with CMS.

*The green light next to the line button goes on.*

2. Lift the handset.
3. If using an SA button, dial the access code for an outside line (usually 9).
4. Dial the outside number.

### **Placing Extension Calls**

Each telephone connected to the system, including your own telephone and the agents' telephones, has its own extension number. You and your agents can dial extension numbers to place calls to people connected to your system. On all telephones in the system, you and your agents can place two types of extension calls:

- **Ringling Extension Calls.** You and your agents can place ringing extension calls when you want to have a conversation with anyone connected to the system. The call rings at the called person's telephone, and the called person lifts the handset to hear you and talk with you.
- **Announced Extension Calls.** When you or your agents place an announced extension call, the called person hears your voice through the telephone speaker, but must lift the handset to respond to you.

If an agent is using a MLX telephone, he or she can place both ringing and announced extension calls, but can receive *only* ringing extension calls. Agents with analog telephones can place and receive ringing and announced calls.

To place ringing extension calls:

1. Touch [ICOM Ring] or [SA Ring] .
2. Lift the handset.
3. Dial the extension number.

To place announced extension calls:

1. Touch [ICOM Voice] or [SA Voice].
2. Lift the handset.
3. Dial the extension number.
4. Listen for a beep, then speak into the handset.

If an agent often needs to call either you or another agent he or she can program an Inside Auto Dial button (see page 5-23), Notify button (see page 5-24), or Manual Signal (see page 5-24) for that person on his phone.

### **Conferencing a Call**

An agent may need to have you, an agent in another split, or any person on the system assist in a CMS call. One way of doing this is to ask you or the other person to join the call in progress.

To establish the conference call:

1. Touch [Conference] .  
*The CMS call is automatically placed on hold.*
2. Touch [ICOM Ring] or [SA Ring] to place a ringing call  
or  
touch [ICOM Voice] or [SA Voice] to place an announced call.
3. Dial the extension number of the person to be added.
4. Announce the call, if appropriate.
5. Touch [Conference] to add the held call.  
*The CMS call is added to the extension call.*

To disconnect a person in a conference call, the agent must:

1. Touch [Drop].
2. Touch the button of the line to be disconnected.

## **Transferring Calls**

---

After answering a CMS call, the agent may need to transfer the call to another split (see page 5-25) or to another person in the MERLIN LEGEND system.

When an agent needs to transfer a call to you, another CMS agent, or a person in the MERLIN LEGEND system, he or she must:

1. Touch [Transfer].
2. Touch the Inside Auto Dial button or dial the extension number of the person to whom the call is being transferred.
3. Hang up.

If the call is refused (not answered within a specified number of rings) the call will return to the transferring agent's extension.

### **NOTE:**

If the system administrator has set the system for One-Touch Transfer, a person can merely touch the Inside Auto Dial 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.

### **NOTE:**

If the agent has a **Notify** button for the person, he or she can touch [SA Ring] or [ICOM Ring] and then touch [Notify]. (See page 5-24 for more about the Notify feature.)

### **NOTE:**

When agents transfer calls, the statistics for that call are no longer accurate.

## **Optional Headset and Headset Adapter**

---

Your agents can use optional headsets with their MLX and analog phones. The headset used with each type of phone works differently. Each is described below.

### **Headsets with MLX Telephones**

---

The headsets used with MLX phones are controlled by buttons on the agents' telephones. These buttons *must* be programmed on telephone buttons with lights. Label these buttons **Headset Status** and **Headset Hangup**. Optional headset features, Auto Answer, and Headset Mute, if used, must be programmed on buttons with lights, and only work when headset operation is activated (by pressing [Headset Status] ).

### **Headset Buttons**

**Headset Status** (also called **Handset Disable**). This button is used to activate or deactivate headset operation. When this feature is activated (the green light is on), the switchhook operation used for the handset is disabled and the user can originate and answer calls using the headset.

**Headset Hangup**. This button is used to disconnect calls. This feature only works when headset operation has been enabled with the **Headset Status** button. Headset Hangup takes the place of the switchhook operation that is disabled when the telephone is in the headset operation mode.

#### **NOTE:**

Headset Hangup can only be programmed in Centralized Programming.

**Headset Auto Answer-optional**. This button allows users with headsets to automatically answer a ringing call without pressing a line button. When this feature is activated (the green light is on), and a call is ringing on the telephone, the user hears a tone, and after a short pause is connected to the caller.

***Hand/Headset Mute-optional.*** This button turns the microphone in the headset (or handset) off so that the user can converse with another person without the caller hearing the conversation.

**NOTE:**

The [Mute] button on your telephone will not work with headsets. If you want to turn the microphone off while using a headset, you must use the Hand/Headset Mute feature.

### **Headset Operation**

To answer a call, press button with flashing light.

To hang up a call, press [Headset Hangup].

To mute the headset while on a call,

- 1 Press [Mute].
2. Press [Mute] again to resume conversation.

To place a call, select a line button and dial the number.

### **Considerations**

- Headset Auto Answer can be activated and deactivated during a call without disconnecting the caller and takes effect immediately.
- A user with Headset Auto Answer active must manually select a line button before making an inside or outside call.
- A user can press [Speaker] to move the call from the headset to the Speakerphone.
- Headset Auto Answer does not automatically answer voice-announced calls.

## Feature Interactions

**Auto Dial.** If the telephone or telephone is in the headset mode, the user must select a line button before dialing an extension or an outside number using Auto Dial.

**Conference.** Headset Auto Answer is disabled while a user is setting up a conference and must be activated manually.

**Hold.** Headset Auto Answer is automatically deactivated when a user puts a call on Hold and must be activated manually.

**Paging.** A user with a headset hears Group Paging even if the telephone speakerphone.

For more information about how other MERLIN LEGEND features affect headset operation, refer to “Headset Operation” in the *MERLIN LEGEND System Reference*.

## Headsets with Analog Phones

The headset used with analog phones requires a 502C adapter. The **On/Off** button on the adapter acts as the switchhook does on a telephone. The **Mute** button is used to turn off the microphone so that the agent can have a conversation with someone without the caller hearing what is said.

To answer a call, the agent presses [On/Off] on the Headset Adapter.

To hang up a call, the agent presses [On/Off] on the Headset Adapter.

1. To mute the headset while on a call, press [Mute].
2. Press [Mute] again when ready to resume the call.

To make a call, press [On/Off] and dial the number.

## Optional Headset Button

**Auto Answer All.** Automatically transfers calls to the headset. This feature must be programmed on a button with lights. When this feature is activated

(the green light is on), and a call is ringing on the telephone, the user hears a tone and after a short pause is connected to the caller.

**NOTE:**

Auto Answer can be invoked only in the Enhanced Mode. Refer to Customer Instruction Booklet (CIB) for an explanation of Enhanced and Manual Mode of 502C Headset Adapter.

## **Using MERLIN LEGEND Features with CMS**

---

Many of the MERLIN LEGEND system features can be used with CMS. Several of the most useful features for use with your CMS are described in this section. (Programming instructions and codes are given on page 5-29.) For a complete list and information on all the MERLIN LEGEND system features, see the *MERLIN LEGEND System Reference*.

**WARNING:**

*The following features should not be used with CMS agent telephones because they may interfere with the operation and historical reporting capabilities of CMS.*

- Remote Call Forward
- Call Pickup Groups
- Call Pickup
- Call Forward
- Follow Me
- Do Not Disturb
- Privacy

You can use your phone's features two ways:

- **Press a programmed button.** When you have programmed a feature onto a vacant line button, just press that button to use the feature.

- **Dial a feature code.** Many features have a 1-, 2-, or 3-digit feature code. If all your line buttons are programmed, you can still use additional features by pressing the **Feature** button and dialing their feature codes.

## **Feature Button**

---

Many MERLIN LEGEND features can be activated with the use of a **Feature** button and feature codes. MLX phones have **Feature** buttons but the analog phones do not. A **Feature** button was programmed on the supervisor's phone when it was installed. To program a **Feature** button on agents' analog phones, follow the instructions on pages 5-31 and 5-32.

## **Inside Auto Dial**

---

With this feature, agents can contact individuals within the MERLIN LEGEND system by pressing a programmed button. This feature can also be used while a call is in progress or for transferring calls. The agent just presses the programmed Inside Auto Dial button instead of dialing the desired extension number.

If agents in a certain split often need to call another split for information or need to transfer calls to another split, you can program the extension number for the called split's "ghost telephone" on the Inside Auto Dial buttons of the agents in the calling split. This way, when someone from the calling split presses the button for the called split, all phones in the called split ring and any available agent in the called split can answer the call (see "Ghost Telephones and Cover Buttons).

### **NOTE:**

If agents sometimes need to contact you or a co-worker while calls are in progress, they can do so *without putting calls on hold* by using the Notify feature (see page 5-24).

Agents *cannot* have *both* Inside Auto Dial and Notify buttons programmed for a single extension number to signal someone in the MERLIN LEGEND system.

### **Notify**

---

Notify is used to send a visual signal to another telephone. To use the feature, a **Notify Send** button must be programmed (and labeled) at the signal sender's telephone and a **Notify Receive** button must be programmed (and labeled) at the signal receiver's telephone.

When the signal sender presses the programmed **Notify Send** Button, the green LED next to both the **Notify Receive** button and the **Notify Send** button goes on. Both lights remain on until the sender presses the **Notify Send** button again or the receiver presses the **Notify Receive** button.

The visual signal sent is one way; if both users want to send and receive, both telephones must be programmed with a **Notify Send** and a **Notify Receive** button.

To signal someone in the MERLIN LEGEND system:

- If the agent has a call in progress, he or she can just touch the **Notify** 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 **Notify** button for the person he or she wants to signal.

### **Manual Signaling**

---

Manual Signaling is used to send an audible signal to another telephone. To use the feature, a user presses a programmed **Manual Signaling** button without lifting the receiver. An audible tone is heard at the destination telephone for as long as the sender holds the button down.

In addition to sending an audible signal, the **Manual Signaling** button can be used to see the status of the destination telephone. When the destination telephone user lifts the receiver, the green LED next to the **Manual Signaling** button goes on.

The user can also use a **Manual Signaling** button to automatically dial the destination telephone extension. However, the user must select a line and lift the receiver or press [Speaker] before dialing an extension using a **Manual Signaling** button.

### **Agent Assist**

Some systems are installed with **Agent Assist** buttons. These are used like manual signaling buttons, but they are programmed to signal the CMS supervisor.

### **Transfer to Split or Queue**

Agents can transfer calls to all phones in another split (not just a particular agent in the split) if Transfer to Split or Transfer to Queue has been programmed on your system.

These features work similarly, except that calls transferred using the Transfer-to-Split feature are not recorded as ACD calls and appear only as “Other” on CMS historical reports. Transfer-to-Queue treats all transferred calls as new ACD calls so that CMS keeps complete records. If your business has a large number of transferred calls, your system is probably programmed for Transfer-to-Queue.

If neither feature is programmed on your CMS, programming instructions for Transfer-to-Split are given under “Ghost Telephones and Cover Buttons” on page 5-27. Transfer-to-Queue requires extra hardware and system programming. See your System Administrator if think you may need Transfer-to-Queue programmed.

In order to transfer a call to another split, the agent needs to know the extension number of the “ghost” telephone that you have assigned to the split.

If an agent needs to transfer a call to another split, he or she must:

1. Touch [Transfer].
2. Touch the Inside Auto Dial button or dial the extension number of the “ghost” telephone assigned to the split to which the call is to be transferred.

*The transferred call rings at all the telephones that have a Cover button for the “ghost” telephone, 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 the telephone flashes and the telephone gives one transfer ring (two rings).*

### NOTE:

If the MERLIN LEGEND system administrator has set the system for One-Touch Transfer, a person can merely touch the Auto Dial button of the split to which the call is to be transferred. The person transferring the call does *not* need to touch [Transfer] beforehand.

To answer a call transferred from another split the agent should:

- 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 calls line button flashes rapidly.*

2. Touch [Cover] to pickup the new call.
3. Touch the held call's line button to return to the call on hold.

## **All-Ring Operation**

This feature is useful if agents in a split are frequently away from their telephones (for instance, in a warehouse). With All-Ring operation, you can set up the phones in that split so that up to 6 phones in the split ring whenever a call comes into that split.

All-Ring operation requires:

1. A "ghost telephone" assigned to the split with All-Ring operation. (See "Ghost Phones and Cover Buttons.")
2. Cover buttons for the "ghost phone" assigned to each agent's phone. (See "Ghost Phones and Cover Buttons.") That is, the agents' phones are programmed to ring when a call goes to the extension assigned to the "ghost."

When a CMS call comes in, all the telephones in the split that have an All-Ring operation button ring and the light beside the button flashes. To answer one of the ringing telephones, the agent must:

- Lift the handset.

*The agent is automatically connected to the incoming call.*

**CAUTION:**

When All-Ring is activated, agents are automatically logged in and cannot log out.

### **Ghost Telephones and Cover Buttons**

In order for agents to use the All-Ring operation or Transfer-to-Split feature either you, as the CMS supervisor, or the MERLIN LEGEND system manager must assign a “ghost” telephone for each split that needs to use these features. The “ghost” telephone should be assigned a valid and unused extension number. However, you *do not* need to connect a telephone to the telephone jack. Agents who need to use either the All-Ring operation or Transfer-to-Split feature must have a Cover button programmed for the “ghost” telephone.

If you decide that a split needs All-Ring operation or needs to receive transferred calls, up to six agents in the split can have a Cover button for a “ghost” telephone that you have associated with the split. When an agent transfers a call to another split, it rings at all those telephones that have a Cover button for that “ghost” telephone.

When you program a Cover button on an agent’s telephone for the Transfer-to-Split feature,

- Program the Cover button for the extension number of the split’s “ghost” telephone. (See “Telephone Programming” on page 5-31.)
- 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.”

## **Ringling Options**

You can determine whether incoming calls ring immediately at a telephone or do not ring at all. (With your MERLIN LEGEND system, you can also program lines for delayed ringing, but this option is not recommended for CMS.) The following suggestions should 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 telephone.

- All CMS lines on an agent's telephone 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 responds to the incoming ring for each new call, answers it, and transfers it to the agent's telephone, which rings in response to the transferred call.
- Lines or line pools used primarily for placing outgoing calls should be programmed for No Ring.
- SA/ICOM buttons must be programmed for Immediate 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:

1. For analog telephones, slide the T/P switch to *P*.

For MLX telephones, press [Feature] [0] [0] .

*In programming mode, both types of telephones 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 Ring or No Ring.

3. Use the following codes to select the type of ringing for the line or line pool:
  - Press [\*] [3] [4] [5] to set all lines for No Ring.  
*The red lights next to the line buttons go off*
  - Press [\*] [3] [4] [7] to set all lines for Immediate Ring.  
*The red lights next to the line buttons go on steady.*
  - Press [\*] [3] [5] to set a single line for No Ring.  
*The red light next to the line button goes off.*
  - Press [\*] [3] [7] to set a single line 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, if necessary.
5. For analog telephones, slide the T/P switch to the center position.  
For MLX telephones, press [Feature] [\*] [0] [0] .

### **Personalized Ringing**

Agents may confuse the ring of nearby telephones with the ringing sound of their own. Each agent, especially within an individual split, may want to program his or her telephone with a ringing pattern that is easier to identify. There are eight different ringing patterns available.

#### **NOTE:**

Even if agents program their telephones for personalized ringing, they can still distinguish between the different kinds of calls.

To program the preferred ringing pattern for a telephone, agents should:

For an analog telephone,

1. Slide the T/P switch to *P*.

*The telephone rings to signal program mode.*

2. Touch line button.
3. Press [\*] [3] [2] and the ring pattern number (1–8).

*The phone rings with a different ring each time a different ring number is pressed.*

4. When the agent hears the ringing pattern he or she likes, he or she should slide the T/P switch to the center position.

For an MLX telephone (without display),

1. Press [Feature] [0] [0].

*The phone is in program mode.*

2. Touch line button.
3. Press [\*] [3] [2] and the ring pattern number (1-8).

*The phone rings with a different ring each time a different ring number is pressed.*

4. When the agent hears the ringing pattern he or she likes, he or she should press [Feature] [\*] [0] [0] .

For an MLX telephone (with display),

1. Press [Feaure] [0] [0].

*The phone is in program mode.*

2. Touch line button.
3. Press [\*] [3] [2] and select a pattern (1–8) using the display buttons.
4. Press [Enter] after selecting the pattern you like.
5. To leave programming mode, press [Feautre] [\*] [0] [0] .

## **Telephone Programming**

---

Your supervisor's telephone and agents' telephones were programmed for use with CMS when the CMS was installed. Optional MERLIN LEGEND features may have been programmed, as well. However, as the needs of your business change you may want to add a telephone to the CMS or change the features on some phones. If so, follow the instructions given to program the mandatory and/or optional features as necessary.

Remember, all agent phones *must* have **Available** and **ACW** buttons programmed. Program these features on buttons with lights.

### **WARNING:**

Do not use the following features on CMS agent telephones because they may interfere with the operation and historical reporting capabilities of CMS.

- Remote Call Forward
- Call Pickup Groups
- Call Pickup
- Call Forward
- Follow Me
- Do Not Disturb
- Privacy

## **Telephone Programming Instructions**

---

Use the following procedures for programming MERLIN LEGEND system features onto CMS telephones.

1. Label the button(s) you want to program.
2. Enter the programming mode in one of the following ways:
  - For analog telephones, slide the T/P (Test/Program) switch on the left side of the telephone to the *P (Program)* position,

- For the MLX telephones, dial the 3-character code [Feature] [0] [0].

*In programming mode, both types of telephones ring every 5 seconds to remind you that you are programming and that you cannot place or receive talk.*

3. Without lifting the 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 LEGEND Communications System Reference*.
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 telephones, slide the T/P switch to the center position.
  - For MLX telephones, dial the 4-character code [Feature] [\*] [0] [0].

**Table 5-3. Feature Programming Codes**

| Feature Name                     | Feature Programming Code  | Notes                                    |
|----------------------------------|---|--|
| Make Available (supervisor only) | *762  | Use a button with lights.                |
| Make ACW (supervisor only)       | *761  | Use a button with lights.                |
| Make Logout (supervisor only)    | *760  | Use a button with lights.                |
| Barge-In (supervisor only)       | *58   | Use centralized programming              |
| Group Page                       | *22 plus one of these codes:<br>793 for group 1<br>794 group 2<br>795 group 3<br>796 group 4<br>797 group 5<br>798 group 6<br>799 group 7<br>(Page All) |  |
| Feature Button                   | *20   | Use bottom, left-most line button (#34). |
| Available (on agent phones)      | *44   | Use a button with lights.                |
| ACW (on agent phones)            | *45   | Use a button with lights.                |
| Inside Auto Dial                 | *22 + target extension number   | If possible, use a button with lights.   |

Feature Programming Codes-continued

| Feature Name   | Feature Programming Code                                    | Notes  |
|--|---|--|
| Manual Signaling   | *23 + target extension number                               | If possible, use a button with lights.                   |
| Notify-Send  | *757 + target extension number                              | Button with lights will show status of target extension. |
| Notify-Receive   | *758 + sending extension number                             | Use a button with lights.                                |
| All-Ring operation and Transfer-to-Split (a Cover button for the “ghost” telephone). | *40 + the extension number of the split’s “ghost” telephone | Use a button with lights.                                |
| Headset Hangup (MLX phones only)   | *781  | Use a button with lights. Use centralized programming    |
| Headset Status (MLX phones only)   | *782  | Use a button with lights.                                |
| Headset Auto-Answer (MLX phones only)  | *780  | Use a button with lights.                                |
| Headset Mute (MLX phones only)   | *783  | Use a button with lights.                                |
| Auto-Answer All (analog phones only)   | *754  | Use a button with lights.                                |

---

# Supervising CMS

# 6

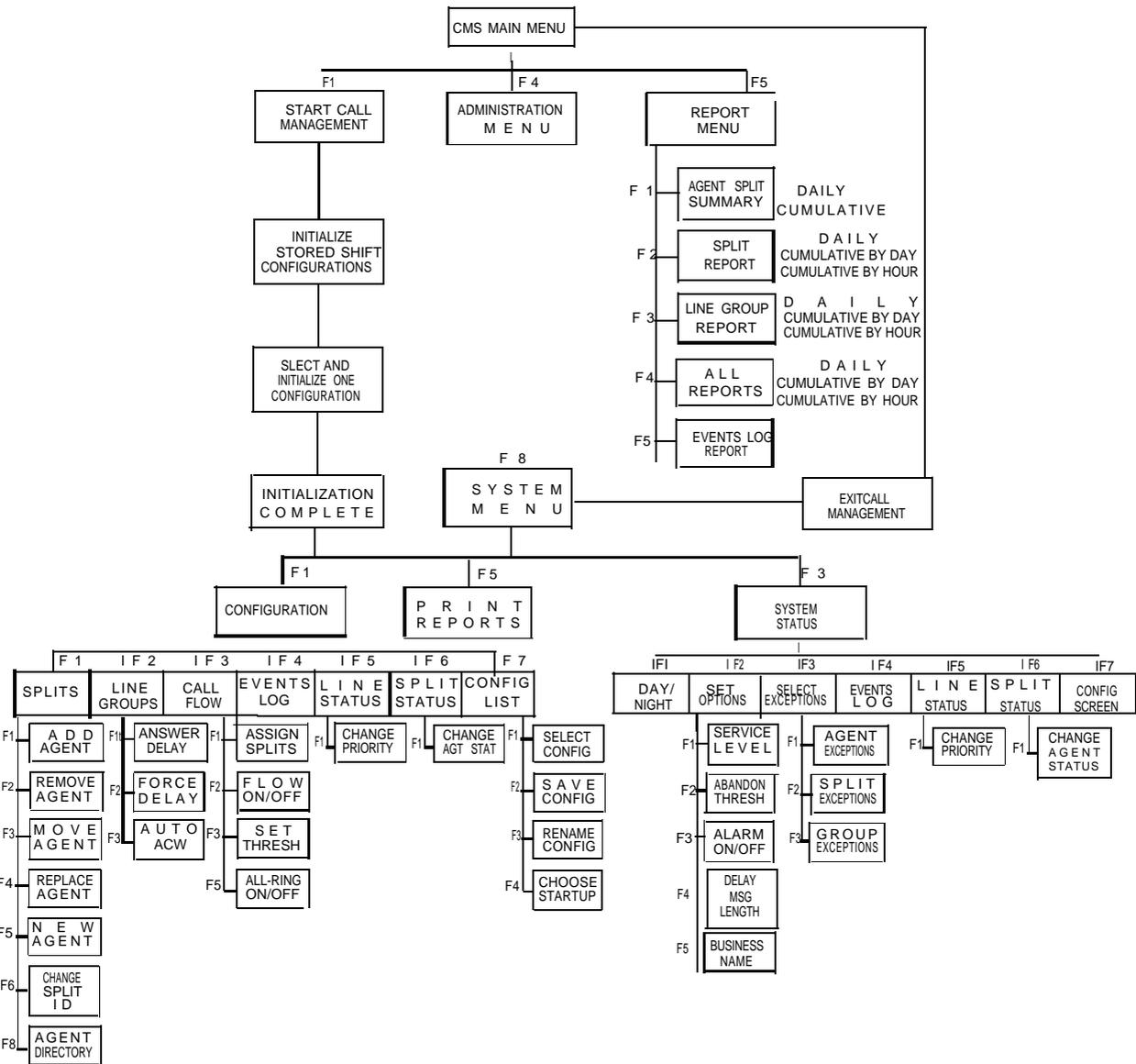
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The CMS Supervisor is responsible for the following daily activities, each described in this chapter:

- **Startup Procedures.** Tells how to start data collection and call management.
- **Making Agents Available for CMS Calls.** Describes how agents make themselves available for CMS calls and how they or the supervisor can change agent work states.
- **Monitoring Call Management.** Explains the status screens that give current information on agent and split activity, call traffic, and system problems.
- **Dynamic Reconfiguration.** Tells how to change a shift configuration while CMS is managing calls.
- **Selecting Day or Night Service.** Describes changing CMS from Day Service mode to Night Service mode.

You may find the example of Bon Voyage Travel's daily CMS operations helpful. Refer to "Day-to-Day Operation of CMS" in Chapter 1 for an overview of the activities involved in using CMS.

Figure 6-1 shows the screens you use to monitor call management and perform dynamic reconfiguration.



**NOTES:**

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.

After initialization is complete and another menu is selected, the system menu screen can be used to select configurations, review system status screens, print reports, and exit call management.

**Figure 6-1. Map of the Screens for Call Management**

## Startup Procedures

---

To activate CMS, follow these steps:

1. Turn on your PC.

*The CMS Main Menu (Figure 6-2) appears.*

```
Bon Voyage Travel                                CMS   CMS R3.0   5:47p 03/04

  C A L L  M A N A G E M E N T  S Y S T E M  ( C M S )
  F O R   T H E   A T . & T   M E R L I N   L E G E N D S
                ( c ) 1 9 9 1 b y   A T & T

                                MAIN MENU

                                F1 - Start Call Management

                                F4 - Administer CMS
                                  (Agents, Lines, Configurations )

                                F5 - Print Reports

                                F8 - Exit to DOS

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

**Figure 6-2. CMS Main Menu**

**NOTE:**

You can choose to have a particular shift configuration begin automatically during system startup. That way, if you use a particular configuration more than others, you don't have to choose the

configuration each time. If you need to choose a different configuration each time you start call management, do not choose a startup configuration. To choose a startup configuration during call management, see the instructions on page 6-50. To activate a configuration from the Programming Menu, refer to “Selecting a Startup Configuration” in Chapter 3.

2. Press [F1] (Start Call Mgt) to begin call management.

*If you have not preselected a shift configuration, the initialization screen (Figure 6-3) appears with a list of configurations and a SELECT CONFIGURATION prompt.*

```
Bon Voyage Travel                                DAY   CMS R3.0 3:02p 03/13

INITIALIZATION IN PROGRESS . . . SELECT CONFIGURATION

        STORED SHIFT CONFIGURATIONS

                1 - DAY
                2 - CONFIG_2
                3 - UNUSED
                4 - UNUSED
                5 - UNUSED
                6 - UNUSED

SELECT CONFIGURATION : Config #:
F Cancel                FPrevious F Next                F Enter
1 Prompt                5 Field    6 Field                8 Data
```

---

**Figure 6-3. Initialization Screen**

While the Initialization 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 Chapter 9, "Troubleshooting," for instructions).

3. Enter the number of the configuration you want to use and press **[F8]** (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.*

(If you receive an error or warning message, turn to Chapter 9, "Troubleshooting," for instructions).

*When, after a successful system check, CMS is ready to begin call management, the Initialization Complete screen (Figure 6-4) appears.*

When call management begins, all agents are automatically in the logged out state. To make themselves available, they must touch the **Available** button on their telephones. This turns on the light next to the **Available** button and signals CMS that they are ready to receive calls. (See Chapter 5.)

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

```
Bon Voyage Travel                                DAY   CMS R3.0 6:16p 03/04

INITIALIZATION COMPLETE . . . READY FOR INPUT

F Config          F System          FReports          F10 - Help
1 Screen         3 Status          5                 F Exit
                                     8Call Mgt
```

**Figure 6-4. Initialization Complete Screen**

4. Press the function key for the activity you want to perform. For information on moving the cursor, entering data, and editing data, see Chapter 2.

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 managing calls. For instance, you may want to replace an agent who is absent. For more information see “Dynamic Reconfiguration,” in this chapter.

- [F3] (System Status). Use this function key to select the System Status screen, the “home” screen of the running CMS and your primary source of information when monitoring call management. It summarizes the activity in each agent split and line group. For information on interpreting this screen, see “Using the System Status Screen” in this chapter.
- [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 Chapter 7, “Generating Reports.”
- [F8] (Exit Call Mgt). 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 program CMS, print reports, exit to MS-DOS, or start call management again.

## **Making Agents Available for CMS Calls**

---

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

### **Agent Telephone Button Requirements**

Each agent telephone must have both an **Available** button and an **ACW** button. For telephone programming procedures, see Chapter 5, “CMS Telephones and Telephone Programming.”

### Agent Telephone Work States

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

- Logged out state
- Available state
- After-Call-Work (ACW) state.

### Logged Out State

When call management begins, all agents are automatically in the logged out state. While logged out, agents are not able to take calls. Use the MERLIN LEGEND 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 LEGEND System Manual*.) At this time, agents who are available for CMS calls can turn on the light next to the **Available** button at their telephones 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 that 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 Inside Auto Dial 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 avail-

able 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**

Auto ACW is an enhancement to the After-Call-Work state. An agent receiving a call from a line group with Automatic ACW does not have to touch [ACW] to announce unavailability upon completion of a call. The agent has a set period of time (1–999 seconds) that was programmed 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 [ACW] goes off and the light next to [Available] 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 telephone, 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].

### Changing Agent Status

You can change agent status from the CMS PC or the supervisor's telephone.

To change agent status from the PC:

1. Press [F1] from the Split Status screen.

*The following prompt appears:*

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

2. Enter the agent ID in the AGENT ID field and the desired status in the NEW STATUS field.
3. Press [F8] (Enter Data).

*The agent's work state (under the "Status" column) changes 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.

To change agent status from the supervisor's telephone:

1. Press the appropriate button on the telephone (***Make Available, Make Logout*** or ***Make ACW***).
2. Press the DSS button for the agent whose status you want to change.

If these buttons are not programmed on your telephone, refer to Chapter 5 for programming instructions and codes.

## **Monitoring Call Management**

Once you begin call management (as described earlier in "Startup Procedures"), you can monitor activity in the line groups and splits for the current hour through the status screens. The 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, routine events (such as normal shutdown), 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," on page 6-31.)

The following terms are used on CMS Status screens 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 LEGEND 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--extension calls, non-CMS outside line calls, and calls transferred to an agent by another person, including calls which were originally ACD calls.

**NOTE:**

Once an ACD call is transferred, the statistics change to “other.”

## Using the System Status Screen

The System Status screen (Figure 6-5) summarizes the activity in each line group and agent split so you can tell at a glance if CMS is operating efficiently. This screen can be selected from the Initialization screen or any status screen. A brief description of each column is given on the following pages and keyed to the circled numbers on the figure. 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," in this chapter.

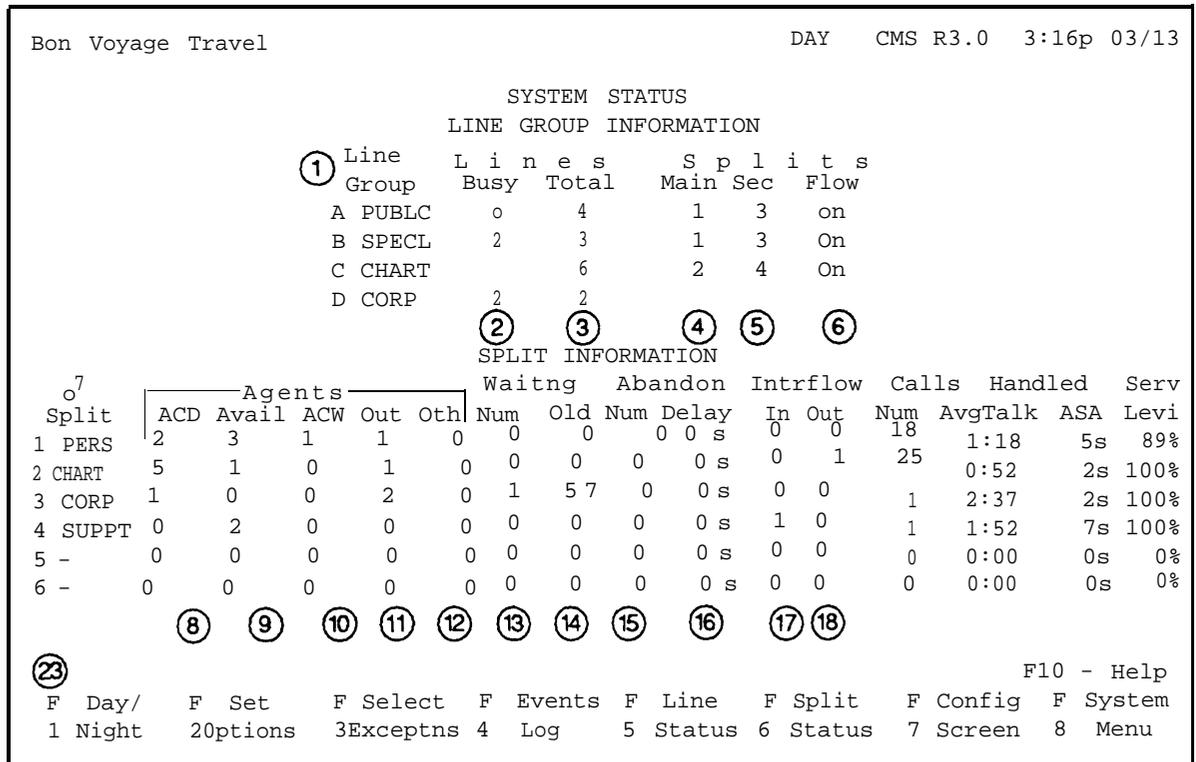


Figure 6-5. System Status Screen

When CMS transfers a call to an agent, the call disappears from the group of calls waiting to be answered by an agent and the call appears in the ACD column. The System Status screen shows an agent to be on an ACD call while the call is ringing at the agent's telephone. 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. If the call is refused, it reappears in the same group of waiting calls.

### Line Group Information

- |   |              |  |
|---|--------------|--|
| ① | Line Group   | The first two columns list the letter to which a line group is assigned, and the line group ID.  |
| ② | Lines Busy   | The number of lines in the line group that are either ringing, on hold, or connected.  |
| ③ | Lines Total  | The total number of lines in the group.  |
| ④ | Splits, Main | The number of the main split assigned to the line group. If no main split is assigned, a hyphen appears instead of a number.   |
| ⑤ | Splits, Sec  | The number of the secondary split assigned to the line group for intraflow. The secondary split can receive calls for the line group only if intraflow is on. If no secondary split is assigned, a hyphen appears instead of a number. |
| ⑥ | Splits, Flow | Intraflow is indicated by "On" or "Off." The secondary split can receive calls only if intraflow is on.  |

### Split Information

- |   |               |  |
|---|---------------|--|
| ⑦ | Split         | The number and ID of each split.   |
| ⑧ | Agents, ACD   | The number of agents currently active on ACD calls including ringing calls at agent stations. Active calls include both calls currently connected to an agent and calls the agent has placed on hold.  |
| ⑨ | Agents, Avail | The number of agents currently available to receive ACD calls.   |
| ⑩ | Agents, ACW   | The number of agents currently in the After-Call-Work state.   |
| ⑪ | Agents, Out   | The number of agents currently in the Logged Out or Night state, and not available to receive an ACD call.   |
| ⑫ | Agents, Oth   | The number of agents currently active on calls not related to ACD work such as outgoing calls, other than ACD incoming calls, transferred ACD calls, extension calls, and transferred calls. Active calls include calls currently connected to an agent and calls the agent has placed on hold.  |
| ⑬ | Waitng, 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 an agent. It does not include calls which are ringing at an agent position or which were put on hold by an agent. (These are shown in the Agents, ACD column.) |

- ⑭ Waitng, Old      The number of seconds the current oldest call has been waiting to be transferred to an agent in each 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.*

- ⑮ 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.
- Intrflow, In      The number of serviced calls intraflowed into a particular split from another split. Calls are credited to the split after they are completed.
- Intrflow, 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.

- ⑳ 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.
- ㉑ 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 split that answered it, not the main split.
- ㉒ Serv Levi      The service level is the percentage of calls connected to an agent within the service level limit set by the system manager. This includes completed calls only.

### ㉓ **Function Keys**

- **[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 "Night Service," in this chapter.
- **[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 "Changing System Options" in Chapter 4.
- **[F3]** (Set 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 "Programming Exceptions" in Chapter 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,” in this chapter.
- [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,” in this chapter.
  - [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,” in this chapter.
  - [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,” in this chapter.
  - [F8] (System Menu). Use this function key to get to the System Menu for performing dynamic reconfiguration, reviewing system status, generating reports, and exiting call management.

## **Using the Split Status Screens**

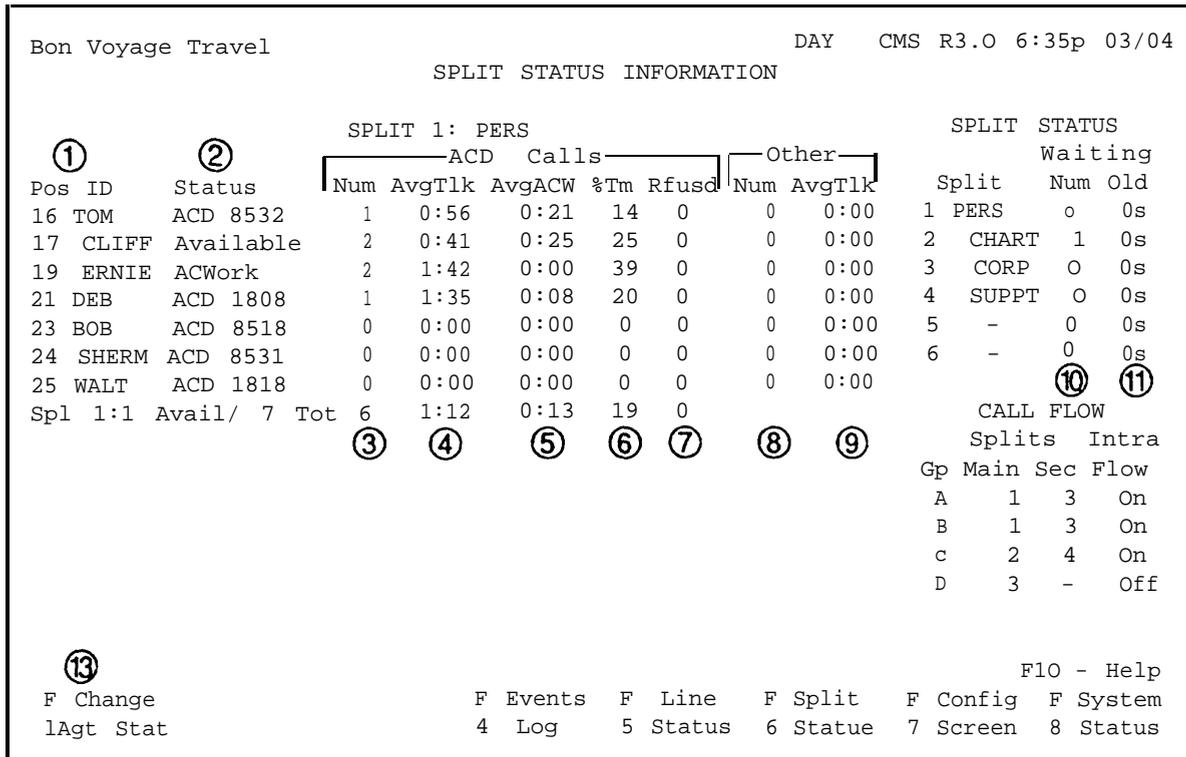
With the Split Status screens (Figure 6-6), you can get a detailed picture of the activities of each agent in each split on an hourly basis. For instance, you can see how many calls each agent has answered and the average time an agent spends on a call.

The same data are collected for each split. Each Split Status screen contains one split’s data. To view a Split Status screen for any split:

1. Press [F6] (Split Status) from any status screen.
2. At the prompt, enter the split number for the Split Status screen you want to see.

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,” in this chapter.

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. An explanation of each type of data on this screen follows. The circled numbers on the figure are keyed to the text explanation.



**Figure 6-6. Split Status Screen**

**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

- ① **Pos-ID**                      The first two columns list the agent's position number, which is the MERLIN LEGEND system extension number of the agent's telephone, and the agent's ID, an assigned "name" of up to five characters.
- ② **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 and is unavailable to take calls.
- Night:* The agent's voice terminal is hung up, and the CMS is in Night Service.
- ③ **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.

- |   |                   |  |
|---|-------------------|--|
| ⑤ | ACD Calls, AvgACW | The average amount of time (in minutes and seconds) the agent has spent in the 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. |
| ⑥ | ACD Calls, %Tm    | The percentage of time the agent spent on ACD-related work within the current hour.  |
| ⑦ | ACD Calls, Rfused | The number of ACD calls that the agent did not answer.   |
| ⑧ | Other, Num        | The number of completed other than ACD calls the agent has made or received.   |
| ⑨ | 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.

- |   |              |   |
|---|--------------|---|
| ⑩ | Waiting, Num | The number of calls in a split that are ringing, connected to the delay message, or on hold waiting for an agent. |
| ⑪ | Waiting, Old | The number of seconds the current oldest call has been waiting to be answered by an agent in a particular split.  |

## ⑫ Call Flow Information

The bottom right section of the screen shows how splits are assigned to line groups and whether intraflow is turned on.

## ⑬ Function Keys

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

– **[F1]** (Change Agt Stat).

1. Press this function key to change an agent's work status.

*The following prompt appears:*

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

2. Enter the agent ID in the AGENT ID field and the desired status in the NEW STATUS field.
3. Press **[F8]** (Enter Data).

*The agent's work state (under the "Status" column) changes 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) or (previous page). press these function keys 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, system functions, and system errors. For more information, see “Using the Events Log Screen,” in this chapter.
- **[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,” in this chapter.
- **[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,” in this chapter.
- **[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,” in this chapter.



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. An explanation of the data on this screen is given below. The circled numbers in the text are keyed to columns on the screen in Figure 6-7.

### Line Status

- |   |        |  |
|---|--------|--|
| ① | Gp     | The letter assigned to the line group.   |
| ② | Line   | The number of the line(s) assigned to each group.  |
| ③ | P      | Line priority status. A “+” in this column indicates that the line is a priority line and is answered before other, nonpriority lines.   |
| ④ | Status | <p>The line status, which can be one of the following conditions:</p> <p><i>Ring</i>: Initial ringing; a call has seized the line, but CMS has not answered it yet.</p> <p><i>Idle</i>: The line is not in use.</p> <p><i>Queued</i>: The call is in the CMS hold state. The announcement has played and the caller is waiting for a CMS agent to become available.</p> <p> <i>Agent ID</i>: The call is ringing at this agent’s phone.</p> <p> <i>Agent ID</i>: This agent has answered and is handling the call.</p> <p><i>Annc</i>: The caller is hearing the delay announcement.</p> |

*Othr*: The line is being used by an incoming or outgoing non-CMS call.

**NOTE:**

When a CMS call that comes in on a CMS line is transferred by an agent, the status of the CMS line changes from “ ↔ AGTID” to “Other” when the agent who transfers the call hangs up.

- ⑤ 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.
- ⑥ Calls, HldT      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).

- ⑦ **XX B u s y**      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.”
- ⑧ **XX T o t a l**      The total number of lines in the line group.

- ⑨ **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 each split.

- ⑩ **Waitng, 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 an agent. It does not include calls which are ringing at an agent position or which were put on hold by an agent. (These are shown in the Agents ACD column.

- ⑪ **Waitng, Old**                      The number of seconds the current oldest call has been waiting to be transferred to an agent in each 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.

**⑫ 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.

## ⑬ Function Keys

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.
  1. Press **[F1]** (Change Priority).

*The following prompt appears:*

```
CHANGE PRIORITY :   Line ID: _____
```
  2. Enter a line ID to change the priority of that line.
  3. Press **[F8]** (Enter Data).
- **[F4]** (Events Log). press this function key to select the Events Log screen. It displays the 19 most recent exceptions, routine events, and system errors. For more information, see “Using the Events Log Screen,” in this chapter.
- **[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,” in this chapter.
- **[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,” in this chapter.
- **[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,” in this chapter.

## Using the Events Log Screen

The Events Log screen (Figure 6-8) displays the last 19 exceptions, routine events (such as a normal shutdown), and system problems with the time and date they occurred.

To view the Events Log screen, press **[F4]** (Events Log) from any status screen.

```
Bon Voyage Travel                                DAY   CMS RO.3 3:53p 03/13
Time  Date          Event
8:06p 03/04 WARNING--Printer Not Ready. Using Prt Sc Key will Halt CMS
8:06p 03/04 Card RAM Adrs. 781a0; Int. 0; Firmware 0.0; PC Clk Type 18.211
8:09p 03/04 Normal Call Management Shutdown
8:09p 03/04 CMS for MERLIN LEGEND(TM) CS Version 0.3. Call Management Started
8:10p 03/04 ERROR--No Startup Configuration was Selected.
8:11p 03/04 Normal Call Management Shutdown.
8:33p 03/04 CMS for MERLIN LEGEND(TM) CS Version 0.3. Call Management Started
8:33p 03/04 WARNING--Printer Not Ready. Using Prt Sc Key will Halt CMS
8:33p 03/04 Card RAM Adrs. 781a0; Int. 0; Firmware 0.0; PC Clk Type 18.199
9:32p 03/04 Normal Call Management Shutdown
8:30p 03/12 CMS for MERLIN LEGEND(TM) CS Version 0.3. Call Management Started
8:31p 03/12 ERROR--No Startup Configuration was Selected.
8:31p 03/12 Normal Call Management Shutdown
8:31p 03/12 CMS for MERLIN LEGEND(TM) CS Version 0.3. Call Management Started
8:31p 03/12 WARNING--Printer Not Ready. Using Prt Sc Key will Halt CMS
8:32p 03/12 Card RAM Adrs. 848e0; Int. 0; Firmware 0.0; PC Clk Type 18.211
8:55p 03/12 Normal Call Management Shutdown
3:01p 03/13 CMS for MERLIN LEGEND(TM) CS Version 0.3. Call Management Started
3:03p 03/13 Card RAM Adrs. 792c0; Int. 0; Firmware 0.0; PC Clk Type 18.211

                                           F10 - Help
F Line   F Split  F Config F System
5 Status 6 Status 7 Screen 8 Status
```

**Figure 6-8. Events Log Screen**

Exception messages alert you to unusual or undesirable situations. 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 programming them, see "Programming Exceptions" in Chapter 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 chapter.)

### Function Keys

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,” in this chapter.
- **[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,” in this chapter.
- **[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,” in this chapter.
- **[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,” in this chapter.

### Multiple View Only Monitors

For CMS applications in which each split is assigned its own supervisor, an option is available that allows the same CMS screen to be displayed on a number of monitors. Screen selection is controlled at the CMS Supervisor’s PC.

Used in conjunction with the Enhanced Line Status feature of MERLIN LEGEND CMS, this monitoring option provides supervisors with a more detailed picture of agent activity than has been available in any previous CMS. This option requires UGA monitors and a UGA video adapter card. See *CMS Installation and Programming Guide* for installation instructions.

## **Dynamic Reconfiguration**

Once you activate a shift configuration (as described 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 to make permanent changes to the current configuration, 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.

To see how the supervisor at Bon Voyage Travel uses dynamic reconfiguration during a typical day, see “Day-to-Day Operation of CMS, ” in Chapter 1.

You use these screens during dynamic reconfiguration:

- **Configuration screen.** The starting point for dynamic configuration.
- **Configure Splits screen.** You can add, move, or remove the agents in splits from this screen.
- **Line Group Options screen.** With the line groups prompt on this screen, 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.
- **Configure Call Flow screen.** From this screen, you can reassign splits to groups, change Intraflow thresholds, turn Intraflow on or off, and designate splits for All-Ring operation.
- **Stored Shift Configurations screen.** From 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.

These screens are almost identical to the configuration screens you use for programming. During programming, however, CMS *is not* managing calls. CMS *is* managing calls during dynamic reconfiguration. Step-by-step instructions for using these screens are given later in this section.

## Beginning Dynamic Reconfiguration

All dynamic reconfiguration activities are selected from the Configuration screen (Figure 6-9). To select the Configuration screen, press [F1] (Config Screen) at the Initialization screen (or the System Menu) or [F7] (Config Screen) from any status screen. The current configuration is displayed.

```

Bon Voyage Travel                                DAY   CMS R3.0 6:41p 03/04

          AGENT SPLITS                          LINE GROUP OPTIONS
    Split  A g e n t      Split  A g e n t      Num  Answer Force Auto
    1 PERS  16 TOM        3 CORP  37 IKE        A  PUBLC 4    55  off  20s
          17 CLIFF        39 TINA       B  SPECL 3    5s  off  30s
          19 ERNIE        40 DIANA      C  CHART 6    5s  off  10s
          21 DEB         4 SUPPT       42 RON        D  CORP  2    5s  off  15s
          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

                                CALL FLOW
                                Splits  Intra  Spl  Flow All
                                Gp Main Sec Flow 1 10s off
          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 - DAY

                                F10 - Help
F Splits  F Line  F Call  F Events  F Line  F Split  F Config  F System
1         2 Groups 3 Flow  4 Log    5 Status 6 Status 7 List   8 Status
  
```

Figure 6-9. Configuration Screen

## Function Keys

Press the function keys listed below to perform dynamic reconfiguration activities or select other screens.

- **[F1]** (Splits). Press this key to select the Configure Splits screen and reassign, add, or remove agents. For more information, see “Reconfiguring Splits,” in this section.
- **[F2]** (Line Groups). Press this function key to change the length of time calls ring before CMS answers them, whether callers must hear an announcement, and program the amount of time an agent is in Auto ACW. For more information, see “Changing Line Group Options” 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,” in this section.
- **[F4]** (Events Log). Press this function key to select the Events Log screen. It lists the 19 most recent exceptions, routine events, and system errors. For more information, see “Using the Events Log Screen, ” 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,” 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,” 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,” 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, ” in this section.

## Reconfiguring Splits

Press [F1] (Splits) from the Configuration screen to select the Configure Splits screen (Figure 6-10). 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 view the agent directory during any of these activities, press [F8].

| Bon Voyage Travel  |                    |              |                | DAY CMS R3.0 6:45p 03/04  |            |          |            |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
|--|--------------------|--------------|----------------|---|------------|----------|------------|-----------|-------|-------|-------|--|--------|----|--------|--------|--------|--------|--------|----------|---------|----------|---------|----------|--------|--------|--------|----------|---------|----------|-----|---|---------|-----|---|--------|---|----|--------|-----|-----|---------|---|---|-------|---|-----|----------|---|---|-------|-----|---|--------|-----|--|--|--|--|---|--------------------|-----|--|--|-------|-------|--------------|----------------|---------|---|----|---------|---------|---|----|---------|---------|---|----|---------|--------|---|----|---------|
| <table border="1"> <thead> <tr> <th colspan="4">AGENT SPLITS</th> </tr> <tr> <th>Split</th> <th>Agent</th> <th>Split</th> <th>Agent</th> </tr> <tr> <th></th> <th>Pos ID</th> <th></th> <th>Pos ID</th> </tr> </thead> <tbody> <tr> <td rowspan="5">1 PERS</td> <td>16 TOM</td> <td rowspan="2">3 CORP</td> <td>37 IKE</td> </tr> <tr> <td>17 CLIFF</td> <td>39 TINA</td> </tr> <tr> <td>19 ERNIE</td> <td rowspan="3">4 SUPPT</td> <td>40 DIANA</td> </tr> <tr> <td>21 DEB</td> <td>42 RON</td> </tr> <tr> <td>23 BOB</td> <td>43 NANCY</td> </tr> <tr> <td rowspan="10">2 CHART</td> <td>24 SHERM</td> <td>5 -</td> <td></td> </tr> <tr> <td>25 WALT</td> <td>6 -</td> <td></td> </tr> <tr> <td>27 BEN</td> <td></td> <td></td> </tr> <tr> <td>28 SAM</td> <td></td> <td></td> </tr> <tr> <td>29 NORM</td> <td></td> <td></td> </tr> <tr> <td>31 DI</td> <td></td> <td></td> </tr> <tr> <td>32 CARLA</td> <td></td> <td></td> </tr> <tr> <td>33 BJ</td> <td></td> <td></td> </tr> <tr> <td>35 MAX</td> <td></td> <td></td> </tr> </tbody> </table> |                    |              |                | AGENT SPLITS  |            |          |            | Split     | Agent | Split | Agent |  | Pos ID |    | Pos ID | 1 PERS | 16 TOM | 3 CORP | 37 IKE | 17 CLIFF | 39 TINA | 19 ERNIE | 4 SUPPT | 40 DIANA | 21 DEB | 42 RON | 23 BOB | 43 NANCY | 2 CHART | 24 SHERM | 5 - |   | 25 WALT | 6 - |   | 27 BEN |   |    | 28 SAM |     |     | 29 NORM |   |   | 31 DI |   |     | 32 CARLA |   |   | 33 BJ |     |   | 35 MAX |     |  | <table border="1"> <thead> <tr> <th colspan="4">LINE GROUP OPTIONS</th> </tr> <tr> <th>Group</th> <th>Lines</th> <th>Answer Delay</th> <th>Force Auto ACW</th> </tr> </thead> <tbody> <tr> <td>A PUBLC</td> <td>4</td> <td>5s</td> <td>off 20s</td> </tr> <tr> <td>B SPECL</td> <td>3</td> <td>5s</td> <td>off 30s</td> </tr> <tr> <td>C CHART</td> <td>6</td> <td>5s</td> <td>off 10s</td> </tr> <tr> <td>D CORP</td> <td>2</td> <td>5s</td> <td>off 15s</td> </tr> </tbody> </table> |  |  |   | LINE GROUP OPTIONS |     |  |  | Group | Lines | Answer Delay | Force Auto ACW | A PUBLC | 4 | 5s | off 20s | B SPECL | 3 | 5s | off 30s | C CHART | 6 | 5s | off 10s | D CORP | 2 | 5s | off 15s |
| AGENT SPLITS   |                    |              |                |   |            |          |            |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
| Split  | Agent              | Split        | Agent          |   |            |          |            |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
|  | Pos ID             |              | Pos ID         |   |            |          |            |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
| 1 PERS   | 16 TOM             | 3 CORP       | 37 IKE         |   |            |          |            |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
|  | 17 CLIFF           |              | 39 TINA        |   |            |          |            |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
|  | 19 ERNIE           | 4 SUPPT      | 40 DIANA       |   |            |          |            |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
|  | 21 DEB             |              | 42 RON         |   |            |          |            |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
|  | 23 BOB             |              | 43 NANCY       |   |            |          |            |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
| 2 CHART  | 24 SHERM           | 5 -          |                |   |            |          |            |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
|  | 25 WALT            | 6 -          |                |   |            |          |            |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
|  | 27 BEN             |              |                |   |            |          |            |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
|  | 28 SAM             |              |                |   |            |          |            |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
|  | 29 NORM            |              |                |   |            |          |            |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
|  | 31 DI              |              |                |   |            |          |            |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
|  | 32 CARLA           |              |                |   |            |          |            |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
|  | 33 BJ              |              |                |   |            |          |            |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
|  | 35 MAX             |              |                |   |            |          |            |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
|  | LINE GROUP OPTIONS |              |                |   |            |          |            |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
| Group  | Lines              | Answer Delay | Force Auto ACW |   |            |          |            |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
| A PUBLC  | 4                  | 5s           | off 20s        |   |            |          |            |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
| B SPECL  | 3                  | 5s           | off 30s        |   |            |          |            |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
| C CHART  | 6                  | 5s           | off 10s        |   |            |          |            |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
| D CORP   | 2                  | 5s           | off 15s        |   |            |          |            |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
|  |                    |              |                | <table border="1"> <thead> <tr> <th colspan="6">CALL FLOW</th> </tr> <tr> <th>Gp</th> <th>Split</th> <th>Intra</th> <th>Spl</th> <th>Flow</th> <th>Thresh</th> <th>All</th> </tr> <tr> <th></th> <th>Main</th> <th>Sec</th> <th></th> <th></th> <th>Ring</th> <th></th> </tr> </thead> <tbody> <tr> <td>A</td> <td>1</td> <td>3</td> <td>On</td> <td>2</td> <td>10s</td> <td>off</td> </tr> <tr> <td>B</td> <td>1</td> <td>3</td> <td>On</td> <td>3</td> <td>30s</td> <td>off</td> </tr> <tr> <td>c</td> <td>2</td> <td>4</td> <td>On</td> <td>4</td> <td>30s</td> <td>off</td> </tr> <tr> <td>D</td> <td>3</td> <td>-</td> <td>Off</td> <td>5</td> <td>30s</td> <td>off</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>6</td> <td>30s</td> <td>off</td> </tr> </tbody> </table> |            |          |            | CALL FLOW |       |       |       |  |        | Gp | Split  | Intra  | Spl    | Flow   | Thresh | All      |         | Main     | Sec     |          |        | Ring   |        | A        | 1       | 3        | On  | 2 | 10s     | off | B | 1      | 3 | On | 3      | 30s | off | c       | 2 | 4 | On    | 4 | 30s | off      | D | 3 | -     | Off | 5 | 30s    | off |  |  |  |  | 6 | 30s                | off |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
| CALL FLOW  |                    |              |                |   |            |          |            |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
| Gp   | Split              | Intra        | Spl            | Flow  | Thresh     | All      |            |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
|  | Main               | Sec          |                |   | Ring       |          |            |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
| A  | 1                  | 3            | On             | 2   | 10s        | 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 - DAY   |                    |              |                |   |            |          |            |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
|  |                    |              |                |   |            |          | F10 - Help |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
| F Add  | F Remove           | F Move       | F Replace      | F New   | F Change   | F Config | F Agent    |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |
| 1 Agent  | 2 Agent            | 3 Agent      | 4 Agent        | 5 Agent   | 6 Split ID | 7 Screen | 8 Directry |           |       |       |       |  |        |    |        |        |        |        |        |          |         |          |         |          |        |        |        |          |         |          |     |   |         |     |   |        |   |    |        |     |     |         |   |   |       |   |     |          |   |   |       |     |   |        |     |  |  |  |  |   |                    |     |  |  |       |       |              |                |         |   |    |         |         |   |    |         |         |   |    |         |        |   |    |         |

Figure 6-10. Configure Splits Screen

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

### Add Agent

1. Press **[F1]** (Add Agent) 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 or you may do this from the PC or attendant telephone. No report statistics are collected for an agent until this is done.

*The following prompt appears: .*

```
ADD AGENT : ID: _____ Pos #: _ Split #: _
```

2. At the prompt, enter an agent's ID.
3. Enter the agent's position number (a MERLIN LEGEND system 2-digit extension number).
4. Enter a split number (1 through 6).
5. Press **[F8]** (Enter Data).

### Remove Agent

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

*The following prompt appears:*

```
REMOVE AGENT : ID: _____
```

2. Enter the agent's ID.
3. Press **[F8]** (Enter Data).

## Move Agent

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 (as described above) 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 is collected for Bill as he is moved from split to split.

1. Press **[F3]** (Move Agent) 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.

*The following prompt appears:*

```
MOVE AGENT : ID: _____ New Pos #: _ New Split #: _
```

2. Enter an agent ID.
3. You may enter a new position number, split number, or both. To skip a field, press **[F6]** (Next Field).
4. Press **[F8]** (Enter Data) after your last entry.
5. Check the Splits section of the screen to make sure you moved the agent as you intended.

## Replace Agent

1. Press **[F4]** (Replace Agent) 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.

*The following prompt appears:*

```
REPLACE AGENT :   Pos #:  ___  New Agent ID:  _____
```

2. Enter the position number of the agent to be removed.
3. Enter the ID of the new agent, (The-new agent's ID must be in the Agent Directory.)
4. Press **[F8]** (Enter Data).

## New Agent

1. Press **[F5]** (New Agent) 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.

*The following prompt appears:*

```
NEW AGENT :   Last Name:  _____ \
First:  _____  ID:  _____  Pos:  ___  Split #:  _
```

2. 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

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

*Position:* a 2-digit MERLIN LEGEND system extension number

*Split:* a number from 1 through 6

3. Press **[F8]** (Enter Data) after your last entry.

## **Change Split ID**

1. Press [F6] (Change Split ID) to assign or change a split ID.

*The following prompt appears:*

```
CHANGE SPLIT ID:  Split #:  _ New Split ID:  _____
```

2. Enter a split number (1 through 6).
3. Enter a split ID (up to 5 letters, numbers, or special characters).
4. Press [F8] (Enter Data).

## **Go to Configuration Screen**

Press [F7] (Config Screen) to return to the Configuration screen.

*The box around the agents section of the screen disappears and the function keys are relabeled.*

## **Agent Directory**

1. Press [F8] (Agent Directory) 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.
2. Press [F7] (Config Splits) to return to the Configure Splits screen.

## Changing Line Group Options

You can change the current setting for the answer delay, force delay, or Auto ACW options at any time from the Line Group Options screen.

Press [F2] (Line Groups) from the Configuration screen to select the Line Group Options screen (Figure 6-1 1), It looks similar to the Configuration screen except a box appears around the Line Group Options portion of the screen and the function keys are relabeled.

To change line group options, press the function key for the activity you want to perform and follow the instructions given in this section.

To view the agent directory during any of these activities, press, [F8]

```

Bon Voyage Travel                                DAY   CMS R3.0 6:46p 03/04

          AGENT SPLITS
    Split  A g e n t      Split  A g e n t
    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 -
    2 CHART 25 WALT      6 -
           27 BEN
           28 SAM
           29 NORM
           31 DI
           32 CARLA
           33 BJ
           35 MAX

          LINE GROUP OPTIONS
          Num Answer Force Auto
          Group Lines Delay Delay ACW
    A PUBLC 4      5s   off  20s
    B SPECL 3      5s   off  30s
    C CHART 6      5s   off  10s
    D CORP  2      5s   off  15s

          CALL FLOW
          Splits Intra      Spl  Flow All
          Gp Main Sec Flow  1  Thresh Ring
    A   1  3  On   2   10s 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 - DAY

          F10 - Help
    F Answer  F Force  F Auto
    1 Delay  2 Delay  3 ACW
          F Config
          7 Screen
    
```

Figure 6-11. Line Group Options Screen

## Answer Delay

A description of the answer delay option appears on page 3-18.

To change the answer delay, do the following:

1. From the Line Group Options screen, press **[F1]** (Answer Delay).

*The editing function keys appear with this prompt:*

ANSWER DELAY : Group Letter: \_ How Many Seconds: \_\_

2. Enter a group letter (A-D).
3. Enter the number of seconds (0 through 99) a call is to ring for that group before CMS answers.

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

4. Press **[F8]** (Enter Data).

*The Line Group Options screen reappears and the answer delay for the specified line group is updated.*

5. Repeat steps 1 through 4 to adjust the answer delay for another group, or choose another activity from this screen, or press **[F7]** to return to the Configuration screen.
6. Choose an activity from the Configuration screen or press **[F7]** to return to the Stored Shift Configurations screen.
7. Choose an activity from the Stored Shift Configurations screen or press **[F8]** to return to the System Menu.

## Changing Force Delay

A description of the force delay option appears on page 3-20.

To change force delay, do the following:

1. From the Line Group Option screen, press **[F2]** (Force Delay).

*The Force Delay editing keys appear with this prompt:*

FORCE DELAY : Group Letter: \_

2. Type in the group letter for the line group you want to program.
3. Press **[F8]** (Enter Data).  
*The setting toggles automatically to ON or off, depending on the setting before you made the change. (The factory setting is off.)*
4. Repeat steps 1 through 4 to adjust the force delay for another group, or press **[F7]** to return to the Configuration screen.
5. Choose an activity from the Configuration screen or press **[F7]** to return to the Stored Shift Configurations screen.
6. Choose an activity from the Stored Shift Configurations screen or press **[F8]** to return to the System Menu.

## Changing Automatic ACW

A description of the Automatic ACW option appears on pages 3-20 and 3-21.

To program Auto ACW, do the following:

1. From the Line Group Options screen, press **[F3]** (Auto ACW).

*The following prompt appears near the bottom portion of the screen:*

AUTOMATIC ACW: Group Letter: \_ Seconds: \_\_\_\_

2. Enter a group letter (A through D) for the group to be programmed.

3. Enter the number of seconds (0 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.

4. Press **[F8]** (Enter Data).
5. Repeat steps 1 through 5 to program Auto ACW for another line group, or press **[F7]** to return to the Configuration screen.
6. Choose an activity from the Configuration screen or press **[F7]** to return to the Stored Shift Configurations screen.
7. Choose an activity from the Stored Shift Configurations screen or press **[F8]** to return to the System Menu,

## **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, unexpected heavy call volume may cause you to call on your sales people to help answer those calls. Therefore, you may decide to reassign secondary splits or turn on Intraflow for some line groups. (For more information on Call Flow, Intraflow, and programming considerations for this option, see pages 3-22 through 3-24.)

Use the Configure Call Flow screen (Figure 6-1 2) to set thresholds for intraflow, assign splits to line groups, and turn intraflow on or off. You can also change All-Ring operation from this screen. (For more information on All-Ring operation see pages 3-27 and 3-28.)

To reconfigure call flow or change All-Ring operation, press **[F3]** from the Configuration screen, then press the function key for the activity you want to perform.

```

Bon Voyage Travel                                DAY   CMS R3.0 7:06p 03/04

          AGENT SPLITS                          LINE GROUP OPTIONS
    Split  A g e n t          Split  A g e n t          Num Answer Force Auto
    1 PERS  16 TOM           3 CORP   37 IKE           Group Lines Delay Delay ACW
              17 CLIFF              39 TINA           A PUBLCL 4      5s   off  20s
              19 ERNIE              40 DIANA          B SPECL 3      5s   off  30s
              21 DEB                42 RON            C CHART 6      5s   off  10s
              23 BOB                43 NANCY          D CORP 2      5s   off  15s
              24 SHERM              5 -
              25 WALT              6 -
    2 CHART 27 BEN
              28 SAM
              29 NORM
              31 DI
              32 CARLA
              33 BJ
              35 MAX

Configuration #1 - DAY
Printer Now Ready

          F10 - Help

F Assign  F Flow  F Set          FAll-Ring          F Config
1 Splits  2 On/Off 3 Thresh          5 On/Off          7 Screen
    
```

| CALL FLOW |       |       |      |             |
|-----------|-------|-------|------|-------------|
|           | Split | Intra | Spl  | Flow All    |
| Gp        | Main  | Sec   | Flow | Thresh Ring |
|           |       |       | 1    | 10s off     |
| 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     |

**Figure 6-12. Configure Call Flow Screen**

### Assign Splits

To choose this activity,

1. Press **[F1]** (Assign Splits). You can now assign main splits and secondary splits to line groups.

*The prompt is displayed as follows:*

```

ASSIGN SPLITS:  Line Group Letter: _ Main Split #: _\
Secondary Split #: _
    
```

Initially, all splits are unassigned; choose which split answers calls for each line group.

If you do not want to assign a secondary split, leave that field unchanged.

To remove a secondary split already assigned to the line group, type a hyphen in that field.

2. Enter a line group letter (A through D).
3. Enter the number of the main split (1 through 6) that is to answer calls for the line group. (Leaving the field blank leaves it unchanged.)
4. 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. )
5. Press **[F8]** (Enter Data).
6. Repeat steps 1 through 5 to-assign a split to another line group, or press **[F7]** to return to the Configuration screen.
7. Choose an activity from the Configuration screen or press **[F7]** to return to the Stored Shift Configurations screen.
8. Choose an activity from the Stored Shift Configurations screen or press **[F8]** to return to the System Menu.

### **Flow On/off**

To choose this activity:

1. Press **[F2]** (Flow On/Off). You can now turn intraflow on or off for a particular line group.

*Each line group's intraflow status appears in the Intraflow column of the Call Flow area of the screen. The prompt is displayed as follows:*

```
CHANGE INTRAFLOW : Line Group Letter: _
```

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

3. Press **[F8]** (Enter Data)  
*The intraflow designation for that line group automatically changes from Off to On or vice versa.*
4. Repeat steps 1 through 3 to turn intraflow on or off for another line group, or press **[F7]** to return to the Configuration screen.
5. Choose an activity from the Configuration screen or press **[F7]** to return to the Stored Shift Configurations screen.
6. Choose an activity from the Stored Shift Configurations screen or press **[F8]** to return to the System Menu.

### **Set Intraflow Threshold**

To choose this activity:

1. Press **[F3]** (Set Thresh). You can now 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.  
*The prompt is displayed as follows:*  

```
SET INTRAFLOW THRESHOLD: Split #: \  
Threshold (seconds) : ____
```
2. Enter a split number (1 through 6).
3. Enter the number of seconds from 0 through 999.
4. Press **[F8]** (Enter Data).
5. Repeat steps 1 through 4 to set the intraflow threshold for another split, or press **[F7]** to return to the Configuration screen.
6. Choose an activity from the Configuration screen or press **[F7]** to return to the Stored Shift Configurations screen.
7. Choose an activity from the Stored Shift Configurations screen or press **[F8]** to return to the System Menu.

## All-Ring On/Off

### NOTE:

Agents will be unable to log out if you use All-Ring.

To choose this activity:

1. Press **[F5]** (All-Ring On/Off). You can now change a split from automatic call distributor (ACD) to all-ring operation, or vice versa.

In the AH-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.

*The prompt is displayed as follows:*

```
CHANGE ALL-RING OPERATION : Split #: _
```

2. Enter a split number (1 through 6).
3. Press **[F8]** (Enter Data).
4. Repeat steps 1 through 3 to change another split to all-ring or ACD operation, or press **[F7]** to return to the Configuration screen.
5. Choose an activity from the Configuration screen or press **[F7]** to return to the Stored Shift Configurations screen.
6. Choose an activity from the Stored Shift Configurations screen or press **[F8]** to return to the System Menu.

## Using the Stored Shift Configurations Screen

---

The Stored Shift Configurations screen (Figure 6-13), is very similar during call management and programming.

The shift configuration currently in use for call management is shown in reverse video on the screen. 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.

```
Bon Voyage Travel                                DAY   CMS R3.0   7:09p 03/04

                STORED SHIFT CONFIGURATIONS

                1 - DAY ( startup default)
                2 - CONFIG_2
                3 - UNUSED
                4 - UNUSED
                5 - UNUSED
                6 - UNUSED

Printer Now Ready

                F10 - Help
F Select  F Save  F Rename  F Choose      F Config F System
1 Config  2 Con fig  3 Config  4Startup    7 Screen 8 Status
```

---

**Figure 6-13. Stored Shift Configurations Screen**

During call management, you can perform these activities with the Configuration Screen:

- 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 Screen, press the function key for the activity you want to perform using the procedures given on the following pages.

### Select Configuration

From the Stored Shift Configurations screen:

1. Press **[F1]** (Select Config) to select a shift configuration for call management or to change from one configuration to another.

*The following prompt appears:*

```
SELECT CONFIGURATION : Config #: _
```

2. Enter a configuration number (1 through 6)
3. Press **[F8]** (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 reverts 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.
- AH 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.

## Save Configuration

From the Stored Shift Configurations screen:

1. press **[F2]** (Save Config) to save any changes you made in the current configuration. If you don't save the changes, they are 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.

*The following prompt appears:*

```
SAVE CONFIGURATION : Into Config #: _
```

2. Press **[F8]** (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]** (Enter Data) to save the edited configuration under a different configuration number.

*The following prompt appears:*

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

*Where x is the name of the configuration and NAME is the name of the configuration.*

3. Type **y** to confirm your request or **n** to cancel it.
4. Press **[F8]** (Enter Data),

### **Rename Configuration**

From the Stored Shift Configurations screen:

1. Press **[F3]** (Rename Config) 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.

*The following prompt appears:*

```
RENAME CONFIGURATION :  Config #:_ New Name: _____
```

2. Enter the configuration number (1 through 6).
3. Enter the new name (up to 10 letters, numbers, or special characters).
4. Press **[F8]** (Enter Data).

### **Choose Startup**

From the Stored Shift Configurations screen:

1. Press **[F4]** (Choose Startup) 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 different configuration each time you begin call handling.

*The following prompt appears:*

```
CHOOSE STARTUP CONFIGURATION: (Enter '-' for none) \  
Config #: _
```

2. Enter a configuration number, or enter a hyphen if you do not want a startup configuration.
3. Press [F8] (Enter Data).

*The words (startup default) appear next to the configuration you selected.*

## **Selecting Day or Night Service**

---

There are two ways to handle CMS calls at night or during off hours:

- If you want to have all CMS calls answered at one place, such as a guard's desk, create a night configuration with *one* split and *one* agent—the guard- to cover all the line groups. Select this configuration for after-hours use.
- If you want all CMS calls to be connected to a recorded message and then disconnected, select Night Service as described below.

### **IMPORTANT:**

The MERLIN LEGEND system feature called Enhanced Night Service is *not* related to CMS Night Service or to a CMS night configuration

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.

During Night Service, CMS answers calls, connects them to the voice announcement unit, and disconnects the calls after the message is over. A typical night message is: "Thank you for calling Bon Voyage Travel. We are closed now. Please call again between 8 a.m. and 5 p.m. and weekday."

You can access all your status screens while CMS is in the Night Service mode. If you start Night Service during 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 “Oth” 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 is in effect.

### **Change to Night Service**

1. From the System Status screen, press **[F1]** (Day/Night) to change from Day Service to Night Service.

*The following prompt appears:*

```
DAY/NIGHT:   Change to Night Service? (Y/N) : _
```

2. Type **y** to change to Night Service.
3. Press **[F8]** (Enter Data).

*CMS stops answering tails, and the following prompt appears on the prompt line:*

```
Change to Night Message and Press Any Key to Start \  
Night Service.
```

4. Change to the night message on the voice announcement unit, and press any key to start Night Service.

*The word NIGHT appears to the left of the CMS version on the ID line. Incoming calls are connected to the night message and then disconnected.*

5. Press a function key to select another activity or screen.

### **Change to Day Service**

1. From the System Status screen, press **[F1]** (Day/Night) to change from Night Service to Day Service.

*The following prompt appears:*

```
DAY/NIGHT :   Change to Day Service?  
(Y/N) : _
```

2. Type **y** to change to Day Service.
3. Press **[F8]** (Enter Data).

*The following prompt appears:*

```
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 tails keep ringing). Any tails already connected to the voice announcement unit stay connected until the message is finished, and are then disconnected.*

4. 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.*

5. To become available to answer calls, agents must touch their Available button.

6. Press a function key to select another activity or screen.

## **Printing CMS Screens**

---

To print a copy of any screen, press **[^]** + **[Prt Sc]** while the screen is displayed.

### **WARNING:**

*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 may stop running. See Chapter 9 for more information about troubleshooting your printer.*

---

# Generating Reports

# 7

---

CMS provides a wealth of Management Information System (MIS) data through both on-line and historical reports. These reports 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 on-line reports while CMS is managing calls.

This section is divided into these parts:

- **Keeping Historical Data Accurate.** Lists configuration changes that affect historical data and tells how to ensure accuracy or historical data *before* making changes to shift configurations.
- **Types of CMS Reports.** Describes the CMS reports.
- **How to Generate Reports.** Describes how to select and print reports.

You can also save historical data onto floppy disks. For more information, see Chapter 8, “Archiving and Restoring Data.”

## Keeping Historical Data Accurate

When you make certain types of changes in shift configurations, you can 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\cms rept`.

1. To delete a file or files, at the CMS Main Menu, press **[F8]** (Exit to DOS).

*The DOS prompt appears.*

2. Type the command:

```
cd \cms \cms rept and 
```

*You are now in the cmsrept directory.*

3. Type the command:

```
dir/p and .
```

*A list of the files in this directory scrolls onto the screen.*

Notice that each entry on the list contains a file name and extension, the size of the file, the date the file was created, and the time the file was created. Note the date column and look for the oldest dates. These are the files you may want to include in reports before deletion. Make a note of

the file names, including the extension. (A file name is made up of two parts: the name and extension separated by a period. For example, a file could be named exclog.cms. )

4. After running the CMS program on the old files, you may delete the files by typing:

```
del <filename> and [↵].
```

where <filename> is the name of the file plus the extension that you wish to delete.

5. When you have completed deleting the old files, return to CMS by typing, at the DOS prompt:

```
cd c: cms [↵].
```

```
cms [↵].
```

*The CMS Main Menu appears on the screen*

## **Types of CMS Reports**

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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.

### **Daily Agent Split Summary**

---

The Daily Agent Split Summary (Figure 7-1 ) 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 Reports. 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 serves 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 is shown as if the agent had been in the second split for the whole hour.

## Generating Reports

| Bon Voyage Travel   |         |                     |                     |                      |                     |                   |                      |                      |                      |                  |                 |
|---|---------|---------------------|---------------------|----------------------|---------------------|-------------------|----------------------|----------------------|----------------------|------------------|-----------------|
| DAILY AGENT SPLIT SUMMARY   |         |                     |                     |                      |                     |                   |                      |                      |                      |                  |                 |
| SPLIT 1: PERS<br>Date: 03/11/91   |         | ①                   | ②                   | ③                    | ④                   | ⑤                 | ⑥                    | ⑦                    | ⑧                    | ⑨                | ⑩               |
|   |         | ACD CALLS           |                     |                      |                     | OTHER             |                      | CALLS                |                      | Total            |                 |
| Agent   |         | Num<br>ACD<br>Calls | Avg<br>Talk<br>Time | Avg<br>After<br>Call | Avg<br>Work<br>Time | %<br>Talk<br>Time | Num<br>Rfusd<br>Call | Num<br>Other<br>Call | Avg<br>Talk<br>Other | %<br>ACD<br>Time | Time<br>Staffed |
| Bakerson  | Tom     | 981                 | 0:07                | 0:08                 | 0:15                | 16%               | 2                    | 0                    | 0:00                 | 33%              | 12.2hr          |
| Weiss   | Debra   | 998                 | 0:10                | 0:08                 | 0:18                | 19%               | 0                    | 0                    | 0:00                 | 33%              | 15.0hr          |
| Claren  | Cliffor | 975                 | 0:07                | 0:08                 | 0:15                | 16%               | 2                    | 0                    | 0:00                 | 33%              | 12.2hr          |
| Patrick   | Bob     | 989                 | 0:10                | 0:08                 | 0:18                | 19%               | 0                    | 0                    | 0:00                 | 34%              | 15.0hr          |
| Peters  | Norman  | 957                 | 0:07                | 0:08                 | 0:15                | 21%               | 2                    | 0                    | 0:00                 | 46%              | 8.9hr           |
| Mailer  | Sam     | 949                 | 0:07                | 0:08                 | 0:15                | 21%               | 2                    | 0                    | 0:00                 | 46%              | 8.9hr           |
| Chanleys  | Diane   | 957                 | 0:07                | 0:08                 | 0:15                | 21%               | 2                    | 0                    | 0:00                 | 46%              | 8.9hr           |
| Pantilly  | Ernie   | 938                 | 0:07                | 0:08                 | 0:15                | 20%               | 3                    | 0                    | 0:00                 | 45%              | 8.9hr           |
| Piers   | Benjami | 5                   | 0:07                | 41:39                | 41:46               | 0%                | 1                    | 2                    | 9h                   | 28%              | 12.3hr          |
| Price   | Sherman | 1036                | 0:07                | 0:09                 | 0:16                | 13%               | 0                    | 0                    | 0:00                 | 30%              | 15.0hr          |
| O'Rourke  | Walter  | 947                 | 0:10                | 0:08                 | 0:18                | 18%               | 0                    | 0                    | 0:00                 | 32%              | 15.0hr          |
| Split 1 Totals  |         | 9732                | 0:08                | 0:09                 | 0:17                | 16%               | 14                   | 2                    | 9h                   | 36%              | -               |
| <u>Notes</u>  |         |                     |                     |                      |                     |                   |                      |                      |                      |                  |                 |
| 1. Call statistics are counted in the hour and day in which they complete.                                      |         |                     |                     |                      |                     |                   |                      |                      |                      |                  |                 |
| 2. Split totals may not be the sum of the agent totals if agents have been moved between splits within an hour. |         |                     |                     |                      |                     |                   |                      |                      |                      |                  |                 |
| CALL MANAGEMENT SYSTEM FOR THE MERLIN LEGEND(TM) CS<br>Date Printed: 03/15/91 Time Printed: 2:46p               |         |                     |                     |                      |                     |                   |                      |                      |                      |                  |                 |

**Figure 7-1. Daily Agent Split Summary**

The information on the following pages is keyed (with callouts) to each column in the report.

### Daily ACD Calls

①

**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.

- ② **Avg Talk Time.** The average amount of time an agent spent on each ACD call. Average talk time includes intraflowed calls and excludes abandoned calls. In the summary line, the average talk time is the average time per call, *not* per agent.
- ③ **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.
- ④ **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.
- ⑤ **% Talk Time.** The percentage of time the agent spent talking on ACD calls, excluding the After Call Work.
- ⑥ **Num Rfused Calls.** The number of ACD calls refused by each agent in a given split.

### Other Daily Calls

(These include all calls, not related to ACD work, lasting more than 5 seconds, and CMS calls transferred from one agent to another.)

- ⑦ **Num Other Calls.** The number of “other” calls handled by each agent. Other calls are recorded regardless of the agent’s work state.
- ⑧ **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.

#### NOTE:

Agents should be instructed to hang up within 4 seconds when a CMS call is completed. If they do not, the Split Reports may count the off-hook time as time spent on “Other” (non-CMS) calls.

### **Additional Data**

- ⑨ **% 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.
- ⑩ **Total Time Staffed.** The total amount of time the agent's telephone was off-hook in a given split for a given day, and under a given ID (rounded to the nearest tenth hour). This includes time spent making and receiving calls while in the logged out state.

**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 (Figure 7-2) 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 reflects 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.

## Generating Reports

| Bon Voyage Travel   |         |               |               |                |               |             |                 |                |                |            |                    |
|---|---------|---------------|---------------|----------------|---------------|-------------|-----------------|----------------|----------------|------------|--------------------|
| CUMULATIVE AGENT SPLIT SUMMARY  |         |               |               |                |               |             |                 |                |                |            |                    |
| SPLIT 1: PERS   |         |               |               |                |               |             |                 |                |                |            |                    |
| Period : 02/15/91 - 03/15/91  |         |               |               |                |               |             |                 |                |                |            |                    |
| Agent   |         | ACD CALLS     |               |                |               |             | OTHER CALLS,    |                |                |            | Total Time Staffed |
|   |         | Num ACD Calls | Avg Talk Time | Avg After Call | Avg Work Time | % Talk Time | Num Rfused Call | Num Other Call | Avg Talk Other | % ACD Time |                    |
| Bakerson  | Tom     | 18224         | 0:07          | 0:07           | 0:14          | 25%         | 9               | 12             | 0:07           | 49%        | 145.0hr            |
| Claren  | Cliffor | 12204         | 0:07          | 0:07           | 0:14          | 23%         | 8               | 7              | 0:07           | 47%        | 102.6hr            |
| Peters  | Norman  | 22962         | 0:07          | 0:11           | 0:18          | 23%         | 5               | 5              | 0:15           | 59%        | 193.6hr            |
| Mailer  | Sam     | 17016         | 0:07          | 0:05           | 0:12          | 27%         | 5               | 8              | 0:09           | 47%        | 123.2hr            |
| Chanleys  | Diane   | 17596         | 0:07          | 0:11           | 0:18          | 22%         | 6               | 16             | 0:35           | 56%        | 159.8hr            |
| Pantilly  | Ernie   | 9573          | 0:07          | 0:08           | 0:15          | 22%         | 5               | 1              | 0:08           | 46%        | 86.1hr             |
| Piers   | Benjami | 13579         | 0:07          | 0:13           | 0:20          | 18%         | 6               | 15             | 78:35          | 51%        | 144.4hr            |
| Fielding  | William | 4             | 0:08          | 23:47          | 23:56         | 1%          | 1               | 19             | 0:32           | 88%        | 1.8hr              |
| Weiss   | Debra   | 5824          | 0:10          | 0:08           | 0:18          | 27%         | 1               | 16             | 0:34           | 47%        | 62.1hr             |
| Patrick   | Bob     | 5793          | 0:10          | 0:08           | 0:18          | 27%         | 0               | 4              | 0:13           | 48%        | 61.9hr             |
| Price   | Sherman | 6002          | 0:07          | 0:09           | 0:16          | 19%         | 0               | 2              | 0:06           | 43%        | 61.9hr             |
| O'Rourke  | Walter  | 5563          | 0:10          | 0:08           | 0:18          | 25%         | 0               | 2              | 0:09           | 46%        | 61.9hr             |
| Split 1 Totals  |         | 134340        | 0:07          | 0:09           | 0:16          | 23%         | 46              | 107            | 11:20          | 50%        | -                  |
| <u>Notes</u>  |         |               |               |                |               |             |                 |                |                |            |                    |
| 1. Call statistics are counted in the hour and day in which they complete.                                      |         |               |               |                |               |             |                 |                |                |            |                    |
| 2. Split totals may not be the sum of the agent totals if agents have been moved between splits within an hour. |         |               |               |                |               |             |                 |                |                |            |                    |
| CALL MANAGEMENT SYSTEM FOR THE MERLIN LEGEND(TM) CS   |         |               |               |                |               |             |                 |                |                |            |                    |
| Date Printed: 03/15/91 Time Printed: 2:22p  |         |               |               |                |               |             |                 |                |                |            |                    |

**Figure 7-2. Cumulative Agent Split Summary**

### **Daily Split Report**

---

The Daily Split Report (Figure 7-3) 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.

Determine whether or not the splits are reaching your target service level.

The information on the following pages is keyed (with callouts) to each column in the report.

#### **Time**

- ① **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**

- ② **Avg Speed Ans.** The average speed of answer for all ACD calls answered by the agents in this split during a given hour.
- ③ **Num Calls Aband.** The number of calls abandoned (that is, the caller hung up before an agent answered) during a given hour. If an agent services a call in less time than the abandoned call threshold (see page 4-6), the call will be counted as an abandoned call.
- ④ **Num ACD Calls.** The total number of completed ACD calls (calls completed by an agent) during a given hour. The number excludes abandoned calls.

| Bon Voyage Travel  |               |                 |               |             |                |               |                |                 |                 |                       |      |       |                     |
|--------------------|---------------|-----------------|---------------|-------------|----------------|---------------|----------------|-----------------|-----------------|-----------------------|------|-------|---------------------|
| DAILY SPLIT REPORT |               |                 |               |             |                |               |                |                 |                 |                       |      |       |                     |
| SPLIT 1: PERS      |               |                 |               |             |                |               |                |                 |                 |                       |      |       |                     |
| Date: 03/11/91     |               |                 |               |             |                |               |                |                 |                 |                       |      |       |                     |
| ①                  | ②             | ③               | ④             | ⑤           | ⑥              | ⑦             | ⑧              | ⑨               | ⑩               | ⑪                     | ⑫    | ⑬     |                     |
| Time               | Avg Speed Ans | Num Calls Aband | Num ACD Calls | ACD Flow In | CALLS Flow out | Avg Talk Time | Avg After Call | Cnct Aftr SrvLv | OTHER Num Calls | CALLS, Avg Talk Other | Pos  | Avg % | ACD Time Serv Level |
| 12:00a             | 10s           | 7               | 1083          | 0           | 0              | 0:08          | 0:08           | 486             | 0               | 0:00                  | 11.0 | 44%   | 55%                 |
| 1:00a              | 109           | 4               | 1077          | 0           | 0              | 0:08          | 0:08           | 470             | 0               | 0:00                  | 11.0 | 44%   | 56%                 |
| 2:00a              | 10s           | 1               | 1106          | 0           | 0              | 0:08          | 0:08           | 433             | 0               | 0:00                  | 11.0 | 45%   | 61%                 |
| 3:00a              | 10s           | 2               | 1102          | 0           | 0              | 0:08          | 0:08           | 470             | 0               | 0:00                  | 11.0 | 43%   | 57%                 |
| 4:00a              | 10s           | 0               | 1113          | 0           | 0              | 0:08          | 0:08           | 403             | 0               | 0:00                  | 11.0 | 45%   | 64%                 |
| 5:00a              | 10s           | 3               | 1084          | 0           | 0              | 0:08          | 0:08           | 456             | 0               | 0:00                  | 11.0 | 44%   | 58%                 |
| 6:00a              | 10s           | 2               | 1110          | 0           | 0              | 0:08          | 0:08           | 478             | 0               | 0:00                  | 11.0 | 45%   | 57%                 |
| 7:00a              | 10s           | 6               | 1084          | 0           | 0              | 0:08          | 0:08           | 456             | 0               | 0:00                  | 11.0 | 44%   | 58%                 |
| 8:00a              | 10s           | 9               | 829           | 0           | 0              | 0:08          | 0:09           | 369             | 2               | 9h                    | 10.1 | 39%   | 55%                 |
| 9:00a              | 0s            | 0               | 0             | 0           | 0              | 0:00          | 60:01          | 0               | 0               | 0:00                  | 7.0  | 14%   | 100%                |
| 10:00a             | 0s            | 0               | 0             | 0           | 0              | 0:00          | 60:05          | 0               | 0               | 0:00                  | 7.0  | 14%   | 100%                |
| 11:00a             | 0s            | 0               | 0             | 0           | 0              | 0:00          | 60:00          | 0               | 0               | 0:00                  | 7.0  | 14%   | 100%                |
| 12:00p             | 13s           | 18              | 144           | 0           | 0              | 0:09          | 0:27           | 64              | 0               | 0:00                  | 5.4  | 27%   | 56%                 |
| 1:00p              | 0s            | 0               | 0             | 0           | 0              | 0:00          | 0:00           | 0               | 0               | 0:00                  | 4.0  | 0%    | 100%                |
| 2:00p              | 0s            | 0               | 0             | 0           | 0              | 0:00          | 0:00           | 0               | 0               | 0:00                  | 4.0  | 0%    | 100%                |
|                    | 10s           | 52              | 9732          | 0           | 0              | 0:08          | 0:09           | 4085            | 2               | 9h                    | 8.8  | 36%   | 56%                 |

Note  
1. Call statistics are counted in the hour and day in which they complete.

CALL MANAGEMENT SYSTEM FOR THE MERLIN LEGEND(TM) CS  
Date Printed: 03/15/91 Time Printed: 2:48p

Figure 7-3. Daily Split Report

- ⑤ **Flow In.** The total number of ACD calls intraflowed *into* this split during a given hour. The number excludes abandoned calls.
- ⑥ **Flow Out.** The total number of calls intraflowed *out* of this split and answered by agents in another split. The number excludes abandoned calls.
- ⑦ **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.
- ⑧ **Avg After Call.** The average amount of time agents spent in the after-call-work state per call.
- ⑨ **Cnct Aftr SrvLv.** The number of calls that waited longer than the specified service level before being answered by an agent in this split.

### Other Calls

These include outgoing calls, incoming calls not associated with ACD work, extension calls, and transferred calls from other stations. If agents do not hang up within 4 seconds after a caller disconnects, the Split Reports may count the off-hook time as time spent on “Other” (non-CMS) calls.

- ⑩ **Num Other Calls.** The total number of other than ACD calls completed by all agents in the split during a given hour,
- ⑪ **Avg Talk Other.** The average amount of time spent on other calls.

#### 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.

### **Additional Data for Daily Calls**

- ⑫ **Avg Num Pos.** The average number of agent positions staffed during the hour.
- ⑬ **% 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).
- ⑭ **Serv Lev.** The percentage of ACD calls that were connected to agents within the service level limit. For instance, if the service level limit is set at 20 and this report entry reads 85%, then it means 85% of the calls were answered within 20 seconds.

**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 (Figure 7-4) 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 reflects the entire consecutive period specified. Hours in which CMS was in Night Service for the entire duration are not included in the summaries.

## Generating Reports

| Bon Voyage Travel  |               |           |               |         |          |               |                |                 |                 |                |         |            |      |
|--|---------------|-----------|---------------|---------|----------|---------------|----------------|-----------------|-----------------|----------------|---------|------------|------|
| CUMULATIVE SPLIT REPORT BY DAY   |               |           |               |         |          |               |                |                 |                 |                |         |            |      |
| SPLIT 1: PERS  |               |           |               |         |          |               |                |                 |                 |                |         |            |      |
| Period: 02/15/91 - 03/15/91  |               |           |               |         |          |               |                |                 |                 |                |         |            |      |
| Day  | ACD CALLS     |           |               |         |          |               | OTHER CALLS,   |                 |                 |                |         |            |      |
|  | Avg Speed Ans | Num Calls | Num ACD Calls | Flow In | Flow Out | Avg Talk Time | Avg After Call | Cnct Aftr SrvLv | Num Other Calls | Avg Other Talk | Avg Pos | % ACD Time | Levi |
| 03/02  | 20s           | 0         | 5162          | 0       | 0        | 0:07          | 0:10           | 2870            | 13              | 0:39           | 4.8     | 68%        | 44%  |
| 03/03  | 36s           | 0         | 7736          | 0       | 0        | 0:07          | 0:25           | 7729            | 6               | 0:07           | 3.6     | 79%        | 0%   |
| 03/04  | 14s           | 8         | 7897          | 0       | 0        | 0:07          | 0:22           | 4091            | 41              | 0:24           | 3.5     | 79%        | 48%  |
| 03/05  | 27s           | 5         | 12168         | 0       | 0        | 0:07          | 0:07           | 4411            | 14              | 0:07           | 3.4     | 60%        | 64%  |
| 03/06  | 73            | 1         | 15191         | 0       | 0        | 0:07          | 0:06           | 860             | 0               | 0:00           | 5.4     | 44%        | 94%  |
| 03/07  | 24s           | 1         | 11779         | 0       | 0        | 0:07          | 0:02           | 6878            | 1               | 0:08           | 2.8     | 45%        | 42%  |
| 03/08  | 24s           | 5         | 12605         | 0       | 0        | 0:07          | 0:04           | 8068            | 4               | 0:15           | 3.5     | 54%        | 36%  |
| 03/09  | 10s           | 71        | 25838         | 0       | 0        | 0:08          | 0:08           | ****            | 26              | 0:24           | 10.8    | 44%        | 57%  |
| 03/10  | 10s           | 92        | 26232         | 0       | 0        | 0:08          | 0:08           | ****            | 0               | 0:00           | 11.0    | 44%        | 58%  |
| 03/11  | 10s           | 52        | 9732          | 0       | 0        | 0:08          | 0:09           | 4085            | 2               | 9h             | 0.8     | 36%        | 58%  |
| -----  |               |           |               |         |          |               |                |                 |                 |                |         |            |      |
|  | 16s           | 235       | 134340        | 0       | 0        | 0:07          | 0:09           | ****            | 107             | 11:20          | 5.8     | 50%        | 55%  |
| Note   |               |           |               |         |          |               |                |                 |                 |                |         |            |      |
| 1. Call statistics are counted in the hour and day in which they complete. |               |           |               |         |          |               |                |                 |                 |                |         |            |      |
| CALL MANAGEMENT SYSTEM FOR THE MERLIN LEGEND(TM) CS                        |               |           |               |         |          |               |                |                 |                 |                |         |            |      |
| Date Printed: 03/15/91 Time Printed: 2:36P                                 |               |           |               |         |          |               |                |                 |                 |                |         |            |      |

**Figure 7-4. Cumulative Split Report by Day**

### **Cumulative Split Report By Hour**

A Cumulative Split Report Report By Hour (Figure 7-5) 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 over all the days specified. If there is no CMS activity for any hour during the period selected, that hour is not shown on the report.

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.

## Generating Reports

| Bon Voyage Travel               |                  |              |                     |            |             |                     |                      |                       |                       |                      |                   |                  |                   |
|---------------------------------|------------------|--------------|---------------------|------------|-------------|---------------------|----------------------|-----------------------|-----------------------|----------------------|-------------------|------------------|-------------------|
| CUMULATIVE SPLIT REPORT BY HOUR |                  |              |                     |            |             |                     |                      |                       |                       |                      |                   |                  |                   |
| SPLIT 1: PERS                   |                  |              |                     |            |             |                     |                      |                       |                       |                      |                   |                  |                   |
| Period : 02/15/91 - 03/15/91    |                  |              |                     |            |             |                     |                      |                       |                       |                      |                   |                  |                   |
| Hour                            | ACD CALLS        |              |                     |            |             |                     | OTHER CALLS,         |                       |                       |                      |                   |                  |                   |
|                                 | Avg Speed<br>Ans | Num<br>Calls | Num<br>ACD<br>Calls | Flow<br>In | Flow<br>Out | Avg<br>Talk<br>Time | Avg<br>After<br>Call | Cnct<br>Aftr<br>SrvLv | Num<br>Other<br>Calls | Avg<br>Talk<br>Other | Avg<br>Num<br>Pos | %<br>ACD<br>Time | %<br>Serv<br>Levi |
| 12:00a                          | 16s              | 7            | 5828                | 0          | 0           | 0:07                | 0:09                 | 2559                  | 25                    | 0:24                 | 5.6               | 53%              | 56%               |
| 1:00a                           | 16s              | 15           | 5841                | 0          | 0           | 0:08                | 0:09                 | 2680                  | 4                     | 0:12                 | 5.9               | 51%              | 54%               |
| 2:00a                           | 17s              | 14           | 5918                | 0          | 0           | 0:08                | 0:09                 | 2697                  | 2                     | 0:08                 | 5.9               | 51%              | 54%               |
| 3:00a                           | 17s              | 11           | 5921                | 0          | 0           | 0:08                | 0:09                 | 2709                  | 0                     | 0:00                 | 5.9               | 51%              | 54%               |
| 4:00a                           | 17s              | 10           | 5899                | 0          | 0           | 0:08                | 0:09                 | 2657                  | 1                     | 0:08                 | 5.9               | 51%              | 55%               |
| 5:00a                           | 17s              | 16           | 5900                | 0          | 0           | 0:08                | 0:09                 | 2653                  | 0                     | 0:00                 | 5.9               | 51%              | 55%               |
| 6:00a                           | 17s              | 5            | 5932                | 0          | 0           | 0:08                | 0:09                 | 2704                  | 0                     | 0:00                 | 5.9               | 52%              | 54%               |
| 7:00a                           | 17s              | 9            | 5899                | 0          | 0           | 0:08                | 0:09                 | 2682                  | 1                     | 0:08                 | 5.9               | 51%              | 55%               |
| 8:00a                           | 17s              | 16           | 5677                | 0          | 0           | 0:08                | 0:09                 | 2635                  | 2                     | 9h                   | 5.8               | 51%              | 54%               |
| 9:00a                           | 19s              | 12           | 5026                | 0          | 0           | 0:07                | 0:09                 | 2417                  | 6                     | 0:07                 | 5.5               | 48%              | 52%               |
| 10:00a                          | 16s              | 5            | 5500                | 0          | 0           | 0:07                | 0:08                 | 2574                  | 3                     | 0:08                 | 6.1               | 42%              | 53%               |
| 11:00a                          | 20s              | 5            | 4971                | 0          | 0           | 0:07                | 0:08                 | 3180                  | 4                     | 0:07                 | 5.5               | 45%              | 36%               |
| 12:00p                          | 19s              | 30           | 5217                | 0          | 0           | 0:07                | 0:08                 | 3033                  | 0                     | 0:00                 | 5.4               | 46%              | 42%               |
| 1:00p                           | 17s              | 4            | 5009                | 0          | 0           | 0:07                | 0:07                 | 2815                  | 5                     | 0:07                 | 5.2               | 43%              | 44%               |
| 2:00p                           | 19s              | 9            | 3906                | 0          | 0           | 0:08                | 0:09                 | 2146                  | 22                    | 0:37                 | 5.4               | 42%              | 45%               |
| 3:00p                           | 22s              | 3            | 3518                | 0          | 0           | 0:08                | 0:11                 | 1719                  | 4                     | 0:22                 | 5.4               | 48%              | 51%               |
| 4:00p                           | 17s              | 7            | 4543                | 0          | 0           | 0:07                | 0:10                 | 1997                  | 19                    | 0:29                 | 5.4               | 53%              | 56%               |
| 5:00p                           | 12s              | 17           | 5335                | 0          | 0           | 0:07                | 0:09                 | 1947                  | 2                     | 0:07                 | 6.0               | 52%              | 64%               |
| 6:00p                           | 11s              | 6            | 6438                | 0          | 0           | 0:08                | 0:09                 | 2009                  | 1                     | 0:08                 | 6.2               | 55%              | 69%               |
| 7:00p                           | 13s              | 16           | 6368                | 0          | 0           | 0:07                | 0:09                 | 2723                  | 1                     | 0:08                 | 5.9               | 55%              | 57%               |
| 8:00p                           | 13s              | 7            | 6424                | 0          | 0           | 0:07                | 0:09                 | 2621                  | 0                     | 0:00                 | 5.9               | 54%              | 59%               |
| 9:00p                           | 13s              | 7            | 6421                | 0          | 0           | 0:07                | 0:09                 | 2618                  | 0                     | 0:00                 | 5.9               | 55%              | 59%               |
| 10:00p                          | 13s              | 1            | 6436                | 0          | 0           | 0:07                | 0:09                 | 2590                  | 0                     | 0:00                 | 5.9               | 55%              | 60%               |
| 11:00p                          | 13s              | 3            | 6413                | 0          | 0           | 0:07                | 0:09                 | 2651                  | 5                     | 0:14                 | 5.9               | 55%              | 59%               |
|                                 | 16s              | 235          | 134340              | 0          | 0           | 0:07                | 0:09                 | ****                  | 107                   | 11:20                | 5.8               | 50%              | 55%               |

Note  
1. Call statistics are counted in the hour and day in which they complete.

CALL MANAGEMENT SYSTEM FOR THE MERLIN LEGEND(TM) CS  
Date Printed: 03/15/91 Time Printed: 2:22p

**Figure 7-5. Cumulative Split Report By Hour**

### **Daily Line Group Report**

The Daily Line Group Report (Figure 7-6) 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.

## Generating Reports

| Bon Voyage Travel       |               |         |           |           |             |       |     |           |           |                 |             |      |    |
|-------------------------|---------------|---------|-----------|-----------|-------------|-------|-----|-----------|-----------|-----------------|-------------|------|----|
| DAILY LINE GROUP REPORT |               |         |           |           |             |       |     |           |           |                 |             |      |    |
| Size: 8 lines           |               |         |           |           |             |       |     |           |           |                 |             |      |    |
| GROUP A: PUBLIC         |               |         |           |           |             |       |     |           |           |                 |             |      |    |
| Date: 03/11/91          |               |         |           |           |             |       |     |           |           |                 |             |      |    |
| (1)                     | (2)           | (3)     | (4)       | (5)       | (6)         | (7)   | (8) | (9)       | (10)      | (11)            | (12)        | (13) |    |
| Time                    | Calls Offered | ACD Num | CALLS Num | Hold Time | TRAFFIC CCS | Load  | Occ | Num Delay | OTHER Num | CALLS Hold Time | % All Lines |      |    |
| Time                    | Night         | Day     | Aband     | Handled   | Avg         | Total |     | Anne      | Calls     | Avg             | Total       | Busy |    |
| 12:00a                  | 0             | 544     | 3         | 541       | 0:18        | 165m  | 100 | 35%       | 0         | 1               | 0:24        | Om   | 0% |
| 1:00a                   | 0             | 551     | 1         | 550       | 0:18        | 168m  | 101 | 35%       | 0         | 0               | 0:00        | Om   | 0% |
| 2:00a                   | 0             | 554     | 0         | 554       | 0:18        | 164m  | 98  | 34%       | 0         | 1               | 0:24        | Om   | 0% |
| 3:00a                   | 0             | 555     | 1         | 554       | 0:18        | 166m  | 99  | 35%       | 0         | 0               | 0:00        | Om   | 0% |
| 4:00a                   | 0             | 566     | 0         | 566       | 0:18        | 167m  | 100 | 35%       | 0         | 0               | 0:00        | Om   | 0% |
| 5:00a                   | 0             | 547     | 3         | 544       | 0:18        | 164m  | 98  | 34%       | 0         | 0               | 0:00        | Om   | 0% |
| 6:00a                   | 0             | 561     | 1         | 560       | 0:18        | 167m  | 100 | 35%       | 0         | 0               | 0:00        | Om   | 0% |
| 7:00a                   | 0             | 562     | 2         | 560       | 0:18        | 169m  | 101 | 35%       | 0         | 0               | 0:00        | Om   | 0% |
| 8:00a                   | 0             | 414     | 1         | 413       | 0:19        | 128m  | 77  | 27%       | 0         | 0               | 0:00        | Om   | 0% |
| 12:00p                  | 0             | 83      | 7         | 76        | 0:20        | 27m   | 16  | 6%        | 9         | 0               | 0:00        | Om   | 0% |
|                         | o             | 4937    | 19        | 4918      | 0:18        | 24h   | 890 | 31%       | 9         | 2               | 0:23        | 1m   | 0% |

(14) Busiest hours: 1- 7:00a, 2- 1:00a, 3- 6:00a

Note  
1. Call statistics are counted in the hour and day in which they complete.

CALL MANAGEMENT SYSTEM FOR THE MERLIN LEGEND(TM) CS  
Date Printed: 03/15/91 Time Printed: 2:49p

**Figure 7-6. Daily Line Group Report**

The information on the following pages is keyed (with callouts) to each column in the report.

### Time

- ① **Time.** The beginning of the hour in which data were collected.

### ACD Calls

- ② **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.
- ③ **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 or the agent serviced the call in less time than the abandoned call threshold).  
  
(The example above includes only Day Service calls.)
- ④ **Num Calls Handled.** The number of incoming calls connected to agents during Day Service. This number includes intraflowed calls and excludes abandoned calls.
- ⑤ **Hold Time (Avg).** The average amount of time that the telephone line(s) were in use for each call (*not* the amount of time a call was “on hold”). This field is calculated by dividing the total hold time by the number of ACD calls. ACD calls include incoming calls answered by agents, and incoming calls that were abandoned before they were answered.
- ⑥ **Hold Time (Total).** The cumulative time that the telephone line(s) were in use for ACD calls. The hold time starts when a call first rings, continues while the call is being handled, and ends when the call is disconnected. The hold time includes all the time that the lines were not available for more ACD calls. It *does not* mean the amount of time a call was “on hold.”

### Traffic

- ⑦ **CCS Load.** Shows the line group traffic density for one hour. This field, when combined with the Average Speed of Answer and Number of ACD Calls, can be used to determine changes to the line group.

**Occ.** Shows how efficiently the line group is being used. It is expressed as a percentage that shows, for example, that the lines are in use 70% of the time. This field can be used to determine changes to the line group.

### **Num Delay Annc**

**Num Delay Annc.** The number of calls in the line group that heard the delay announcement.

### **Other Calls**

(These include outgoing calls and transfers from other stations.)

**Num Other Calls.** The number of “other” calls made and received on the lines in the group during a given hour.

**Hold Time (Avg).** The average amount of time that the telephone line(s) were in use for an “other” call. This field is calculated by dividing the cumulative hold time by the number of “other” calls for that period. “Other” calls includes outgoing calls on CMS lines and incoming calls, after the agent that handles them transfers them and hangs up.

**Hold Time (Total).** The length of time the telephone line(s) were in use for “other” calls. “Other” calls includes outgoing calls on CMS lines and incoming calls, after the agent that handles them transfers them and hangs up.

#### **NOTE:**

Agents should be instructed to hang up within 4 seconds when a CMS call is completed. If they do not, the Split Reports may count the off-hook time as time spent on “Other” (non-CMS) calls.

### **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 they are completed.

### **Cumulative Line Group Report By Day**

A Cumulative Line Group Report By Day (Figure 7-7) 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.

## Generating Reports

| Bon Voyage Travel  |           |               |         |       |       |         |       |      |             |      |       |       |      |
|--|-----------|---------------|---------|-------|-------|---------|-------|------|-------------|------|-------|-------|------|
| CUMULATIVE LINE GROUP REPORT BY DAY  |           |               |         |       |       |         |       |      |             |      |       |       |      |
| GROUP A: PUBLIC  |           | Size: 8 lines |         |       |       |         |       |      |             |      |       |       |      |
| Period : 02/15/91 - 03/15/91   |           |               |         |       |       |         |       |      |             |      |       |       |      |
| Day  | ACD CALLS |               |         |       |       | TRAFFIC |       |      | OTHER CALLS |      |       |       |      |
|  | Offers    | Num           | Num     | Hold  | Time  | CCS     | Delay | Num  | Num         | Hold | %     | All   |      |
| Night  | Day       | Aband         | Handled | Avg   | Total | Load    | Occ   | Anne | Calls       | Avg  | Total | Lines | Busy |
| 03/02  | 0         | 2624          | 0       | 2624  | 0:27  | 19h     | 702   | 32%  | 1375        | 0    | 0:00  | Om    | 0%   |
| 03/03  | 0         | 3962          | 0       | 3962  | 0:42  | 46h     | 1664  | 36%  | 3960        | 1    | 0:19  | Om    | 0%   |
| 03/04  | 0         | 3997          | 3       | 3994  | 0:38  | 41h     | 1510  | 45%  | 838         | 7    | 0:26  | 3m    | 0%   |
| 03/05  | 0         | 6160          | 2       | 6158  | 0:34  | 58h     | 2106  | 31%  | 1570        | 3    | 0:28  | 1m    | 0%   |
| 03/06  | 0         | 6204          | 1       | 6203  | 0:15  | 25h     | 924   | 15%  | 12          | 0    | 0:00  | Om    | 0%   |
| 03/07  | 0         | 4703          | 0       | 4703  | 0:36  | 47h     | 1699  | 25%  | 3461        | 2    | 0:26  | 1     | 0%   |
| 03/08  | 0         | 6315          | 3       | 6312  | 0:32  | 56h     | 2024  | 34%  | 3378        | 0    | 0:00  | Om    | 0%   |
| 03/09  | 0         | 13115         | 27      | 13088 | 0:18  | 65h     | 2352  | 34%  | 17          | 4    | 0:21  | 1m    | 0%   |
| 03/10  | 0         | 13339         | 28      | 13311 | 0:18  | 66h     | 2385  | 35%  | 0           | 6    | 0:22  | 2m    | 0%   |
| 03/11  | 0         | 4937          | 19      | 4918  | 0:18  | 24h     | 890   | 31%  | 9           | 2    | 0:23  | 1m    | 0%   |
| O  |           | 65356         | 83      | 65273 | 0:25  | 451h    | 16256 | 31%  | 14620       | 25   | 0:24  | 10m   | 0%   |
| Busiest Days: 1- 03/10/91 , 2- 03/09/91 , 3- 03/05/91                      |           |               |         |       |       |         |       |      |             |      |       |       |      |
| <u>Note</u>  |           |               |         |       |       |         |       |      |             |      |       |       |      |
| 1. Call statistics are counted in the hour and day in which they complete. |           |               |         |       |       |         |       |      |             |      |       |       |      |
| CALL MANAGEMENT SYSTEM FOR THE MERLIN LEGEND(TM) CS                        |           |               |         |       |       |         |       |      |             |      |       |       |      |
| Date Printed: 03/15/91 Time Printed: 2:41p                                 |           |               |         |       |       |         |       |      |             |      |       |       |      |

**Figure 7-7. Cumulative Line Group Report by Day**

## **Cumulative Report By Hour**

A Cumulative Line Group Report By Hour (Figure 7-8) 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.

# Generating Reports

| Bon Voyage Travel  |       |       |                |              |                         |                     |            |      |       |                      |                       |                     |            |
|--|-------|-------|----------------|--------------|-------------------------|---------------------|------------|------|-------|----------------------|-----------------------|---------------------|------------|
| CUMULATIVE LINE GROUP REPORT BY HOUR                                       |       |       |                |              |                         |                     |            |      |       |                      |                       |                     |            |
| GROUP A: PUBLIC Size: 8 lines  |       |       |                |              |                         |                     |            |      |       |                      |                       |                     |            |
| Period : 02/15/91 - 03/15/91   |       |       |                |              |                         |                     |            |      |       |                      |                       |                     |            |
| Hour   | Night | Day   | ACD CALLS      |              |                         |                     | TRAFFIC    |      |       | OTHER CALLS          |                       |                     |            |
|  |       |       | Num<br>Offered | Num<br>Aband | Num<br>Calls<br>Handled | Hold<br>Time<br>Avg | Avg<br>CCS | Load | Occ   | Num<br>Delay<br>Anne | Num<br>Other<br>Calls | Hold<br>Time<br>Avg | %<br>Total |
| 12:00a   | o     | 2819  | 3              | 2016         | 0:24                    | 18h                 | 67         | 29%  | 683   | 3                    | 0:24                  | 1m                  | 0%         |
| 1:00a  | o     | 2840  | 4              | 2836         | 0:24                    | 19h                 | 69         | 30%  | 623   | 0                    | 0:00                  | 0m                  | 0%         |
| 2:00a  | O     | 2869  | 4              | 2865         | 0:25                    | 19h                 | 72         | 31%  | 605   | 2                    | 0:21                  | 1m                  | 0%         |
| 3:00a  | o     | 2875  | 3              | 2872         | 0:25                    | 19h                 | 72         | 31%  | 605   | 1                    | 0:22                  | 0m                  | 0%         |
| 4:00a  | o     | 2877  | 5              | 2872         | 0:25                    | 19h                 | 72         | 31%  | 606   | 1                    | 0:23                  | 0m                  | 0%         |
| 5:00a  | o     | 2862  | 6              | 2856         | 0:25                    | 19h                 | 71         | 31%  | 618   | 0                    | 0:00                  | 0m                  | 0%         |
| 6:00a  | o     | 2883  | 3              | 2880         | 0:25                    | 19h                 | 72         | 31%  | 598   | 0                    | 0:00                  | 0m                  | 0%         |
| 7:00a  | o     | 2878  | 3              | 2875         | 0:25                    | 19h                 | 71         | 31%  | 608   | 0                    | 0:00                  | 0m                  | 0%         |
| 8:00a  | O     | 2749  | 3              | 2746         | 0:25                    | 19h                 | 70         | 30%  | 611   | 1                    | 0:25                  | 0m                  | 0%         |
| 9:00a  | o     | 2486  | 4              | 2482         | 0:52                    | 36h                 | 130        | 57%  | 703   | 2                    | 0:24                  | 1m                  | 0%         |
| 10:00a   | O     | 2777  | 2              | 2775         | 0:24                    | 18h                 | 66         | 33%  | 779   | 3                    | 0:26                  | 1m                  | 0%         |
| 11:00a   | o     | 2513  | 3              | 2510         | 0:28                    | 19h                 | 70         | 35%  | 968   | 2                    | 0:26                  | 1m                  | 0%         |
| 12:00p   | o     | 2557  | 11             | 2546         | 0:27                    | 18h                 | 68         | 27%  | 075   | 1                    | 0:23                  | 0m                  | 0%         |
| 1:00p  | o     | 2408  | 1              | 2407         | 0:26                    | 17h                 | 62         | 31%  | 809   | 2                    | 0:24                  | 1m                  | 0%         |
| 2:00p  | o     | 1851  | 2              | 1849         | 0:28                    | 863m                | 52         | 30%  | 613   | 1                    | 0:27                  | 0m                  | 0%         |
| 3:00p  | o     | 1652  | 2              | 1650         | 0:31                    | 861m                | 52         | 30%  | 418   | 0                    | 0:00                  | 0m                  | 0%         |
| 4:00p  | o     | 2178  | 3              | 2175         | 0:26                    | 930m                | 56         | 28%  | 483   | 3                    | 0:26                  | 1m                  | 0%         |
| 5:00p  | o     | 2571  | 5              | 2566         | 0:20                    | 848m                | 51         | 26%  | 317   | 0                    | 0:00                  | 0m                  | 0%         |
| 6:00p  | o     | 3125  | 2              | 3123         | 0:19                    | 980m                | 59         | 27%  | 314   | 0                    | 0:00                  | 0m                  | 0%         |
| 7:00p  | o     | 3106  | 8              | 3098         | 0:20                    | 17h                 | 63         | 28%  | 554   | 0                    | 0:00                  | 0m                  | 0%         |
| 8:00p  | o     | 3125  | 3              | 3122         | 0:21                    | 18h                 | 66         | 29%  | 559   | 1                    | 0:22                  | 0m                  | 0%         |
| 9:00p  | o     | 3115  | 2              | 3113         | 0:21                    | 18h                 | 66         | 29%  | 559   | 0                    | 0:00                  | 0m                  | 0%         |
| 10:00p   | o     | 3126  | 1              | 3125         | 0:21                    | 18h                 | 66         | 29%  | 544   | 1                    | 0:24                  | 0m                  | 0%         |
| 11:00p   | o     | 3114  | 0              | 3114         | 0:21                    | 18h                 | 66         | 29%  | 568   | 1                    | 0:23                  | 0m                  | 0%         |
| O  |       | 65356 | 83             | 65273        | 0:25                    | 451h                | 68         | 31%  | 14620 | 25                   | 0:24                  | 10m                 | 0%         |
| Busiest hours: 1- 9:00a, 2- 2:00a, 3- 3:00a                                |       |       |                |              |                         |                     |            |      |       |                      |                       |                     |            |
| <u>Note</u>  |       |       |                |              |                         |                     |            |      |       |                      |                       |                     |            |
| 1. Call statistics are counted in the hour and day in which they complete. |       |       |                |              |                         |                     |            |      |       |                      |                       |                     |            |
| CALL MANAGEMENT SYSTEM FOR THE MERLIN LEGEND(TM) CS                        |       |       |                |              |                         |                     |            |      |       |                      |                       |                     |            |
| Date Printed: 03/15/91 Time Printed: 2:24P                                 |       |       |                |              |                         |                     |            |      |       |                      |                       |                     |            |

**Figure 7-8. Cumulative Line Group Report By Hour**

### **Events Log Report**

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The Events Log Report (Figure 7-9) 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.

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.

## Generating Reports

|        |       | Bon Voyage Travel   |                              |
|--------|-------|---|------------------------------|
|        |       | EVENTS LOG REPORT   |                              |
| Time   | Date  | Event   |                              |
| 8:24a  | 03/11 | *** Split 1   | - # Calls Waiting >= 1       |
| 8:25a  | 03/11 | *** Spilt 1   | - # Calls Waiting >= 1       |
| 8:26a  | 03/11 | *** Split 1   | - # Calls Waiting >= 1       |
| 8:27a  | 03/11 | *** Spilt 1   | - # Calls Waiting >= 1       |
| 8:28a  | 03/11 | *** Spilt 1   | - # Calls Waiting >= 1       |
| 8:29a  | 03/11 | *** Split 1   | - # Calls Waiting >= 1       |
| 8:39a  | 03/11 | *** Spilt 1   | - # Calls Waiting >= 1       |
| 8:40a  | 03/11 | *** Split 1   | - # Calls Waiting >= 1       |
| 8:42a  | 03/11 | *** Spilt 1   | - # Calls Waiting >= 1       |
| 8:43a  | 03/11 | *** splat 1   | - # Calls Waiting >= 1       |
| 8:44a  | 03/11 | *** Split 1   | - # Calls Waiting >= 1       |
| 8:44a  | 03/11 | *** Spilt 1   | - # Calls Waiting >= 1       |
| 8:45a  | 03/11 | *** Spilt 1   | - # Calls Waiting >= 1       |
| 8:45a  | 03/11 | *** Spilt 1   | - # Calls Waiting >= 1       |
| 8:46a  | 03/11 | *** Split 1   | - # Calls Waiting >= 1       |
| 8:46a  | 03/11 | *** split 1   | - Agent SAM - Refused Call   |
| 8:46a  | 03/11 | *** Split 1   | - # Calls Waiting >= 1       |
| 8:46a  | 03/11 | *** Split 1   | - Agent DI - Refused Call    |
| 8:47a  | 03/11 | *** Split 1   | - Agent ERNIE - Refused Call |
| 8:47a  | 03/11 | *** Split 1   | - Agent NORM - Refused Call  |
| 8:47a  | 03/11 | *** Split 1   | - # Calls Waiting >= 1       |
| 12:05p | 03/11 | *** Split 1   | - # Calls Waiting >= 1       |
| 12:07p | 03/11 | *** Split 1   | - # Calls Waiting >= 1       |
| 12:07p | 03/11 | *** Spilt 1   | - Agent TOM - Refused Call   |
| 12:07p | 03/11 | *** Split 1   | - * Calls Waiting >= 1       |
| 12:08p | 03/11 | *** Split 1   | - Agent CLIFF - Refused Call |
| 12:08p | 03/11 | *** split 1   | - # Calls Waiting >= 1       |
| 12:13p | 03/11 | *** Spilt 1   | - # Calls Waiting >= 1       |
| 12:14p | 03/11 | *** split 1   | - * Calls Waiting >= 1       |
| 12:15p | 03/11 | *** Split 1   | - Agent SAM - Refused Call   |
| 12:15p | 03/11 | *** Spilt 1   | - # Calls Waiting >= 1       |
| 12:15p | 03/11 | *** Spilt 1   | - Agent TOM - Refused Call   |
| 12:25p | 03/11 | *** Spilt 1   | - Agent CLIFF - Refused Call |
| 12:15p | 03/11 | *** Spilt 1   | - Agent ERNIE - Refused Call |
| 12:15p | 03/11 | *** Split 1   | - # Calls Waiting >= 1       |
| 12:15p | 03/11 | *** Spilt 1   | - Agent NORM - Refused Call  |
| 12:16p | 03/11 | *** Spilt 1   | - # Calls Waiting >= 1       |
| 12:17p | 03/11 | *** Spilt 1   | - Agent DI - Refused Call    |
| 12:17p | 03/11 | *** Split 1   | - # Calls Waiting >= 1       |
| 12:18p | 03/11 | *** Spilt 1   | - Agent BEN - Refused Call   |
| 12:18p | 03/11 | *** Spilt 1   | - # Calls Waiting >= 1       |
| 12:18p | 03/11 | *** Spilt 1   | - Agent ERNIE - Refused Call |
| 12:18p | 03/11 | *** Spilt 1   | - # Calls Waiting >= 1       |
| 1:01p  | 03/11 | WARNING--Message Unit Out of Service. Check Power and Cables.     |                              |
| 1:01p  | 03/11 | Message Unit In Service   |                              |
| 2:31p  | 03/15 | CMS for MERLIN LEGEND(TM) CS Version 1.5. Call Management Started |                              |
| 2:32p  | 03/15 | Card RAM Adrs. c4000; Int . 2: Firmware 2.1 : PC Clk Type 18.224  |                              |
| 2:39p  | 03/15 | WARNING--CU2 Faulty or Disconnected. (0)                          |                              |
| 2:39P  | 03/15 | CU2 In Service.   |                              |

CALL MANAGEMENT SYSTEM FOR THE MERLIN LEGEND(TM) CS  
Date Printed: 03/15/91 Time Printed: 2:56p

**Figure 7-9. Events Log Report**

## **How to Generate Reports**

---

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, or an error message appears on the screen, see Chapter 9, "Troubleshooting."

**NOTE:**

Do not queue more than three reports while CMS is handling calls.

### **Generating Reports**

To generate a report, follow these steps:

1. Press **[F5]** (Print Reports) on the System Menu, the CMS Main Menu, or the Initialization screen after a configuration has been selected.

*The Report Menu screen (Figure 7-10), 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 again. (The Ready light goes on.)

## Generating Reports

---

```
Bon Voyage Travel                                DAY   CMS R3.0  7:20p 03/04

                                REPORT MENU

                                F1 - Print Agent Split Summary
                                F2 - Print Split Report
                                F3 - Print Line Group Report
                                F4 - Print All Reports (F1, F2, & F3)

                                F6 - Print Events Log Report

                                F8 - Exit Reports Menu

Generating Agent Split Summary
Align Paper. (When Ready, Select a Labeled Function Key)
F Agent    F Split    FLine Grp F  All          F Events      F10 - Help
1Summary  2 Report  3 Report  4              6Log Rept    F Exit
                                8Reports
```

**Figure 7-10. Report Menu**

3. Press the function key for the report(s) you want to print.

For example, if you press **[F2]** (Split Report), the Print Split Report screen (Figure 7-11) appears.

```
Bon Voyage Travel                                DAY   CMS R3.0  7:21p 03/04

                                PRINT SPLIT REPORT

                                F1 - Cancel Report
                                F2 - Print Daily Report
                                F3 - Print Cumulative Report by Day
                                F4 - Print Cumulative Report by Hour

Printer Now Ready
Enter F2 for Daily, F3 for Cum. by Day, F4 for Cum. by Hour          F10 - Help
  F Cancel  F Daily  F Cum   F Cum
  1 Report  2 Report  3 by Day 4by Hour
```

---

**Figure 7-11. Print Split Report Screen**

The function keys offer the choice of a daily report or a cumulative report by day or by hour, For example:

- a. Press **[F2]** (Daily Report).

*The following prompt appears:*

```
Select Report Date [mm/dd/yy] :_ _____
```

*where mm/dd/yy is the current date or the date of the last report requested.*

- b. Enter the date for the report you want printed.
- c. Press **[F8]** (Enter Data).

*The report is printed and the Report Menu screen reappears.*

#### 4. To print a Cumulative Report by Day:

- a. Press **[F3]** (Cum by Day).

*The following prompt appears:*

Select Start Date:\_\_\_\_\_ Select End Date:\_\_\_\_\_

- b. Enter the starting and ending dates for the period you want the report generated.
- c. Press **[F8]** (Enter Data).

*The report is printed and the Report Menu screen reappears.*

#### 5. To print a Cumulative Report by Hour:

- a. Press **[F4]** (Cum by Hour).

*The following prompt appears:*

Select Start Hour:\_\_\_\_\_ Select End Hour:\_\_\_\_\_

- b. Enter the starting and ending hours for the period you want the report generated.
- c. Press **[F8]** (Enter Data).

*The report is printed and the Report Menu screen reappears.*

See "Report Screen Messages" on page 7-33 for a list of possible status and error messages.

### **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:
  - Press [F1] (Agent Summary) to Print the Agent Split Summary.
  - Press [F2] (Split Report) to Print the Split Report.
  - Press [F3] (Line Grp Report) to Print the Line Group Report.
  - Press [F4] (All) to Print All Reports.
  - Press [F6] (Events Log) to Print the Events Log Report.
2. If the report selected is not the Events Log Report, 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 is printed. See the section on “Report Screen Messages” on page 7-33 for a list of possible status and error messages.

### **Summary on Generating All Reports**

To generate all reports, follow these basic steps:

1. From the Report Menu, select [F4] (All).
2. Press either [F2] (Daily Report), [F3] (Cum by Day), or [F4] (Cum by Hour), depending on which group of reports you want printed.
3. Enter the date (for the daily reports) or dates (for either set of cumulative reports) and press [F8] (Enter Data) to print the reports.

### Report Screen Messages

Screen display messages keep you informed as to the printing status or error status of the reports you are generating. Some examples are listed below:

If CMS is managing calls when you request a report to be printed, the message line reads:

```
Scheduling [report name ] . . .
```

where [report name] is replaced by the report to be printed.

When the report is actually being printed, "Scheduling" changes to "Generating," as shown next.

```
Generating [report name ] . . .
```

When the Report Menu reappears, and the status line displays a message such as:

```
Number of Days Requested in Range is Greater than 93
```

change the range of dates to less than 93 days.

If the message:

```
Start Date Does Not Precede End Date
```

appears, the end date precedes the start date. Correct the dates and generate the report again.

If the message:

```
Invalid Report Period Specified
```

appears, the period specified is not entirely in the past. Correct the dates and generate the report again.

If you press **[F1]** (Cancel Report) on any of the print report menus, the prompt disappears and the Report Menu is displayed.

### **Exiting from Reports**

When your report is selected and is being generated, you are returned to the Report Menu screen where you can either press another function key to select another report or you can exit the Report Menu.

**NOTE:**

Do not queue more than three reports while CMS is handling calls.

To exit from the Report Menu screen, press **[F8]** (Exit Reports) to return to the System Menu or CMS Main Menu.

---

# Archiving and Restoring Data

# 8

---

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 chapter 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.

Restoring is the process by which historical data, stored on floppy diskettes, is copied to the hard disk. This operation allows the CMS Supervisor to print historical reports of data previously archived.

**NOTE:**

MERLIN II R2 CMS report files are not compatible with MERLIN LEGEND CMS report files.

## **Transferring Historical Data onto Diskettes**

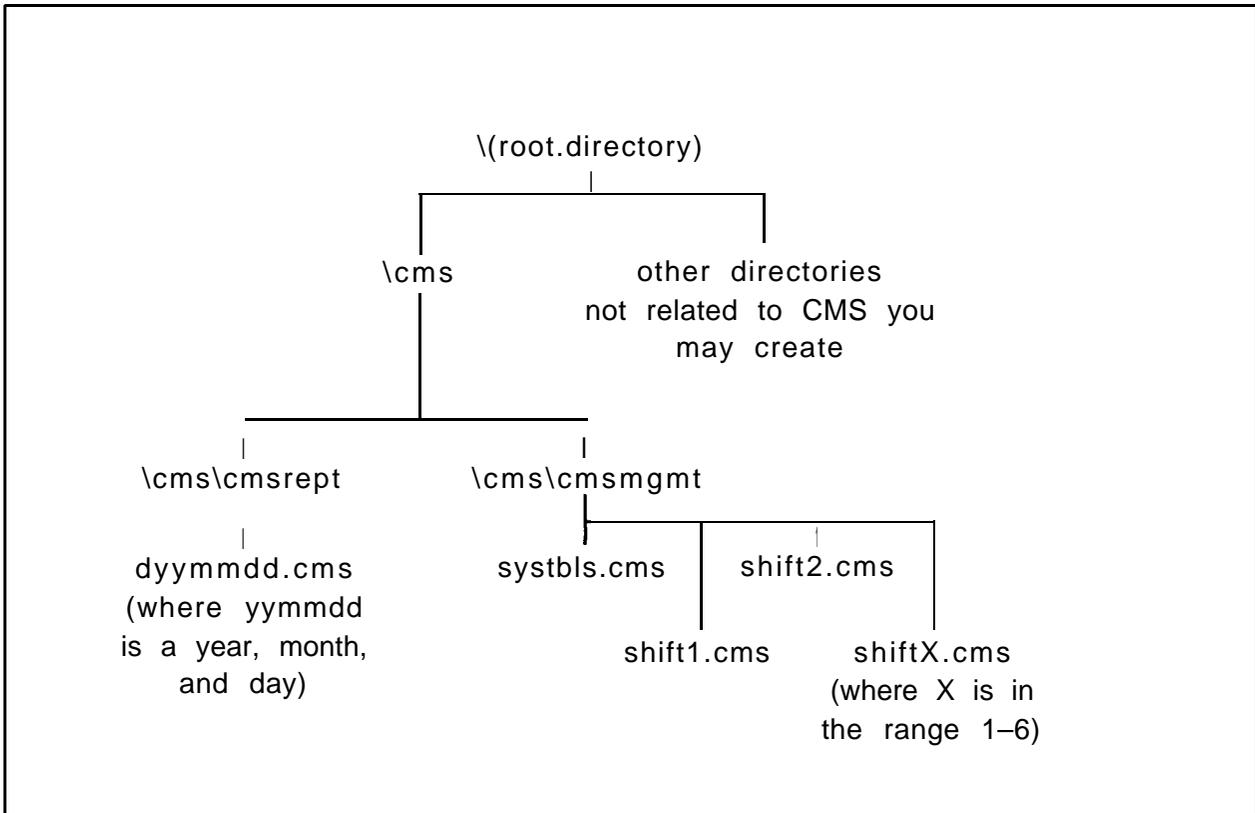
---

In order to print historical reports from archived data, you must have archived 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. Therefore, you must archive these files as detailed in the following discussion.

Up to four historical data files and one system tables file fit on a single 360KB 5 1/4 inch diskette. The 1.44MB storage on a 3 1/2 inch diskette has a capacity for four times more storage, or sixteen historical data files and four system tables.

If you need to clear space on the hard disk, you can save several files on a diskette, then erase them from the hard disk. First save the four oldest data files and the oldest system table on a diskette using the procedures given in this section. After you verify that the files were saved, erase those files from the hard disk using the procedures given in Chapter 7. If you archive files on a regular schedule, such as once a month, 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. CMS Files and Directories**

Use the following procedures to save the required files on a diskette.

### **Saving the System Tables File**

These procedures work for both 3 1/2" or 5 1/4" diskettes. To copy the system tables file, do as follows:

1. Put a formatted diskette into drive A on your PC. Be sure to close the locking bar.
2. Make certain you are in MS-DOS and you have the DOS prompt. From the CMS Administration Menu, you can press **[F8]** (Exit to DOS) to get to the prompt.

3. Type

```
cd C:\cms\cmsgmt [↵].
```

4. 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 for the date 04/1 9/90, type `s` (for system tables) and the date in reverse 900419 (for identification. ) and `.cms` as the file extension. Your result should be

```
copy C : systbls.cms a:s900419.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 was started, use Monday's date. If the change was made after CMS stopped on Monday, use Tuesday's date.

5. When the red light goes out on the floppy disk drive, open the locking bar and remove the diskette. Place a label on the diskette and store it in a safe place.

## Saving Historical Data Files

To save the historical data files, do the following:

1. Put a formatted diskette into drive A on your PC, or use the one you just copied the system tables file to. Be sure to close the locking bar.
2. Make certain you are in MS-DOS and you have the DOS prompt. From the CMS Administration Menu, you can press **[F8]** (Exit to DOS) to get to the prompt.
3. Type

```
cd c:\cms\cmsrept [↵]
```

4. Type a series of commands in the form

```
copy c:dyyymmdd.cms a: [↵]
```

where yymmdd is the date on which data were collected. For example, if you want the historical data file for 04/19/90, you would copy the file d900419.cms, where **d** stands for data, **900419** is the date, and **.cms** is the file extension.

To copy 10 days' data at a time, for instance, files from 07/20/90 through 07/29/90, type a command in this format:

```
copy c:d90072?.cms a: [↵]
```

Note the “?” after the 2 in the filename. The “?” stands for anything in this position. In this case, it stands for all of the numbers, from 0 to 9. This gives you all of the dates from the 20th to the 29th of the month.

5. When the red light goes out on the floppy disk drive, open the locking bar and remove the diskette. Place a label on the diskette and store it in a safe place.

## **Erasing Files from the Hard Disk**

To erase files you have already archived from the hard disk, do as follows:

1. Make certain you are in MS-DOS and you have the DOS prompt. From the CMS Administration Menu, you can press [F8] (Exit to DOS) to get to the prompt.

2. Type

```
cd c:\cms\cmsrept [↵]
```

3. Type a series of commands in the form

```
erase 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 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 restore the system tables and data files of interest from the diskette onto the hard disk so that you can generate reports for that date.

### **Saving the Current System Tables**

You must 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.

*You cannot be running CMS while you are saving these files.* These operations must be performed either before or after CMS is started or stopped.

To save the current system tables, do as follows:

1. Type

```
cd c:\cms\cmsgmt [↵]
```

2. To copy the current system tables to a temporary file, type

```
copy systbls.cms stemp [↵]
```

This copies (and saves) the current system tables to a file called "stemp." (You can choose another name for the file if you want.) Remember to copy the current system tables back into systbls.cms in the cmsgmt directory before you have CMS begin managing calls again.

### **Restoring the Historical System Tables**

You should still be in the cmsgmt directory.

1. Put the floppy diskette containing the historical data you want to print out into disk drive A on your PC. Be sure to close the locking bar.
2. To restore the system tables files for the date you want to the hard disk, type

```
copy a: syymmdd.cms c:systbls.cms [↵]
```

where yymmdd is the date of the system tables file.

#### **NOTE:**

You must have saved these files following the directions on page 8-5.

3. When the red light goes out, you may remove the diskette from the drive. Store the diskette in a safe place.

4. The historical system tables file is now on the hard disk in place of the current system tables file.

### **Restoring the Historical Data Files**

You should still be in the cmsgmt directory.

1. Put the floppy diskette containing the historical data you want to print out into drive A on your PC. Be sure to close the locking bar.
2. To restore the historical data files from the diskette to the hard disk, do as follows:

Get into the cmsrept directory by typing

```
cd c:\cms\cmsrept [↵].
```

3. Type a series of commands in the form

```
copy a:dyymmdd.cms c: [↵]
```

where dyymmdd is the date of the data you want.

#### **NOTE:**

You must have followed the directions on page 8-x when saving these files.

4. When you're finished copying data to the hard disk, type

```
cd \cms [↵]
```

5. When the red light goes out, open the locking bar and remove the diskette from the drive. Store the diskette in a safe place.

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 "Generating Reports" in Chapter 6.

## **Resuming Data Collection**

Now that you have the historical reports, you must restore the hard disk to its previous condition before starting CMS. Otherwise, CMS cannot effectively store new data when it resumes managing calls. To do this, you must 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 c:\cms\cmrept [↵]
```

2. To erase a data file, type

```
erase dyymmdd.cms [↵]
```

where yymmdd is the date of the data file to be erased.

3. Next, type

```
cd c:\cms\cmsgmt [↵]
```

4. Type the command

```
erase syymmdd.cms [↵]
```

#### **NOTE:**

You can also use the “delete” command, as follows:

```
delete 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 c:\cms\cmsmgmt [↵].
```

2. To restore the system tables, type

```
copy stemp systbls.cms [↵]
```

You should now have the historical reports you wanted, and CMS should be ready to store new data.

This chapter suggests corrective action for problems that may occur with CMS. You should use this chapter whenever you detect a problem or the system displays error, warning, or other messages not usually associated with CMS. The messages that indicate trouble are organized alphabetically within type, as described below:

- **Error Messages** identify problems that cause CMS to stop managing calls. Error messages always begin with the word “Error;” for example,

```
ERROR--No Configuration Found. ADMINISTER System.
```

- **Warning Messages** identify conditions that do not halt CMS but adversely affect its performance. Warning messages always begin with the word “Warning;” for example,

```
WARNING- -CU 2 Faulty or Disconnected.
```

- **System Errors** usually indicate damage to a CMS file. The damage may or may not affect CMS. System error messages always begin with the word “Syserr;” for example,

```
SYSERR--Possible Help File Damage. Reinstall CMS.
```

- **Other Messages** indicate that some portion of CMS is not working correctly, such as a printer connection. These messages appear on the error message line of the screen; for example,

```
REPORT ABORTED- -Printer Not Ready.
```

Solutions to other problems you may experience are also grouped by type:

- **Call Management Problems**, such as incoming calls not being correctly processed.
- **Agent Problems**, such as agents receiving other agents' calls.
- **External Alert Problems**, such as an alert failing to signal when an exception has occurred.
- **Fallback Plan** for managing CMS calls using the MERLIN LEGEND system if the CMS PC fails.

If you are unable to solve the problem using the information in this chapter, call the NTSC/NSAC at the phone number given on the inside front cover of this guide or call your AT&T Authorized Dealer.

## **Error Messages**

---

All the problems identified by error messages 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 "Fallback Plan" at the end of this chapter,

**ERROR---** CMS Card Faulty or Not Found. CMS Cannot Manage Calls.

**Status Indicator:** CU 1 (flashing) and CU 2 (on steady)

**Audible Signal:**A single short beep from the PC

**Effect on Call Management:** CMS cannot manage calls until this problem is corrected. See “Fallback Plan” at the end of this chapter.

**Effect on Data Collection:** 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.

---

| <u>Possible Cause</u>  | <u>Corrective Action</u>  |
|--|---|
| The CMS card is loose or was improperly installed.                                     | <ol style="list-style-type: none"><li>1. Exit to DOS. Turn off and disconnect the PC.</li><li>2. Make sure the CMS card is installed as described in the <i>Call Management System Installation Guide</i>.</li><li>3. Reconnect and turn on the PC.</li><li>4. Restart CMS.</li></ol> |
| The CMS card is faulty or another card was installed that conflicts with the CMS card. | Contact your equipment supplier for assistance.   |

---

**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:** CMS cannot manage calls until this problem is corrected. See "Fallback Plan" at the end of this chapter.

**NOTE:**

CMS *can* manage calls using the CU2 port on the CMS PC if it is connected to the CU1 jack on the control unit.

**Effect on Data Collection:** Data collection stops. Data on completed calls are saved, but data on calls in progress when the problem occurred are lost.

**Contact the MERLIN LEGEND system manager before attempting these corrective actions.**

---

| <u>Possible Cause</u>   | <u>Corrective Action</u>   |
|---|--|
| A cable connection between the CU1 jack and the MERLIN LEGEND system control unit is loose. | <ol style="list-style-type: none"><li>1. Make sure one end of the cable is plugged securely into the CU1 port on the back of the PC.</li><li>2. Make sure the other end is plugged securely into the jack assigned to CU1 on the MERLIN LEGEND control unit.</li></ol> |
| CU1 and CU2 are not connected to the same MERLIN LEGEND system control unit module.         | Connect the CU1 and CU2 cables to two operator jacks on the same analog module.  |

---

---

|   |   |
|---|---|
| The cable is faulty.  | <ol style="list-style-type: none"><li>1. Reverse the cables plugged into the CU1 and CU2 ports on the CMS PC. If the CU1 indicator on the screen stops flashing and the CU2 indicator appears, the problem is either a faulty cable or a faulty MERLIN LEGEND system component. Do <i>not</i> plug the cables back into their original ports.</li><li>2. Restart CMS.</li></ol>   |
| The jack assigned to CU1 on the MERLIN LEGEND control unit is faulty. | <ol style="list-style-type: none"><li>1. Unplug the CU1 cable from the CMS PC and plug it into the CMS supervisor telephone. If the phone does not work, go to step 2.</li><li>2. Unplug the CU1 cable from its jack in the control unit and plug it into another operator jack.</li><li>3. Move CU2 to the other operator jack on the same module.</li><li>4. Program the jacks as operator jacks (see page 1-15 in the <i>CMS installation and System Programming Guide</i>).</li></ol> |
| The CU1 jack on the CMS card is faulty.                               | If none of the above actions correct the problem, contact your equipment supplier for help.   |

---

**ERROR--Feature Button Not Working (CU 1's Button #34)**

---

| <b><u>Possible Cause</u></b>  | <b><u>Corrective Action</u></b>   |
|---|---|
| Feature button has failed on-line verification during initialization. | <ol style="list-style-type: none"><li>1. Press [F8] to display CMS menu.</li><li>2. Use centralized telephone programming to remove assignment from button 34 on the CMS supervisor telephone.</li><li>3. Program Feature button on button 34</li></ol> |

---

**ERROR--No Configuration Found. ADMINISTER System.**

**Effect on Call Management:** CMS cannot manage calls until this problem is corrected. See “Fallback Plan” at the end of this chapter.

---

| <u>Possible Cause</u>   | <u>Corrective Action</u>  |
|---|---|
| One or more steps in building shift configurations was omitted. | <ol style="list-style-type: none"><li>1. Display the Stored Shift Configurations screen. Press <b>[F8]</b>, <b>[F4]</b>, <b>[F1]</b>.</li><li>2. Build at least one shift configuration according to the instructions in Chapter 6 of the <i>CMS Installation and System Programming Guide</i>.</li><li>3. Restart CMS.</li></ol> |
| No startup configuration was chosen.                            | Select a startup configuration according to the instructions in Chapter 6 of the <i>CMS Installation and System Programming Guide</i> .   |

---

**ERROR--No Lines in CMS. ADMINISTER Lines.**

**Effect on Call Management:** CMS cannot manage calls until this problem is corrected. See “Fallback Plan” at the end of this chapter.

---

| <u>Possible Cause</u>   | <u>Corrective Action</u>   |
|---|--|
| One or more steps was omitted in programming CMS line groups. | <ol style="list-style-type: none"><li>1. Display the Administer Lines and Line Groups screen. Press <b>[F8]</b>, <b>[F4]</b>, <b>[F3]</b>.</li><li>2. Finish programming line groups according to the instructions in Chapter 5 of the <i>CMS Installation and System Programming Guide</i>.</li><li>3. Make sure you have completed at least one shift configuration as described in Chapter 6 of the <i>CMS Installation and System Programming Guide</i>.</li><li>4. Restart CMS.</li></ol> |

---

## Warning Messages

While problems that generate warning messages do *not* prevent CMS from managing calls, they do adversely affect call management in various ways. This section describes those effects and gives instructions for correcting the problems.

**WARNING--CU 2 Faulty or Disconnected.**

**Status Indicator:** CU 2

**Effect on Call Management:** CMS manages calls somewhat more slowly without CU2. You may notice an increase in abandoned calls during periods of heavy incoming call traffic until you correct this problem.

**Contact the MERLIN LEGEND system manager before attempting these corrective actions.**

| <u>Possible Cause</u>  | <u>Corrective Action</u>  |
|--|---|
| A cable connection between the CU2 jack on the CMS card and the control unit is loose. | <ol style="list-style-type: none"> <li>1. Unplug the CU1 cable from the CMS PC and plug it to the CMS supervisor telephone. If the phone does not work, go to step 2.</li> <li>2. Make sure the connections between the CU2 jack on the CMS PC and the control unit are secure.</li> <li>3. Test at the control unit with a console in the jack for CU2. If it works there but not at the PC, the problem may be wiring.</li> </ol> |
| Either the cable or the jack assigned to CU2 on the control unit is faulty.            | <p>When you can interrupt call management for a few minutes,</p> <ol style="list-style-type: none"> <li>1. Reverse the cables plugged into the CU1</li> </ol>   |

and CU2 ports on the PC. If the CU2 indicator stops and the CU1 indicator appears, the CU2 jack on the CMS card is *not* faulty.

2. Return the cables to their original ports on the CMS PC so that CU1 works and CMS can resume managing calls.
3. Restart CMS and try to isolate the problem further.

---

The CU2 jack on the CMS card is faulty.

If none of the above actions corrects the problem, contact your equipment supplier for assistance.

---

**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, music, or silence until an agent answers.

---

| <u>Possible Cause</u>   | <u>Corrective Action</u>  |
|---|---|
| The voice announcement unit is not receiving power. ”                       | Make sure the voice announcement unit is plugged in and turned on. The lights on the unit are lit when it is on.            |
| A cable connection between the voice announcement unit and the PC is loose. | Make sure all connections are secure on the cable running between the voice announcement unit and the PC.                   |
| The message was lost due to a power outage.                                 | <ol style="list-style-type: none"><li>1. Make sure the battery is turned on.</li><li>2. Record the message again.</li></ol> |

---

---

Message 2 is selected,  
but not recorded.

Select message 1, or record message 2.

---

Lines are not identically  
programmed for CU1 and  
CU2.

Program lines for CU1 and CU2 identically.

---

**WARNING--Message Unit Problem. Check Message Length.**

**Status Indicator: MSG**

---

| <u>Possible Cause</u>  | <u>Corrective Action</u>  |
|--|---|
| 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 for both day and night. Then do one of the following: <ul style="list-style-type: none"><li>■ Record a new delay message.</li><li>■ Enter the correct number of seconds for "Delay Message Length" on the Set Options screen.</li></ul>  |
| The lines assigned to CU1 and CU2 do not match exactly.  | Ask the MERLIN LEGEND manager to check the line assignments for the two jacks assigned to CU1 and CU2. Follow instructions for the "Line Status Test" in Chapter 7 of the <i>CMS Installation and System Programming Guide</i> . <ul style="list-style-type: none"><li>■ If the assignments do not match, reprogram the lines so that they do.</li><li>■ If the assignments match, check the connections to the control unit to be sure the lines are connected properly.</li></ul> |

---

### **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.

---

| <u>Possible Cause</u>  | <u>Corrective Action</u>   |
|--|--|
| Assigning agent splits to line groups is not complete.<br>or<br>All agents were removed from a main split. | From the Initialization screen: <ol style="list-style-type: none"><li>1. Press [F1] to display the Configuration screen.</li><li>2. In the Call Flow area, find the line group(s) (A–D) with no main split assigned.</li><li>3. Assign main splits as needed by following the instructions in Chapter 6 of the <i>CMS installation and System Programming Guide</i>.</li></ol> |

---

### **WARNING--No Secondary Split Assigned to One or More Line Groups**

**Effect on Call Management:** Calls coming into a line group with no secondary split assigned to it cannot be intraflowed.

---

| <u>Possible Cause</u>   | <u>Corrective Action</u>  |
|---|---|
| Intraflow is turned on, but the line group has no secondary split assigned to it. | From the Initialization screen: <ol style="list-style-type: none"><li>1. Press [F1] to display the Configuration screen.</li><li>2. In the Call Flow area, find the line group(s) with intraflow turned on and no secondary split assigned.</li><li>3. Turn intraflow off or assign a secondary split to the line group by following the instructions in Chapter 6 of the <i>CMS Installation and System Programming Guide</i>.</li></ol> |

---

**WARNING--One or More Line Groups has No Lines.**

**Effect on Call Management:** Calls cannot come into a line group with no lines.

---

| <u>Possible Cause</u>  | <u>Corrective Action</u>  |
|--|---|
| At least one agent split is assigned to at least one empty line group. | From the Initialization screen: <ol style="list-style-type: none"><li>1. Press <b>[F1]</b> to display the Configuration screen.</li><li>2. In the Call Flow area, find the line group(s) (A–D) with no lines and at least one agent split:<ul style="list-style-type: none"><li>— To assign lines to an empty line group, exit call management and follow the instructions for “Programming CMS Lines” in Chapter 5 of the <i>CMS Installation and System Programming Guide</i>.</li><li>— To reassign an agent split from an empty line group, follow the instructions for “Dynamic Reconfiguration” in Chapter 6.</li></ul></li></ol> |
| Intraflow is turned on, but no secondary split is assigned.            | From the Initialization screen: <ol style="list-style-type: none"><li>1. Press <b>[F1]</b> to display the Configuration screen.</li><li>2. in the Call Flow area, find the line group(s) with intraflow turned on and no secondary split assigned.</li><li>3. Turn intraflow off or assign a secondary split to the line group by following the instructions in Chapter 6 of the <i>CMS Installation and System Programming Guide</i>.</li></ol>  |

---

**WARNING--One or More Main or Secondary Splits Has No Agent.**

**Effect on Data Collection:**

- If both the main and secondary splits assigned to a line group have no agents, calls coming in on that group of lines are not 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 intraflow is on, calls coming in on that group of lines go to the secondary split as soon as the intraflow threshold is exceeded.

---

| <b><u>Possible Cause</u></b>                                     | <b><u>Corrective Action</u></b>  |
|--|--|
| At least one empty split is assigned to at least one line group. | From the Initialization screen: <ol style="list-style-type: none"><li>1. Press <b>[F1]</b> to display the Configuration screen.</li><li>2. In the Agent Splits area, find the split(s) with no agents.</li><li>3. Assign agents to the empty split(s) or remove the empty splits by following the instructions for “Dynamic Reconfiguration” in Chapter 6.</li></ol> |

---

**WARNING--Only x Day's Space Left for Storing History Data.**

**Status Indicator:** LoStorage

---

| <u>Possible Cause</u>   | <u>Corrective Action</u>  |
|---|---|
| Too much historical data has accumulated on the hard disk. This message appears when there is room for less than 10 days of data. | <ol style="list-style-type: none"><li>1. Exit to DOS.</li><li>2. Erase at least one day's data files. If you want to save your files, follow the instructions in Chapter 8, "Archiving Data."</li></ol> |

---

**WARNING--Out of Disk Space on Drive C: -No Storage of History Data.**

**Status Indicator:** NoStorage

---

| <u>Possible Cause</u>  | <u>Corrective Action</u>  |
|------------------------|---|
| The hard disk is full. | <ol style="list-style-type: none"><li>1. Exit to DOS.</li><li>2. Erase at least one day's data files. If you want to save your files, follow the instructions in Chapter 8, "Archiving Data."</li></ol> |

---

**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 will stop managing calls.

**Effect on Data Collection:** If CMS stops managing calls, all data collection stops, but resumes when the problem is corrected. Data are saved for the portion of the hour that CMS was managing calls.

---

| <u>Possible Cause</u>                                       | <u>Corrective Action</u>  |
|---|---|
| Printer is not in "on-line" or "ready" status.              | Put printer in "on-line" or "ready" status.   |
| The printer is not receiving power.                         | Make sure the printer is plugged in and turned on, and the Ready light is on.   |
| The printer has no paper, or the paper is jammed.           | <ol style="list-style-type: none"><li>1. Make sure paper is loaded and that the paper isn't jammed.</li><li>2. Make sure the paper is aligned properly.</li><li>3. Press the Form Feed button on the printer to make sure the paper feeds properly.</li></ol> |
| A cable connection between the printer and the PC is loose. | Make sure the connections are secure at both ends of the cable running between the printer and the PC.  |

---

**NOTE:**

If the problem is corrected, you should see the message

Printer Now Ready

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. If the problems persist, call NTSC/NSAC at the phone number given on the inside front cover of this guide or contact your AT&T Authorized Dealer.

## **System Errors**

---

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` message usually indicates that a CMS file has been damaged. For example, you may have accidentally deleted a CMS file, or a power surge may have damaged one. A `SYSERR` message does not necessarily mean that CMS has stopped managing calls. For example, if the only `SYSERR` message you receive is:

```
SYSERR--Possible Help File Damage. Reinstall CMS.
```

you cannot use the Help screens, but CMS is probably still managing calls.

### **What to Do**

---

If you receive a `SYSERR` message on a status screen or on the Events Log screen, study the CMS screens to determine if CMS is still managing calls correctly. If you are not sure, call one of your CMS lines and answer the following diagnostic questions.

- 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 Managing Calls Correctly**

If CMS is managing calls correctly, you do not have to shut down the system. You should check CMS periodically, however, in case other problems develop. If the Events Log screen shows additional system errors, print a copy of the Events Log screen by pressing `[^] + [PrtSc]`.

### **If CMS has Stopped Managing Calls**

1. 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 or by turning the PC off and then on again.
3. If CMS restarts, observe the Initialization screen, carefully watching for warnings and errors. After it starts, 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 `SYSERR` message again, call the NTSC/NSAC at the phone number given on the inside front cover of this guide or contact your authorized AT&T dealer. Be sure to have a list of the system errors generated by the problem.
5. See “Fallback Plan” at the end of this chapter.

## Other Messages

Initialization Complete--Fatal Error. Press F8.

---

| <u>Possible Cause</u>   | <u>Corrective Action</u>  |
|---|---|
| Feature button has failed on-line verification during initialization. | <ol style="list-style-type: none"><li>1. Press [F8] to display CMS menu.</li><li>2. Use centralized telephone programming to remove this assignment from button 34 on the CMS supervisor telephone.</li><li>3. Program a new Feature button.</li></ol>  |
| The CMS card is not found.  | <ol style="list-style-type: none"><li>1. Press [F8] to display the CMS Menu.</li><li>2. Stop the program (Exit to DOS).</li><li>3. Turn off the PC.</li><li>4. Determine whether the CMS card is in place and properly configured. (<i>See Installation and Programming Guide.</i>)</li></ol> |

---

**Printer Not Ready. (When Printer Ready, Select a Labeled Function Key. )**

**Status Indicator:** Don'tPrtSc

**Effect on Call Management:** If you use the [Prt Sc] key when this message is displayed, CMS may stop managing calls.

**Effect on Data Collection:** If CMS stops managing calls, all data collection stops, but resumes when the problem is corrected. Data are saved for the portion of the hour that CMS was managing calls.

---

| <u>Possible Cause</u>                                       | <u>Corrective Action</u>   |
|---|--|
| Printer is not in "on-line" or "ready" status.              | Put printer in "on-line" or "ready" status,  |
| The printer is not receiving power.                         | Make sure the printer is plugged in and turned on, and the Ready light is on.  |
| The printer has no paper, or the paper is jammed.           | <ol style="list-style-type: none"><li>1. Make sure the printer has paper and the paper isn't jammed.</li><li>2. Make sure the paper is aligned properly.</li><li>3. Press the Form Feed button on the printer to make sure the paper feeds properly.</li></ol> |
| A cable connection between the printer and the PC is loose. | Make sure the connections are secure at both ends of the cable running between the printer and the PC.   |

---

**NOTE:**

If the problem is corrected, you should see the message

Printer Now Ready

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. If the problems persists, call NTSC/NSAC at the phone number given on the inside front cover of this guide or contact your AT&T Authorized Dealer.

REPORT ABORTED --Printer Not Ready.

---

| <u>Possible Cause</u>                             | <u>Corrective Action</u>   |
|---|--|
| The printer has no paper, or the paper is jammed. | <ol style="list-style-type: none"><li>1, Make sure paper is loaded in the printer and the paper isn't jammed.</li><li>2. Press the Form Feed button on the printer to make sure the paper feeds properly.</li><li>3. When the printer is ready, repeat your print request.</li></ol> |

---

## Other Problems

### Call Management Problems

**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:** CMS cannot manage calls until this problem is corrected. See "Fallback Plan" at the end of this chapter.

**Effect on Data Collection:** Data collection stops, and all data from the current hour are lost.

---

| <u>Possible Cause</u> | <u>Corrective Action</u>  |
|-----------------------|---|
| The PC has failed.    | <ol style="list-style-type: none"><li>1. Press the reset button and restart CMS.</li><li>2. If the PC does not restart, see the user's guide that came with the PC.</li></ol> |

---

**PROBLEM:** Calls coming in on some lines are not being processed properly by CMS.

---

| <u>Possible Cause</u>                                     | <u>Corrective Action</u>  |
|---|---|
| The lines were not programmed identically on CU1 and CU2. | <ol style="list-style-type: none"><li>1. Contact the MERLIN LEGEND system manager and complete the Line Status Test to verify line assignments. See “Line Status Test” in Chapter 7 of the <i>CMS Installation and System Programming Guide</i>.</li><li>2. If the lines are not programmed the same, reprogram them following the instructions for “Setting Up the Operator Positions” in Chapter 1 of the <i>CMS Installation and System Programming Guide</i>.</li></ol> |

---

**PROBLEM:** The PC stops, restarts, and displays the CMS Main Menu.

**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.

---

| <u>Possible Cause</u>  | <u>Corrective Action</u>                     |
|--|--|
| Electrical power to the PC was interrupted, or someone pressed the reset button on the PC. | Press <u>[F1]</u> to resume Call Management. |

---

**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 is not 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.

---

| <u>Possible Cause</u>                                     | <u>Corrective Action</u>  |
|---|---|
| You pressed [↑] + [PrtSc] when the printer was not ready. | See "Printer Not Ready" under the heading "Other Messages" in this chapter for a list of corrective actions.<br><br>When the printer is fixed, CMS resumes managing calls. If it does not, reboot the PC by pressing the reset button or by turning the PC off and then on again. |
| You pressed [Pause] .                                     | Press any key to continue.  |
| You pressed [CTRL] +[C] or [CTRL] + [BREAK].              | Press the reset button to restart CMS.  |

---

**PROBLEM:** A large number of "ghost" calls are ringing to agents.

---

| <u>Possible Cause</u>   | <u>Corrective Action</u>   |
|---|--|
| The loop-start reliable disconnect is set to Yes, but the local phone company does not send a reliable disconnect signal. | Contact the MERLIN LEGEND system manager and reprogram the loop-start reliable disconnect to No. |

---

**PROBLEM:** A large number calls are disconnecting.

---

| <u>Possible Cause</u>  | <u>Corrective Action</u>  |
|--|---|
| The loop-start reliable disconnect is set to No, but the local phone company sends a reliable disconnect signal. | Contact the MERLIN LEGEND system manager and reprogram the loop-start reliable disconnect to Yes. |

---

## Agent Problems

---

**PROBLEM:** An agent is not receiving any CMS calls.

---

| <u>Possible Cause</u>   | <u>Corrective Action</u>  |
|---|---|
| The agent isn't using the Available and ACW buttons correctly<br><i>or</i><br>The buttons may not be programmed properly, | Check the Split Status screen to confirm that the agent is in the available state.<br><i>and</i><br>Check that the buttons are programmed properly.   |
| The agent has not been added to the current shift configuration.  | Add the agent to the current shift configuration by following the instructions for "Creating An Agent Directory" in Chapter 5 of the <i>CMS Installation and System Programming Guide</i> . |

---

**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.

---

| <u>Possible Cause</u>  | <u>Corrective Action</u>  |
|--|---|
| The agent's line group is programmed for Auto ACW and the agent is touching the ACW and Available buttons. | If Auto ACW is in effect, agents should not touch the ACW button. Agents may touch the Available button only after their telephones have been put into the ACW state automatically. |
| Auto ACW is not programmed correctly.  | Check that Auto ACW is programmed properly for the agent's line group, Reprogram if necessary.  |

---

**PROBLEM:** An agent is receiving the CMS calls for a different split.

---

| <u>Possible Cause</u>                      | <u>Corrective Action</u>   |
|--|--|
| The agent is assigned to the wrong split.  | Reassign the agent to the correct split following the instructions for "Dynamic Reconfiguration" in Chapter 6. |
| Fallback plan is on when it should be off. | Make sure Inhibit Call Coverage is on.   |
| Telephone is programmed to "ring."         | Set all CMS lines to "no-ring."  |

---

**PROBLEM:** Agents continue receiving CMS calls after touching the ACW button to indicate they are unavailable for CMS calls.

---

| <u>Possible Cause</u>   | <u>Corrective Action</u>  |
|---|---|
| The agents are touching the ACW button <i>after</i> they hang up. | Remind the agents to touch the ACW button <i>before</i> they hang up. |

---

**PROBLEM:** An agent's telephone rings when the call is for another agent, or it rings once and stops.

---

| <u>Possible Cause</u>  | <u>Corrective Action</u>   |
|--|--|
| 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. Instruct agent on line ringing options as described under "Using MERLIN LEGEND Features with CMS" in Chapter 5. |

---

**PROBLEM:** While on one CMS call, an agent receives another CMS call.

---

| <u>Possible Cause</u>  | <u>Corrective Action</u>   |
|--|--|
| The agent put the first call on hold and hung up the handset.    | Remind the agent to put 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 as described under "Using MERLIN LEGEND Features with CMS" in Chapter 5.   |

---

PROBLEM: Agents stationed close to each other have trouble determining whose telephone is ringing.

---

| <u>Possible Cause</u>                                 | <u>Corrective Action</u>   |
|---|--|
| The agents' telephones have the same ringing pattern. | Remind the agents to personalize the ringing on their telephones as described under "Using MERLIN LEGEND with CMS" in Chapter 5. |

---

PROBLEM: Agents have trouble locating calls they have put on hold.

---

| <u>Possible Cause</u>  | <u>Corrective Action</u>  |
|--|---|
| The agents don't know that the green light next to a call <i>they</i> put on hold flashes more rapidly than the green light next to someone else's call. | Tell agents how telephone lights work, as described under "Using MERLIN LEGEND Features with CMS" in Chapter 5. |

---

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.

---

| <u>Possible Cause</u>  | <u>Corrective Action</u>  |
|--|---|
| CMS sent a call to the agent's telephone (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 telephone and it goes unanswered, the light next to the Available button on that telephone goes off and CMS puts the agent in the logged out state. |

---

PROBLEM: Agent telephones ring part of one ring each time a call arrives.

---

| <u>Possible Cause</u>         | <u>Corrective Action</u> |
|-------------------------------|--------------------------|
| Lines are not set to No Ring. | Set lines to No Ring.    |

---

### **External Alert Problems**

External alert problems do not produce 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.

---

| <u>Possible Cause</u>   | <u>Corrective Action</u>   |
|---|--|
| Alert is not connected to the jack programmed for it or<br>Alert number is not associated with any line button number on the Setting Exceptions screen. | 1. Pre-select the associated line button on the supervisor's console.<br>2. Lift the handset and see if the alert lights.<br>— If it does, check the programming.<br>— If it doesn't, contact the MERLIN LEGEND system manager and check that the alert is connected to the proper jack on the control unit. |
| Faulty lamp   | Test the lamp from the supervisor's console and replace if necessary.  |

---

**PROBLEM:** External Alert stays on after all exceptions to which it has been assigned have been brought below the exception thresholds.

---

| <u>Possible Cause</u>   | <u>Corrective Action</u>   |
|---|--|
| Heavy call traffic can cause a delay in the external alert turning off. | <p>Check to be sure all exceptions have stayed below their thresholds. If they have, simply wait.</p> <p>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 <i>console</i> is connected. Agents using consoles should not press the alert button; supervisors can use the button to test alert operation.</p> <p><b>NOTE:</b><br/>A <i>console</i> (such as the MERLIN LEGEND 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 light goes on.</p> <p>If all connections and assignments are correct and all handsets with that alert line button are hung up, restart CMS.</p> |
| Alerts are programmed to monitor too many exceptions.                   | Decrease the number of exceptions monitored or change the type of exceptions monitored by each alert.  |

---

## **Fallback Plan**

---

During normal operation, the CMS PC distributes all CMS calls to CMS agents. However, if the CMS PC malfunctions, the CMS fallback plan provides the capability to distribute these calls correctly but *not to maintain historical records or reports*.

The fallback plan relies on several MERLIN LEGEND features so that the system—rather than CMS—distributes calls to CMS agents. For a more detailed explanation of the fallback plan, refer to “Setting Up the Fallback Plan” in Chapter 1 of the *CMS installation and System Programming Guide*.

If the CMS PC fails, implement the fallback plan as follows:

1. Turn the **Coverage Off** feature off at the CMS supervisor’s telephone by pressing [33], the button assigned to this feature. The light next to this button turns off when **Coverage Off** is off.

During normal operation, **Coverage Off** is on, disabling the distribution of calls by the MERLIN LEGEND system and allowing the CMS PC to distribute calls. Turning **Coverage Off** enables the MERLIN LEGEND system to distribute calls through the CMS supervisor’s telephone.

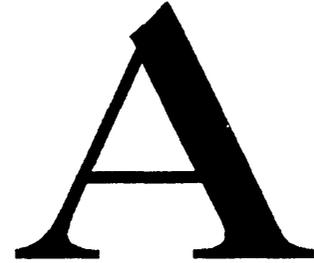
2. Program the CMS lines at the supervisor’s phone for Immediate Ring (normal operation is No Ring):
  - a. On the supervisor’s phone, slide the T/P switch to the P (program) position.
  - b. Press any CMS line button.
  - c. Dial [\*] [3] [4] [7] .
  - d. Slide the T/P switch back to the T position.

**NOTE:**

Remember to set the lines back to No Ring when not using the fallback plan. Repeat the above steps, but dial the code [\*] [3] [4] [5] instead.

---

# MERLIN LEGEND CMS Factory Settings



---

Several of the MERLIN LEGEND programming options have been set at the factory before shipping. Some of those settings you change for using MERLIN LEGEND CMS, while others you don't. Table A-1 provides a summary of the MERLIN LEGEND programming options used by CMS and their factory settings. Refer to the specific programming section in the CMS *Installation and System Programming Guide* for instructions on keeping or changing the setting.

In addition, some of the CMS programming options are also set at the factory. You may change or accept these settings based on the needs of the business. Table A-2 provides a summary of the options and their settings. Refer to the specific programming section in this guide for instructions on changing the settings.

**Table A-1. MERLIN LEGEND Factory Settings (for CMS)**

---

| <b><u>Programming Option</u></b> | <b><u>Factory Setting</u></b> | <b><u>Page</u></b> |
|----------------------------------|-------------------------------|--------------------|
| System Mode                      | Key                           | 1-4                |
| Renumber System                  | 2-Digit                       | 1-5                |
| Loop-Start Reliable Disconnect   | No                            | 1-14               |
| Coverage Delay                   | 3 rings                       | 1-29               |
| Group Type                       | Auto Logout                   | 1-27               |
| Return Time interval             | 4 rings                       | 1-8                |
| Transfer Audible                 | Music-On-Hold                 | 1-9                |
| Extension Status                 | GroupCalling/CMS              | 1-9                |

---

**Table A-2. MERLIN LEGEND CMS Factory Settings**

---

| <b><u>Programming Option</u></b> | <b><u>Factory Setting</u></b> | <b><u>Page</u></b> |
|----------------------------------|-------------------------------|--------------------|
| Answer Delay                     | 5 seconds                     | 3-18               |
| Force Delay                      | off                           | 3-20               |
| Auto ACW                         | 0 seconds                     | 3-20               |
| Intraflow                        | off                           | 3-26               |
| Intraflow Threshold              | 30 seconds                    | 3-26               |
| Service Level Limit              | 20 seconds                    | 4-5                |
| Abandoned Call Threshold         | 10 seconds                    | 4-6                |
| Audible Alarm                    | On                            | 4-7                |
| Delay Message Length             | 10 seconds                    | 4-7                |
| Business Name                    | MERLIN LEGEND(TM) CS          | 4-8                |

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# Glossary

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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 LEGEND 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**

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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 work state in which the agent receives no ACD calls. Agents usually put their telephones into this state when they need to finish work associated with previous calls.                        |
| Agent Position                   | The 2-digit LEGEND system extension number for the telephone 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 CMS 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 supervisor, 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 telephones of all agents in the split.   |
| Answer Delay                               | The initial period of time 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 | A programmed state in which the agent receives no ACD calls. CMS automatically puts an agent's telephone 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 0 time is designated for a line group, the Auto ACW feature is not in effect. If this feature is in effect and the agent becomes available to answer calls while in the ACW state, the agent can override the ACW state by pressing <b>Available</b> on his or her phone. |
| Inside Auto Dial Button                    | A telephone button that has been programmed to contact another telephone in the LEGEND system. Lights beside the button show the current status (busy, idle, or held) of the telephone that the button represents.   |

|                             |   |
|-----------------------------|---|
| Available State             | An agent work 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 LEGEND 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' telephones. 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 length of time that CMS had control of a call. It starts when the call was answered, continues while the delay announcement is played and the call is placed on hold, and ends when CMS transfers the call to an agent.   |
| 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 LEGEND 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.   |

## Glossary

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|                         |   |
|-------------------------|---|
| 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 supervisor's PC screen.  |
| Exception Threshold     | The point at which the supervisor 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, which allows the supervisor to 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 or bell from an external alert, to notify the CMS supervisor that an exception threshold has been met or exceeded.  |
| External Alert          | A wall-mountable lamp or bell that lights up and remains lit or rings while a condition causing the alert is in effect. External alerts can be used with exception thresholds. CMS can have up to four lamps, which are connected to LEGEND system line jacks and programmed for All-Ring operation or exception thresholds by line button number for agent splits and line group exceptions. |
| Factory Setting         | The factory-set value for a system option which allows CMS to operate immediately after installation. The supervisor may later improve system performance by replacing some initial settings with values  |

more appropriate to the needs of his or her business.

|                     |   |
|---------------------|---|
| 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.                                     |
| 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 LEGEND system control unit into which connections for telephone lines and telephones 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 agents are 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.  |
| 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, extension calls, and calls transferred to an agent by another person.   |
| 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.  |
| Ringling      | Two types of ringing are important to CMS: <i>initial</i> ringing occurs during the answer delay, from the time the line is seized by an incoming call until CMS answers the call; <i>transfer</i> ringing occurs at a telephone, from the time CMS transfers the call to an available agent until the agent lifts the handset. |

|                     |   |
|---------------------|---|
| Ringling Options    | <p>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 telephone. The ringing options are:</p> <ul style="list-style-type: none"><li>■ <i>No Ring</i>: All CMS line on an agent's telephone must be programmed for No Ring to prevent all the CMS stations from ringing each time a new call enters the system. Instead, CMS provides the ring for each new call, answers it, and transfers it to the agent's telephone, which rings. Lines or line pools used primarily for placing outgoing calls should be programmed for No Ring.</li><li>■ <i>Immediate Ring</i>: Cover buttons for the Transfer-to-Split or All-Ring operation feature should be programmed for Immediate Ring.</li><li>■ <i>Other</i>: Private lines or lines not assigned to CMS can be programmed as needed.</li></ul> |
| Secondary Split     | <p>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.</p>  |
| Service Level       | <p>The percentage of calls that go from initial ringing to answered within a specified length of time called the service level limit.</p>   |
| Service Level Limit | <p>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.</p>   |

|                          |  |
|--------------------------|--|
| 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) or from the console (via feature buttons). 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-Queue        | A feature that allows an agent to transfer calls to another split via a loop-back. The loop-back consists of a tip/ring extension jack and a loop-start linejack, which is assigned to a CMS line group. Transferred calls are treated as non-CMS calls; CMS distributes them to the appropriate agents and maintains historical records.                                |
| Transfer-to-Split        | A feature that allows an agent to transfer calls to another split by pressing a button on his or her telephone. All telephones in the other split ring. Agents in the other split pickup the call using the LEGEND system Cover button feature.  |

|                             |   |
|-----------------------------|---|
| Transfer<br>Return Interval | The number of times a transferred call rings before returning to the telephone from which it was transferred. |
|-----------------------------|---|

## **CMS Status Screens**

---

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 on CMS Status screens 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 LEGEND 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-extension 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 "Of f." 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   |
| 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, extension calls, and transferred calls. Active calls include calls currently connected to an agent and calls the agent has placed on hold.

**Waitng, 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. (These are shown in the Agents ACD column.

**Waitng, Old**      The number of seconds the current oldest call has been waiting to be transferred to an agent in each 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.

## Glossary

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|                         |  |
|-------------------------|--|
| Abandon, Delay          | The average number of seconds a call spent in the system before it was abandoned.  |
| Intrflow, In            | The number of serviced calls intraflowed into a particular split from another split. Calls are credited to the split after they are completed.   |
| Intrflow, 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      | <p>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 telephone.</p> <p>The waiting time for intraflowed calls is reflected in the average speed of answer for the split that answered it.</p> |
| <b>Sew</b> Levi         | The service level is the percentage of calls connected to an agent within the service level limit set by the system supervisor. This includes completed calls only.  |

## **Split Status Screen**

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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 LEGEND system extension number of the agent's telephone, and the agent's ID, an assigned "name" of up to five characters.  |
| Status | <p>The agent's current status, which can be one of the following conditions:</p> <p><i>Available:</i> 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).</p> <p><i>ACD:</i> The agent is busy on an ACD call or has placed an ACD call on hold; the associated line ID is displayed.</p> <p><i>OtherCall:</i> The agent is busy on a call not related to ACD work.</p> <p><i>ACWork:</i> The agent is in the after-call-work state and is not available to take calls.</p> |

|                   |  |
|-------------------|--|
|                   | <p><i>LoggedOut:</i> The agent is in the logged out state and is unavailable to take calls.</p> <p><i>Night:</i> The agent's telephone is hung up, and the CMS is in Night Service.</p>  |
| 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 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, %Tm    | The percentage of time the agent spent on ACD-related work within the current hour.  |
| 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 each split.

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**

|        |   |
|--------|---|
| Gp     | 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 is answered before other, nonpriority lines.  |
| Status | <p>The line status, which can be one of the following conditions:</p> <p><i>Ring:</i> Initial -ringing; a call has seized the line, but CMS has not answered it yet.</p> <p><i>Idle:</i> The line is not in use.</p> <p><i>Queued:</i> The call is in the CMS hold state. The announcement has played and the caller is waiting for a CMS agent to become available.</p> <p> <i>Agent ID:</i> The call is ringing at this agent’s phone.</p> <p> <i>Agent ID:</i> This agent has answered and is handling the call.</p> <p><i>Annc:</i> The caller is hearing the delay announcement.</p> |

*Ofhr*: The line is being used by an incoming or outgoing non-CMS call.

**NOTE:**

When a CMS call that comes in on a CMS line is transferred by an agent, the status of the CMS line changes from "AGTID" to "Other" when the agent who transfers the call hangs up.

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, HldT            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. individual line 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 each split.

|             |   |
|-------------|---|
| Waitng, 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. (These are shown in the Agents ACD column. |
| Waitng, Old | The number of seconds the current oldest call has been waiting to be transferred to an agent in each 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.  |

### **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.

## **CMS Reports**

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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**

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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.

## Glossary

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|                                   |  |
|-----------------------------------|--|
| Agent                             | The agent's name: last name (up to 12 characters) and first name (up to 8 characters).   |
| ACD CALLS,<br>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,<br>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,<br>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,<br>Avg Work Time       | The average amount of time spent on ACD-related work (the sum of Avg Talk Time and Avg After Call time).   |
| % Talk Time                       | The percentage of time the agent spent on ACD-related work within the current hour.  |
| ACD CALLS,<br>Num Rfused<br>Calls | The number of ACD calls refused by an agent.   |

|                                    |   |
|------------------------------------|---|
| OTHER CALLS,<br>Num Other<br>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 CALLS,<br>Avg Talk<br>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<br>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. Any “off-hook” operations (even when an agent is logged out) contribute to total time staffed.   |

## **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 are on the report.

The column headings in this report are the same as for the daily report; the totals under the headings 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 are included. A separate page, at the end of the report, contains a list of dates for which no CMS data exists.
- Hours for which a CMS agent did not work are not 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,<br>Avg Speed Ans      | The average speed of answering for all ACD 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,<br>Num Calls<br>Aband | The number of ACD calls which were disconnected before reaching the abandoned call threshold determined by the supervisor.  |

## Glossary

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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.)

## Glossary

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|                                    |   |
|------------------------------------|---|
| ACD CALLS,<br>Cnct After<br>SrvLv  | The number of calls that waited longer than the specified service level before being answered by an agent in this split.  |
| OTHER CALLS,<br>Num Other<br>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,<br>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 Level            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 manager. to a value from 0-99 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 can 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 are not included in the Cumulative Split Report by Hour. (A message to this effect appears on the report.)
- Each line of data for a Cumulative Split Report by Day is a daily summary; the date being summarized is in the first column of the report.
- Days and hours for which no CMS data exists are not included. A separate page at the completion of the report contains a list of dates or hours 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 24-hour period the report covers.

## Glossary

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|                                      |  |
|--------------------------------------|--|
| Time                                 | The start time of the data collection hour.  |
| ACD CALLS,<br>Calls Offered<br>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,<br>Calls Offered<br>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,<br>Num Calls<br>Aband     | The number of incoming calls to the line group which were abandoned while the CMS was in Day Service.  |
| ACD CALLS,<br>Num Calls Han-<br>dled | 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,<br>Hold Time Avg          | The aver age 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. |

## Glossary

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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. )

TRAFFIC,  
CCS Load

Shows the line group traffic density for one hour. This field, when combined with the Average Speed of Answer and Number of ACD Calls, can be used to determine changes to the line group.

TRAFFIC, Occ

Shows how efficiently the line group is being used. It is expressed as a percentage that shows, for example, that the lines are in use 70% of the time. This field can be used to determine changes to the line group.

Num Delay  
Annc

The number of calls in the line group that heard the delay announcement.

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<br>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 can either be "Day" or "Hour" depending on which report has been selected. The totals under the headings 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 is a daily summary; the date being summarized is in the first column of the report.
- Days for which no CMS data exists are not included. A separate page at the completion of the report contains a list of dates for which no CMS data exists.

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## **FCC Notification and Repair Information**

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This equipment is registered with the Federal Communications Commission (FCC) in accordance with Part 68 of its rules. In compliance with those rules, you are advised of the following:

**MEANS OF CONNECTION:** Connection to the telephone network shall be through a standard network interface jack USOC RJ11 C. These USOCs must be ordered from your Telephone Company.

This equipment may not be used with party lines or coin telephone lines.

**NOTIFICATION TO THE TELEPHONE COMPANIES:** Before connecting this equipment, you or your equipment supplier must notify your local telephone company's business office of the following:

- The telephone numbers you will be using with this equipment.
- The appropriate registration number and ringer equivalence number (REN) which can be found on the back or bottom of the control unit.

You must also notify your local telephone company if and when this equipment is permanently disconnected from the line(s).

**Repair Instructions:** If you experience trouble because your equipment is malfunctioning, the FCC requires that the equipment not be used and that it be disconnected from the network until the problem has been corrected. Repairs to this equipment can only be made by the manufacturers, their authorized agents, or by others who may be authorized by the FCC. [In the event repairs are needed on this equipment, please contact the AT&T National Service Assistance Center (NSAC) at 1 800 628-2888.]

**Rights of the Local Telephone Company:** If this equipment causes harm to the telephone network, the local telephone company may discontinue your service temporarily. If possible, they will notify you in advance. But if advance notice is not practical, you will be notified as soon as possible. You will also be informed of your right to file a complaint with the FCC.

Your local telephone company may make changes in its facilities, equipment, operations, or procedures that affect the proper functioning of this equipment. If they do, you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service.

***INTERFERENCE INFORMATION NOTICE:*** FCC Rules require that you be notified of the following:

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