ISOETEC® Digital System
ACD Manager Guide

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Part Number 770323B

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Section 1
Introduction

1.1 WHAT IS AUTOMATIC CALL DISTRIBUTION?

Automatic Call Distribution is a means of allowing several individuals to handle a large quantity of incoming calls. Incoming calls are directed to the individual assigned to handle these calls, based on the call that has been waiting the longest. The individuals assigned to answer these calls are called AGENTS.

When **all** agents are busy, incoming calls are directed by the system to a program that is designed to handle ACD calls in the most efficient way for your company. This program can answer calls, and provide an announcement that all representatives are busy. The caller can be placed on hold and connected to music, routed to another program, or an extension, or any combination that best suits the needs of an individual application.

Statistics on an agent and trunk basis are available to assist the management of the ACD operation.

This guide provides information for *four* ACD packages:

BASIC ACD	Basic ACD provides full ACD call routing and control, but does not offer statistical reports, or dynamic displays.
DYNAMIC ACD	Dynamic ACD offers all the routing and control features of Basic ACD, and adds two dynamic (real time) displays. These dynamic displays are a powerful management tool that aid in seeing that all incoming calls are promptly answered.
ADVANCED ACD	Advanced ACD provides full ACD call routing and control, dynamic displays, plus a standard set of statistical reports.
CUSTOM ACD (USER-DEFINED)	Custom ACD is equipped with all the Advanced ACD features, plus the ability to create customized reports. These reports are created from easy-to-understand menus from a choice of over 50 items.

ACD is added to the system software by an authorized service center using the remote programming feature. Once ACD is added, the system is capable of ACD operation.

1.2 ABOUT THIS GUIDE

This guide has been prepared for both the ACD Manager, and the Customer Service **Representative/Technician.**

The guide is divided into several sections. Each section builds on the information presented in the previous sections. For example, the information contained in the Basic ACD section is common to all the ACD Feature packages. The Basic section contains information about the operational part of ACD. The Dynamic section describes the dynamic (real time) management tool added to the Basic package. The Advanced ACD section explains the statistical reports available with this package. The Custom ACD package takes the Advanced package a step further and gives the customer the ability to design their own reports from a number of stored statistics. The Custom ACD section details how to create these reports.

1.3 HARDWARE REQUIREMENTS

In order to install ACD, a Memory Module III (p/n 15290) is needed when using CPU part number 15300. This module is mounted on the CPU, and provides the added memory necessary for the operation of the ACD package. The Expanded CPU, part number 2 1650, used in the 432 port configuration does not require a Memory.Module III.

In order to install ACD in the 108 port configuration, a CPU (p/n 15300) with a Memory Module III (p/n 15290) is needed. The CPU part number 19300 does not support ACD.

1.4 OPTIONAL HARDWARE

The proper functioning of the ACD system may require certain other pieces of hardware.

DIGITAL VOICE ANNOUNCER (p/n 15870)	This is a single-message digital announcer which can be connected directly to a digital station port without the need for an OPX Interface. *The Digital Voice* Announcer can be used in any system application which requires a *recorder,* such as *ACD.*
RECORDED ANNOUNCEMENT EQUIPMENT	This is the device used to play the recorded message(s) when a caller is waiting to be sent to an available representative. One OPXI per announcement is required.
OPX INTERFACE (p/n 15780)	This is used to connect recorded announcement equipment to the system. The interface requires a connection to a digital station, and a power supply (48 volts DC).
OPX LSI PORT CARD (p/n 15880)	This is a port card designed with eight OPX (conventional Tip and Ring) ports per card. This card does not support digital stations. Each port card can be used in any application that requires a tip and ring connection (such as a MODEM, or 2500-type telephone).
HEADSETS	These are used in place of the telephone handsets to provide ease in call handling when the hands must be free to process information.
SUPERVISOR CRT TERMINAL	This is a CRT terminal that is connected to one of the system's programming ports to aid in customer management of the ACD system.
LSI DATA CONTROL MODULE (p/n 15340)	This is an enhanced *Data* Control *Module* (DCM) with six additional I/O ports. The ports can be used as programming, SMDR, or ACD Supervisor positions. The *LSI DCM* is installed in place of the standard DCM.
RELAY/SENSOR INTERFACE (p/n 15770)	This is used in conjunction with the Queue *Manager to* indicate (either with a lamp, or other alerting device) the number of calls waiting to be handled.
PRINTER	A serial printer can be added for hard copies of the ACD statistical data being recorded in the system.
MUSIC SOURCE	An external music source (e.g. tape player) may be connected to the system to provide music to callers while they wait on hold. The music could also be a taped message with information of general interest to your callers (product announcements, sales, etc.).

1.5 SOFTWARE REQUIREMENTS

ACD must be ordered in advance of the installation so that arrangements can be made to add the appropriate features in the system by remote programming.

1.5.1 CALL ACCOUNTING REPORTS OPTION AND ACD

There are two Call Accounting Reports Option packages that are also available with the use of the Memory Module III. The Call Accounting Reports Option I may be used with any of the ACD packages.

Call Accounting Reports Option II CANNOT be used with any ACD package.

1.5.2 ACD AND AUTOMATED ATTENDANT

The system's built-in *Automated Attendant* feature can be used to route incoming calls to an ACD Group. Refer the *Automated Attendant* section of the *ISOETEC Digital System* Technical Manual.

1.6 DEFINITIONS

The following definitions are provided to help explain certain key words that are used throughout this discussion.

AGENT	A person assigned to answer a certain group of incoming lines.
SEQUENCE	The programmed manner in which a call is handled when an agent is not available to answer the incoming call.
SPLIT	A *split* is a group of agents that has a certain *sequence* assigned to it.
QUEUE	The sequence that the calls are directed to when all agents are busy.
ACD TRUNK G R O U P	Incoming trunks which are arranged into groups and are defined to ring a particular ACD SPLIT.
LOOK BACK OVERFLOW	Each ACD Group has the ability to include backup *splits* and their routing patterns.
ACD SUPERVISOR	The person responsible for the moment to moment operation of one or more ACD Groups. The ACD Supervisor monitors call activity, aids agents with difficult calls, and assigns agents to *splits* as needed.
ACD MANAGER	The person responsible for the overall performance of the ACD system. The ACD Manager programs the ACD features of the system, and reviews the statistical reports.
SYSTEM MANAGER	The person responsible for the programming and operation of the entire telephone system.

Section 2
Installation

2.1 INTRODUCTION

The ***Installation*** section provides information on installing equipment pertaining to ACD only. This section does not intend to provide information on basic system installation. If, at any time during an ACD installation, general system installation information is needed, reference the *Installation* or *Cabling and Cross Connection* sections of *the ISOETEC Digital System Technical Manual.*

2.2 MEMORY MODULE III

This module contains 384K of memory which is addressed for both the ACD, and Call Accounting features. A separate battery is located on the board to provide memory retention in case of power loss.

Activate the battery by placing the jumper strap in the El to E2 position. When the jumper is placed in the El to E2 position, and the battery has been given ample time to charge, memory will be held regardless of whether the card is mounted on the CPU or not.

When installing the Memory Module III onto the CPU card, components on the Memory Module III will face the components on the CPU card. The card installs on two connectors located on the CPU labeled J1 and J2.

Remember, if the battery has not been activated, this is your last chance. If, after installation, the Memory Module III is removed from the CPU without the battery connected, all information in the module will be lost.

NOTE: Installation of this module alone does not activate the ACD features. These features MUST be activated by remote programming from an authorized service center.

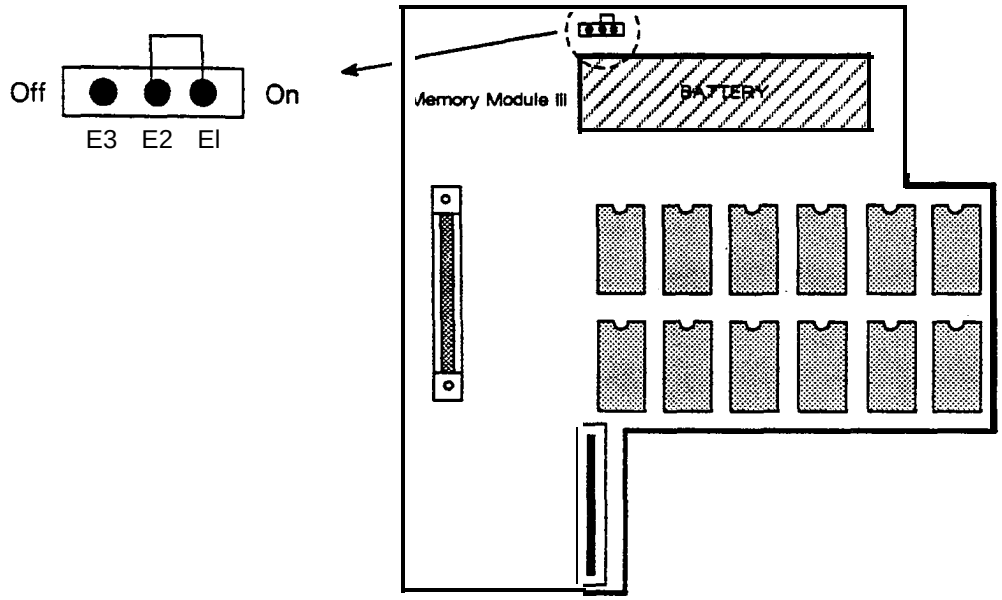


Figure 2-l Memory Module III

2.3 INSTALLING RECORDED ANNOUNCEMENT DEVICES

The Digital Voice *Announcer* (p/n 15870) is a device that can answer a call and play a pre-recorded message (up to *65* seconds) to *the* caller. *The Digital Voice* Announcer can be used in applications that require a recorder (e.g., ACD Recorders, or answering devices for Auto Attendant). This device takes the place of a recorder connected through an OPXI to the system. The Digital Voice Announcer is not able to answer a line that is programmed to ring directly to it. Furthermore, a line cannot be transferred to this device.

> *NOTE: When installing any other announcement device, an OPX Interface or OPX port card must be used.*

The extension number of the *Digital Voice Announcer* or OPX is then programmed to be a recorder. This is accomplished on the *Station Programming* screen. Programming the station to be a recorder allows more than one trunk to be connected to the recorder at the same time.

An AEC Model 212+ Digital Voice Announcer (EISI p/n 440125) may also be used as the recorded announcement device. This voice announcer is capable of delivering two separate messages simultaneously. Each *message* requires the use of one OPX connection.

2.3.1 INSTALLING THE DIGITAL VOICE ANNOUNCER

The Digital Voice Announcer is connected to the system in the same manner as a digital telephone. One digital station port is required for each *Digital Voice Announcer.*

The Digital Voice Announcer is wired to a digital station port on either a Station port card (p/n 15640), an E&M Tie Line Combo card (p/n 15680), or a DTMF Receiver card (p/n 15650).

Software version 4.51 is the lowest software level that support *the* use of *the Digital Voice Announcer.*

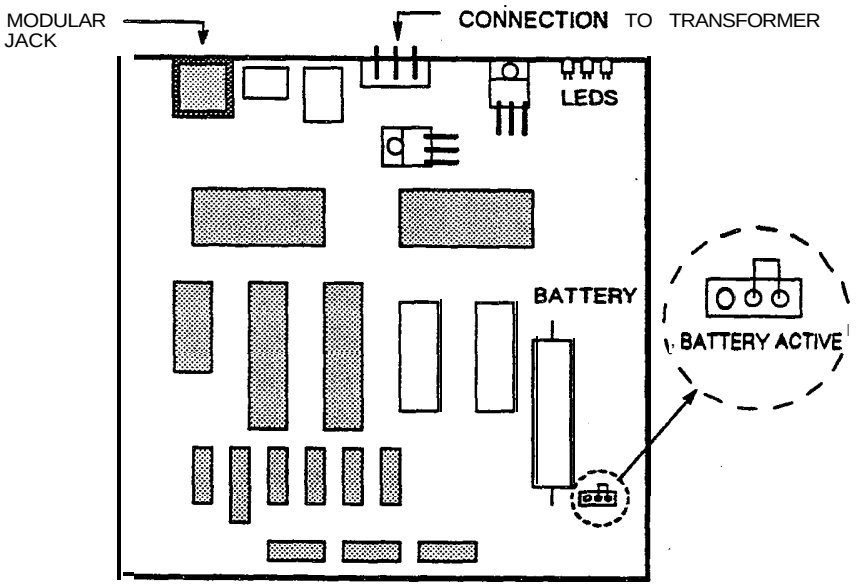


Figure 2-2 Battery Strap Location

The recorded message of the Digital Voice Announcer is retained by a battery in the event of a power failure. The battery will retain the messages for 24 hours.

NOTE: Prior to installation, the battery backup must be activated.

Remove the four screws and lift the cover from the base of the unit. Move the strap such that it connects the two terminals on the right (looking at it from the front). See Figure 2-2.

Plug a standard 4 conductor modular cord into the RI-11 receptacle on the back of the Digital Voice Announcer. Connect the other end to a **RJ-11** type mounting block that has a digital port wired to it from the MDF. Wire the mounting block to the MDF in the same manner as a digital station. See Figure 2-3.

Plug the tail of the transformer on to the three pins on the back of the Digital Voice Announcer and then into an AC power outlet. If AC power to the system is battery-backed, the recorder should be connected to a battery-backed AC power source.

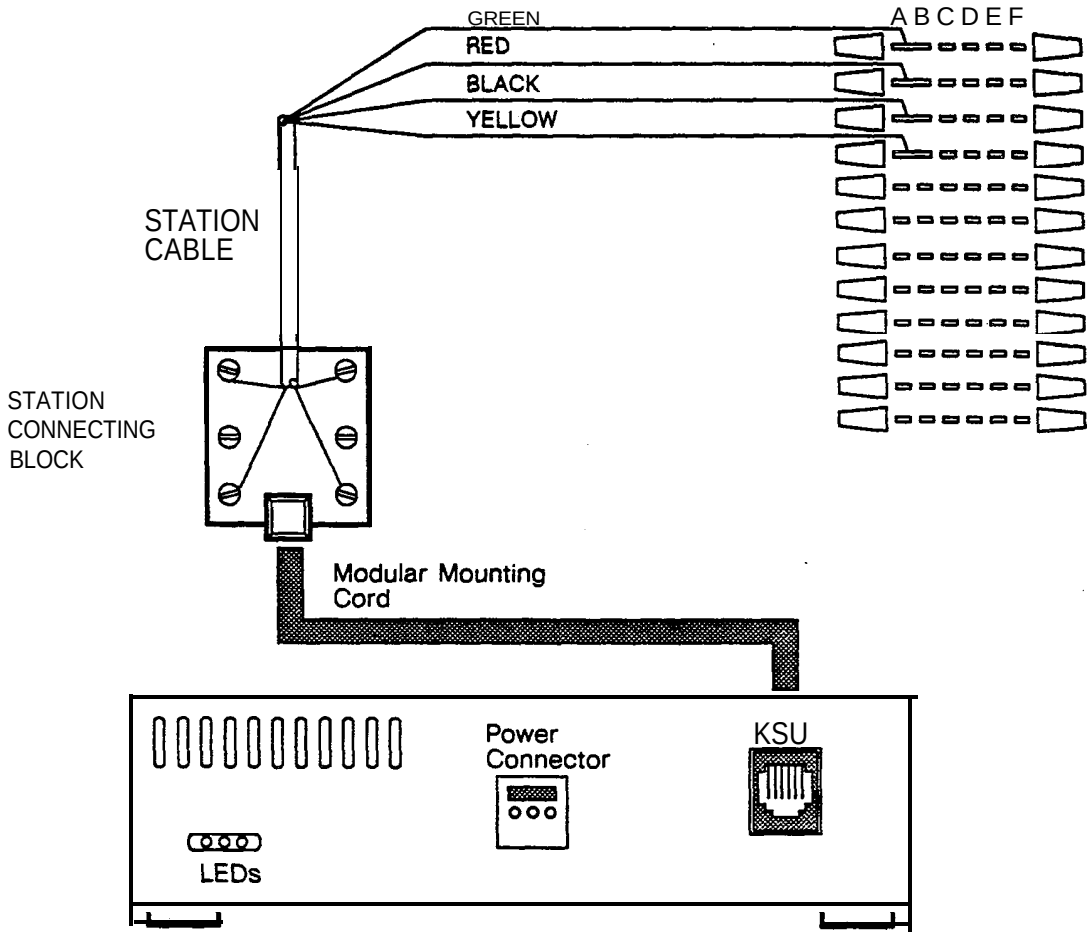


Figure 2-3 Digital Voice Announcer

After the *Digital Voice Announcer* has been wired to the system, a message must be recorded before the DVA will answer a call.

Recording A Message

Dial the extension number of the recorder.

Dial [*] (this is the command to clear the message).

Dial [1] (this is the command to record).

Dial [0] [1]. After the tone, start to record the message.

When finished recording, dial [0] to terminate the recording mode.

To Replay A Message

Dial the extension number of the recorder.

Dial [ABC 2] (this is the command to playback).

Dial [0] [1].

To Clear The Message

Dial the extension number of the recorder.

Dial [*] (this is the command to clear the message).

Maximum Length Of Message

The maximum message length of the Digital Voice Announcer is 65 seconds.

LED Indicators

There are 3 LEDs on the back of the recorder indicating the following:

Idle Mode the RED IDLE LED is flashing.

Recording Mode the YELLOW LED is on.

Play back Mode the GREEN LED is on.

2.3.2 INSTALLING THE OPX INTERFACE

An OPXI (p/n 15780) is installed in the same manner as a digital telephone. Terminate the desired extension for the recorder on a 4 conductor modular jack. *Connect* a modular line cord between the station jack, and the jack marked KSU on the OPXI. Connect another modular cord from the jack marked OPX to the recorder device.

An external 48 volt DC power supply is necessary to power each OPX interface. The current draw of each OPXI is 100 milliamps. The ISOETEC Tri-Output power supply (p/n 550005) is a suitable choice.

Connect the black wire of the OPXI power cord to the negative side of the power supply. Connect the red wire to the positive side of the power supply.

A **66-type** connecting block can be used when installing more than one OPX interface. Loop the 48 volt leads to separate parts of the 66 block. After looping the 48 volts, connect the individual power leads from each OPX interface to the one centralized block.

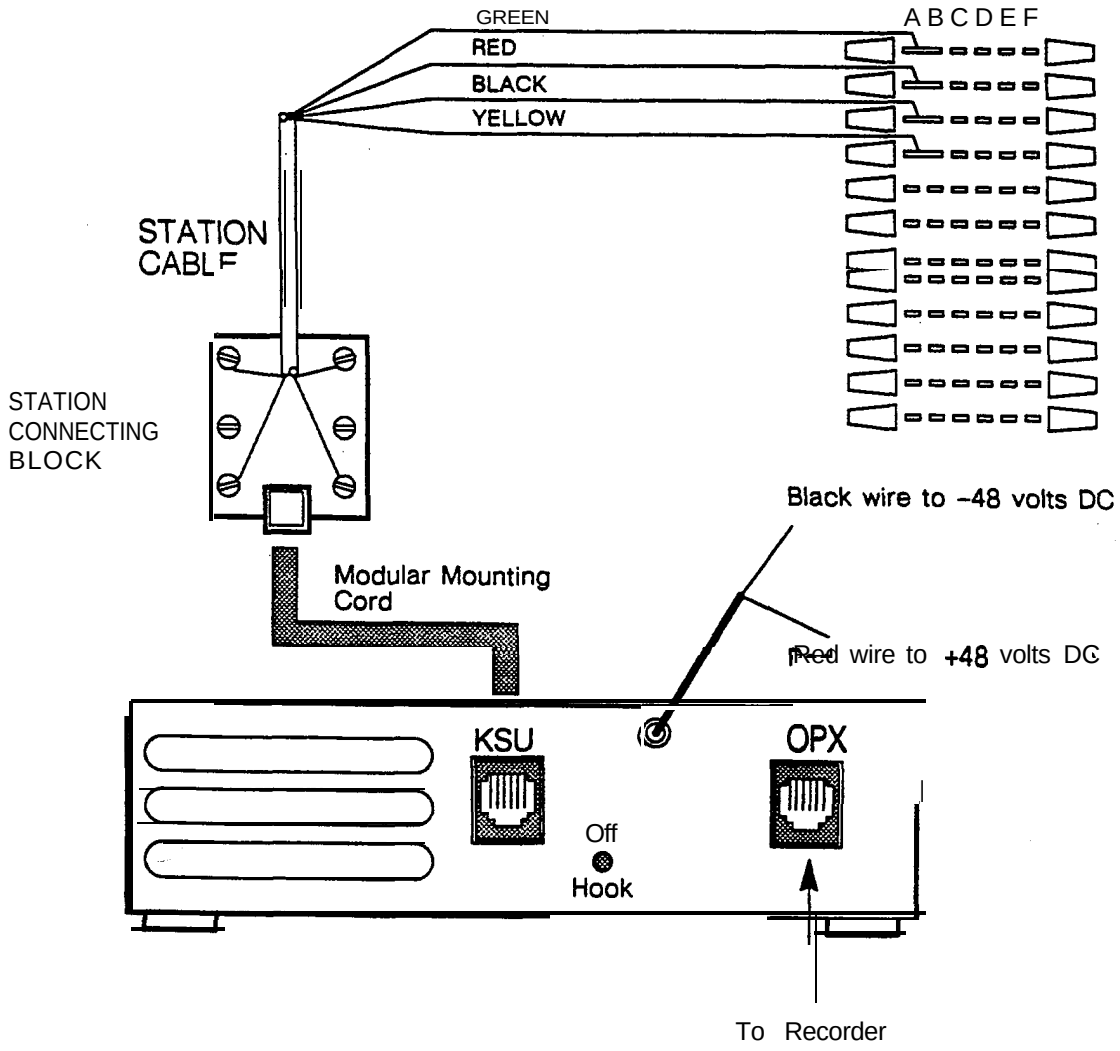


Figure 2-4 OPXI Installation

2.3.3 INSTALLING THE OPX LSI PORT CARD

The OPX LSI port card (p/n 15660) is an 8 port card that can be installed in port card slots J1 through J18 in cabinet 15200 or J1 through J8 in cabinet 19200. The OPX port card can be used to support any conventional tip and ring, DTMF device such as 2500-type telephones, or a recorded announcement device. The OPX port card requires software version 5.26 or higher to operate.

> *NOTE: The OPX port card will not work with rotary dial devices. There is nopowerfailure transfer on this card.*

Power Requirements

The OPX port card requires externally supplied 48 volts DC and ring generator for power. It is suggested that the ISOETEC TRI OUTPUT power supply (p/n 550005) be utilized for external power. Every two OPX port cards will require one TRI OUTPUT power supply. Each OPX port card draws a maximum of 500 milliamps, and requires at least 2 watts of ring generator.

Tone Receivers

The OPX port card also requires a DTMF Receiver port card (p/n 15650) to be installed in the system because there are no DTMF tone receivers on the OPX port card itself. It is recommended that one DTMF Receiver port card be used for every four OPX port cards. This number can vary depending on the amount of traffic on the OPXs. If the OPXs experience delays in obtaining dial tone, another DTMF Receiver port card should be added.

installation

Observing the polarity marked on the card, connect the externally supplied 48 volts and ring generator to the connectors on the edge of the card. Install the OPX port card in a port card slot.

The OPX port to MDF cable (p/n 01037) is installed with-the exposed shield closest to the cabinet. A cable tie or similar device is used to secure the exposed braid to the bottom plate of the cabinet. The paint is removed from a section of the bottom plate to allow a ground connection between the exposed braid of the cable and the cabinet. The cable is then dressed out the back of the cabinet, and connected to the MDF.

The *System Configuration* programming screen can be selected to confirm that the system has recognized the OPX port card(s). The card identifier will indicate "Sli" and show eight ports installed.

Possible Installation Problems

The following may help identify possible problems that may occur when installing the OPX port Card. The OPX card may not provide any side tone. To remedy this problem, check to see if the 48 volt DC power supply has been connected with the wrong polarity, or is not connected at all.

Another possible problem is that the OPX port card may not provide dial tone, but side tone is present. To remedy this problem, check to see that the DTMF Receiver port card is installed. A DTMF Receiver port card must be present in the system when using the OPX LSI port card.

If all telephones connected to the OPX port card do not ring, make certain ring generator has been connected to the proper terminals.

The power supplies are wired to the card (refer to Figure 2-5) as follows:

P3	1	- 48 volts
	2	+ 48 volts
P3	3	Ring generator
	4	Ring generator

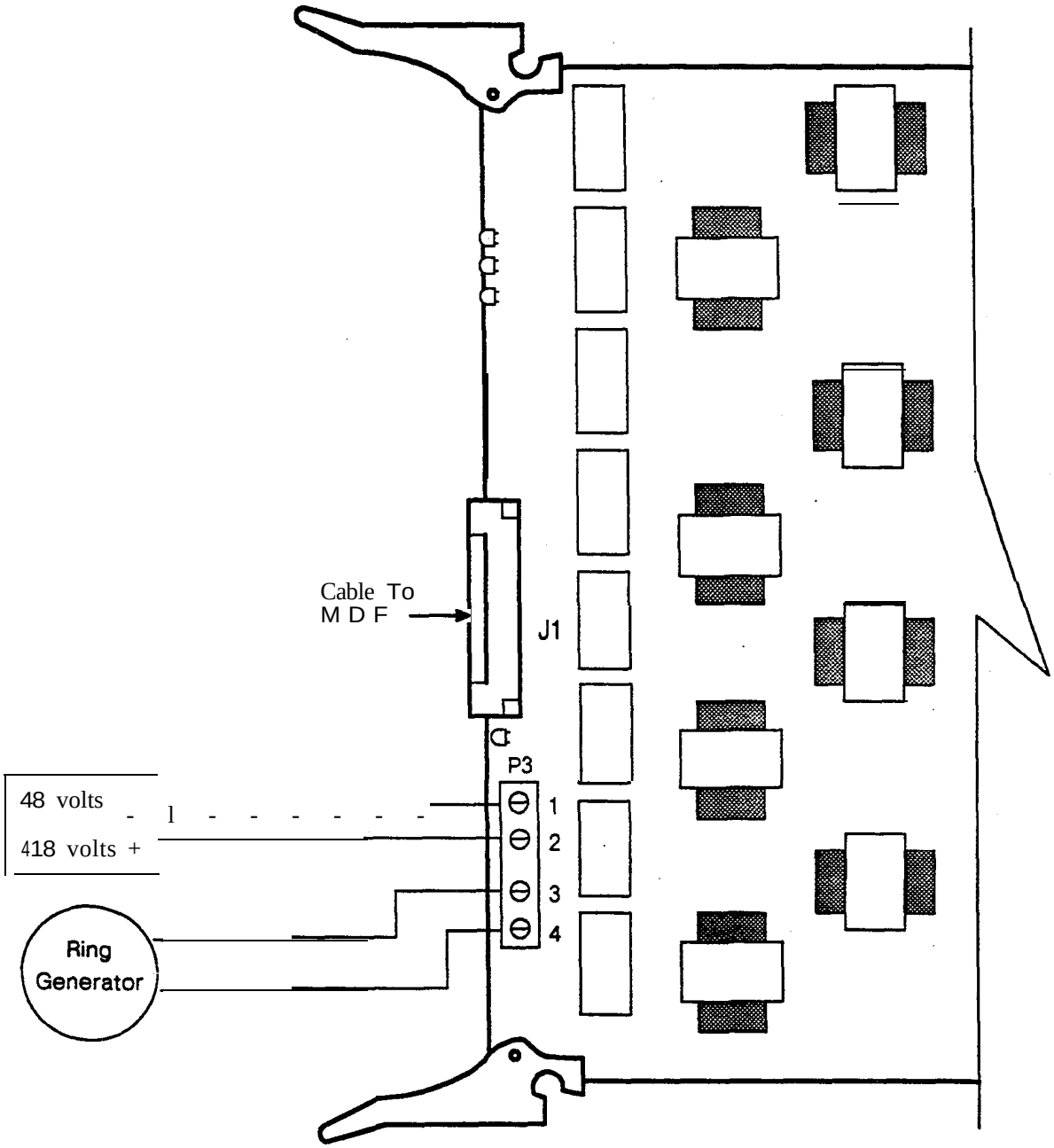
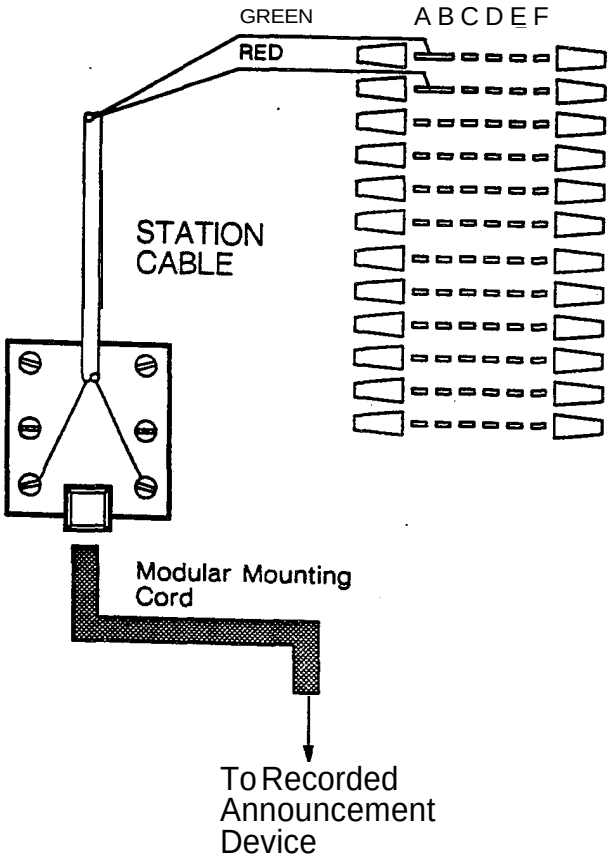


Figure 2-5 OPX LSI Port Card Power Connections

The MDF connections to the OPX LSI port card are shown in the following diagram:



A	B	C	D	E	F
01	T			TT	17
	R			TR	
				RT	
				RR	
02	T			TT	18
	R			TR	
				RT	
				RR	
03	T			TT	19
	R			TR	
				RT	
				RR	
04	T			TT	20
	R			TR	
				RT	
				RR	
05	T	13	TT	TT	21
	R		TR	TR	
			RT	RT	
			RR	RR	
06	T	14	TT	TT	22
	R		TR	TR	
			RT	RT	
			RR	RR	
07	T	15	TT	TT	23
	R		TR	TR	
			RT	RT	
			RR	RR	
08	T	16	TT	TT	24
	R		TR	TR	
			RT	RT	
			RR	RR	
			EXT		
			PAGE		

Figure 2-6 MDF Station Panel Designations For The OPX LSI Card

For those that prefer to design their own MDF, the following table lists the OPXLSI port card cable configuration:

Table 2-l OPX LSI Port Configuration

CABLE PIN AND COLOR	PORT	LEAD DESIGNATION	CONNECTING BLOCKCOLOR
26 wht/blu	001	Tip	green
1 blu/wht		Ring	red
27 wht/org			black
2 org/wht			yellow
28 wht/grn	002	Tip	green
3 grn/wht		Ring	red
29 wht/brn			black
4 brn/wht			yellow
30 wht/slt	003	Tip	green
5 slt/wht		Ring	red
31 red/blu			black
6 blu/red			yellow
32 red/org	004	Tip	green
7 org/red		Ring	red
33 red/grn			black
8 grn/red			yellow
34 red/brn	005	Tip	green
9 brn/red		Ring	red.
35 red/slt			black
10 slt/red			yellow
36 blk/blu	006	Tip	green
11 blu/blk		Ring	red
37 blk/org			black
12 org/blk			yellow
38 blk/grn	007	Tip	green
13 grn/blk		Ring	red
39 blk/brn			black
14 brn/blk			yellow
40 blk/slt	008	Tip	green
15 slt/blk		Ring	red
41 yel/blu			black
16 blu/yel			yellow

The remainder of this cable is not used.

2.4 RELAY/SENSOR INTERFACE

The Relay/Sensor Interface (RSI) requires one digital station port. Once installed on this port, it provides 3 relay contact pairs. A typical application for the RSI is to use it in conjunction with ACD to light beehive lamps. These lamps, when programmed, indicate the number of ACD calls in queue for a particular ACD group.

*NOTE: The sensors on the **Relay/Sensor** Interface are not used at this time.*

An RSI is wired exactly like a digital station. Wire the interface to a station port on the Main Distribution Frame. The RSI requires 4 wires, and should be terminated to a four conductor modular jack. A four conductor line cord should then be connected between the modular jack and the connector provided on the RSI.

Once the RSI has been connected, three relays are supported with one station port. Relay 1 is the first connector terminal on the left when looking at the back of the RSI. The terminal connectors can accommodate two wires. These wires can be positioned so the relay contacts are part of a series circuit. The relay contacts are rated for 1 amp. 24 volts DC only.

The following diagram shows an RSI that is part of a series circuit. The relay, when activated, provides a path for power to a lamp used in an ACD environment.

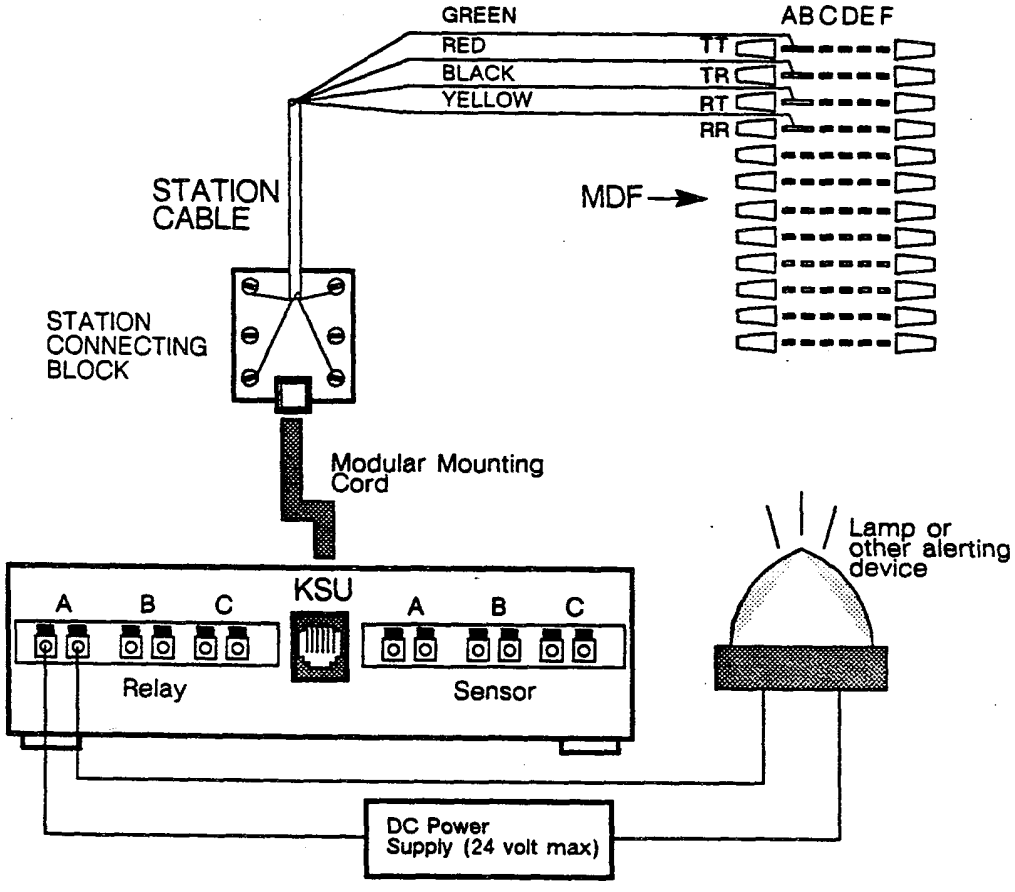


Figure 2-7 Relay/Sensor Interface

Connect a one pair cable to the terminal connector on the RSI. Push type connectors are being used. Insert a small bladed screwdriver, and push back gently. Connect a wire to one side of the power supply. Wire the other side of the power supply to one connector of the lamp. Connect the other wire between the remaining side of the lamp, and the power supply. This makes a series circuit with the relay as a control. When the relay is activated, the lamp will light. Programming the RSI is accomplished on the *ACD Queue* programming screen.

2.5 INSTALLATION OF MUSIC SOURCE

Music is an important part of most ACD Systems. An external music source may be connected to the system to provide music to callers while they wait on hold. The music could also be a recorded message with information of general interest to your callers (product announcements, sales, etc.). Sequences can be set up to have callers connected to music while waiting for an available agent. The input music source used for ACD is Music *On* Hold (MOH) . This music is supplied from an external source that connects to an RCA type jack, labeled **J26** on the backplane. Software programming allows switching of music inputs. This programming is discussed in detail in the System *Programming* section of the Technical Manual.

NOTE: The use of a radio broadcast, or pre-recorded music for Music On Hold could be perceived as a violation of copyright laws.

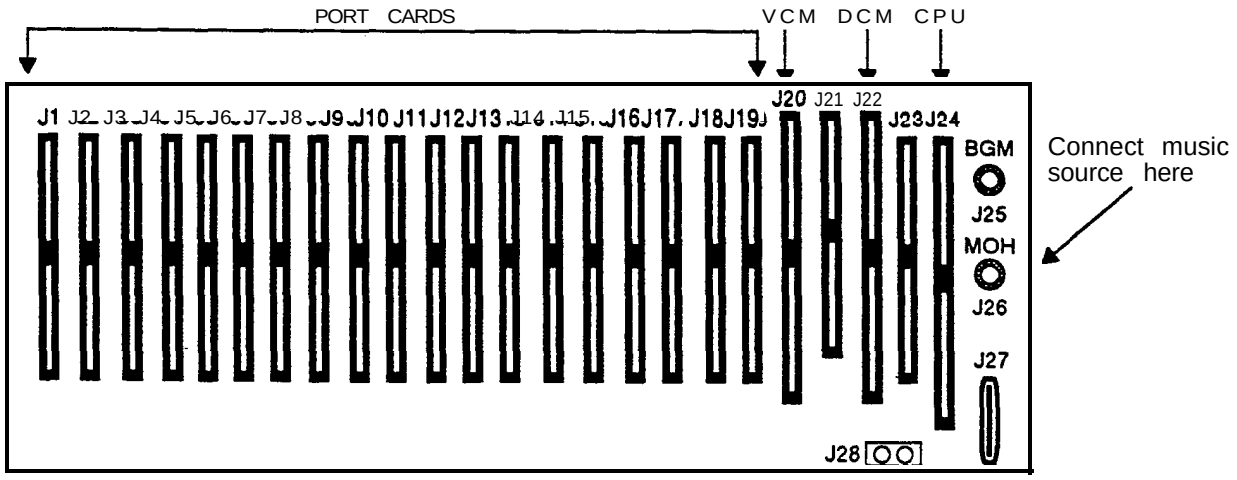


Figure 2-8 Music On Hold Connection

2.6 HEADSETS

Some ACD environments require the use of headsets, rather than handsets. When agents use headsets, they have an option of receiving a tone called *Zap*. When a call comes in to that agent, a tone is heard, and the call is **immediately** connected. Two different tones are used, one to indicate a call from the primary group, and another to indicate a call from a secondary group.

2.6.1 INSTALLATION OF PLANTRONIC HEADSETS

Remove the handset provided with your ISOETEC phone. Plug the headset cord into the modular jack provided for the handset. Plug the external power into an AC outlet. The dip switches on the Plantronics Headset should be set to the following positions:

1 on 2 on 3 on 4 off 5 off 6 on

2.7 SUPERVISOR TERMINAL RS-422

2.7.1 WIRING THE TERMINAL TO THE MDF

The ISOETEC Terminal (p/n 440017) can be connected to one of the system's I/O ports to provide a programming terminal for ACD Supervisors. The system provides 4 I/O ports on the main distribution frame (MDF) . Ports 3 and 4 are configured for an RS-422 type connection. Serial devices connected to either of these ports may be located up to 1000 feet from the MDF. Ports 3 and 4 default to 9600 baud.

This section details the connection of the terminal to either port 3 or 4:

1. Terminate the cable for the RS-422 connection to the main distribution frame on I/O port 3 or port 4 using the chart below. See Figure 2-10.

From the MDF (port 3 or 4)	To the Wall Jack
pin 1	Green
pin 2	Red
pin 3	Black
pin 4	Yellow
pin 5	White

2. Plug the modular end of the RS-422 cable into the jack wired to one of the RS-422 ports.

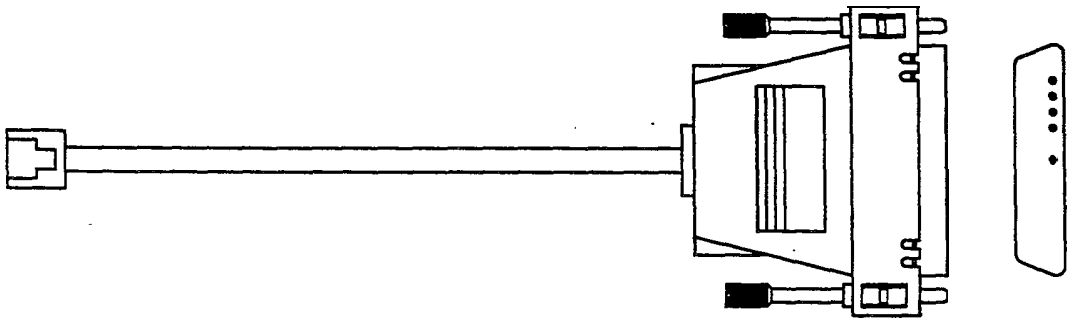


Figure 2-9 RS-422 Connector (p/n 330006) With Modular Cable

3. Connect the other end of the cable (the DB-25 connector) into the connector labeled MODEM on the terminal.

The terminal is now wired, and ready to be turned on.

Turn the power switch located on the right side of the terminal to the on position.

The screen of the terminal should first appear reverse video with all stars, and then appear blank with a cursor in the upper left comer of the screen.

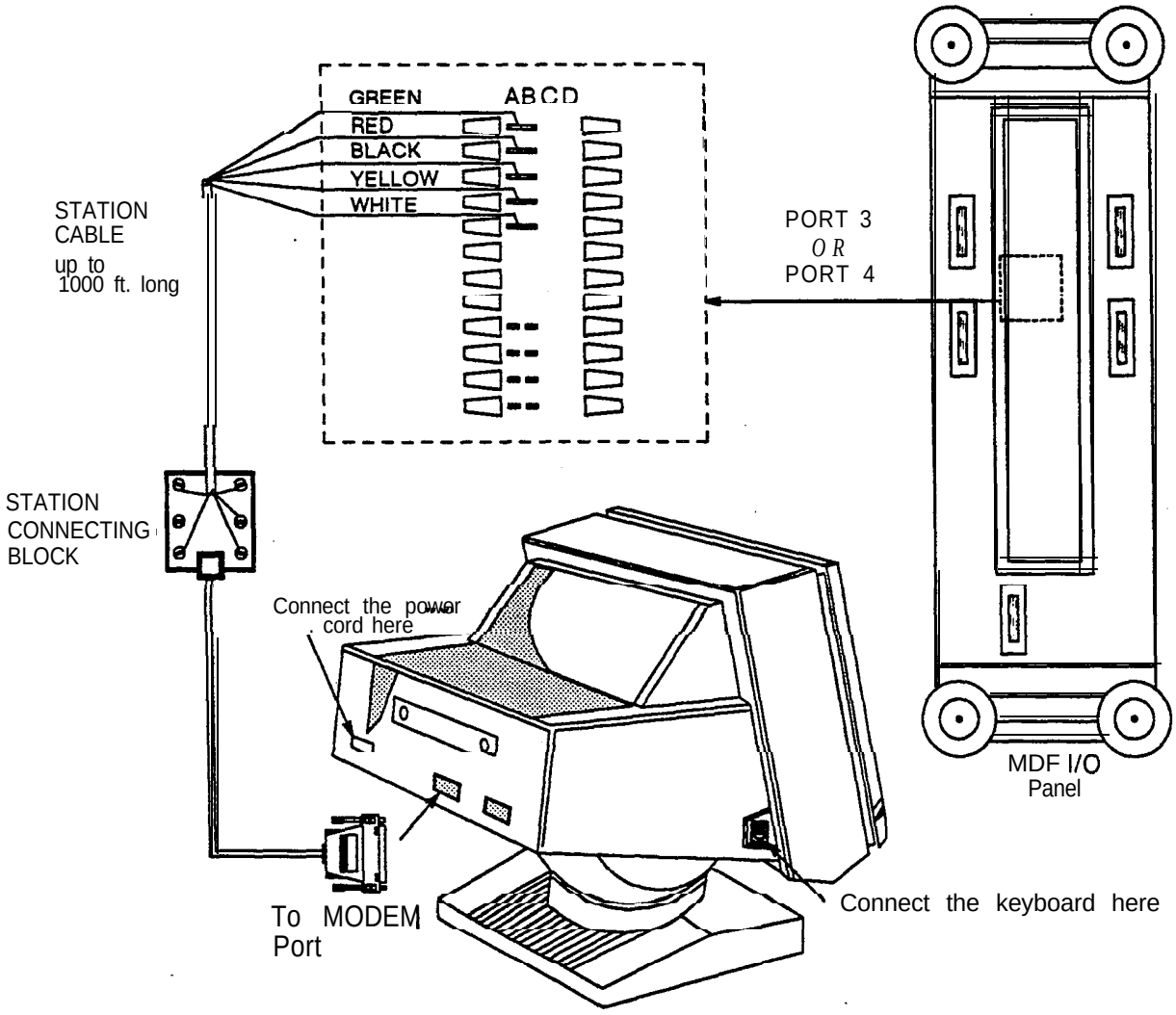


Figure 2-10 Wiring An RS-422 Terminal

2.7.2 TERMINAL SETUP RS-422

The terminal, in default mode, is programmed to operate RS-422 at 9600 baud. To insure that proper default settings are on the terminal, follow the procedures listed below.

1. Press the CONTROL and SETUP (ICM) keys simultaneously. This places the terminal in the setup mode.
2. Press the RIGHT arrow key ▸ until the highlighted box is over DEFAULT ALL.
3. Press the key labeled **F10.** The highlighted box appears over EXIT.
4. Press the RIGHT arrow ▸ key twice. SAVE ALL is highlighted.
5. Press the key labeled **F10** again.

The terminal is now ready for operation.

2.8 SUPERVISOR TERMINAL RS-232

2.8.1 -TERMINAL SET-UP RS-232

The programming of the terminal setup must be changed to convert it from RS-422 to RS-232. To convert, follow the instructions provided below.

1. Press the CONTROL and SETUP **(ICM)** keys simultaneously. The terminal enters the setup mode.
2. Press the key labeled F2. **PERSONALITY=OPT'S** TERM is highlighted.
3. Press DOWN arrow key twice. **DATA/PRINTER=MODEM/AUX** is highlighted.
4. Press the space bar. **DATA/PRINTER=AUX/MODEM** is highlighted.
5. Press **F10** key. The terminal setup menu appears with EXIT highlighted.
6. Press the RIGHT arrow ▸ key twice. SAVE ALL is highlighted.
7. Press the **F10** key.

The terminal is now ready to be connected to one of the RS-232 ports of the system.

2.8.2 WIRING THE TERMINAL TO THE MDF

The ISOETEC Terminal (p/n 440017) can be connected to one of the system's **I/O** ports to provide a programming terminal for ACD Supervisors. The system provides 4 I/O ports on the main distribution frame (MDF) . Ports 1 and 2 are configured for an RS-232 type connection. Serial devices connected to either of these ports may be located up to 50 feet from the MDF. Ports 1 and 2 default to 9600 baud.

This section details the connection of the terminal to either port 1 or 2:

1. The RS-232 ports can be accessed on the main distribution frame using one of two different methods of connection. Either a DB-25 type connector can be connected directly to the MDF, or a cable can be connected to the pins of the "66 B" type block. As the type of cabling and connections can vary with this type of operation, the pin to pin connections are listed in the following table. It is left to the discretion of the installer what type of connections to make.

From the MDF pins (port 1 or 2)	From the MDF connector (DB-25 type)	To CRT Terminal Connector
pin 1	pin 2	pin 3
pin 2	pin 3	pin 2
pin 3	pin 5	no connection
pin 4	pin 6	no connection
pin 5	pin 7	pin 7
pin 6	pin 20	pin 6

2. Make the connection between the MDF using either connection outlined above, and the AUX connector on the back of the terminal.

The terminal is now wired, and ready to be turned on.

Turn the power switch located on the right side of the terminal to the on position.

The screen of the terminal should first appear reverse video with all stars, and then appear blank with a cursor in the upper left comer of the screen.

NOTE: It is very important to place the RS-232 cable into the AUX jack located on the back of the terminal. If it is accidentally placed into the MODEM port, the terminal may appear to function, however, the terminal does not transmit proper characters.

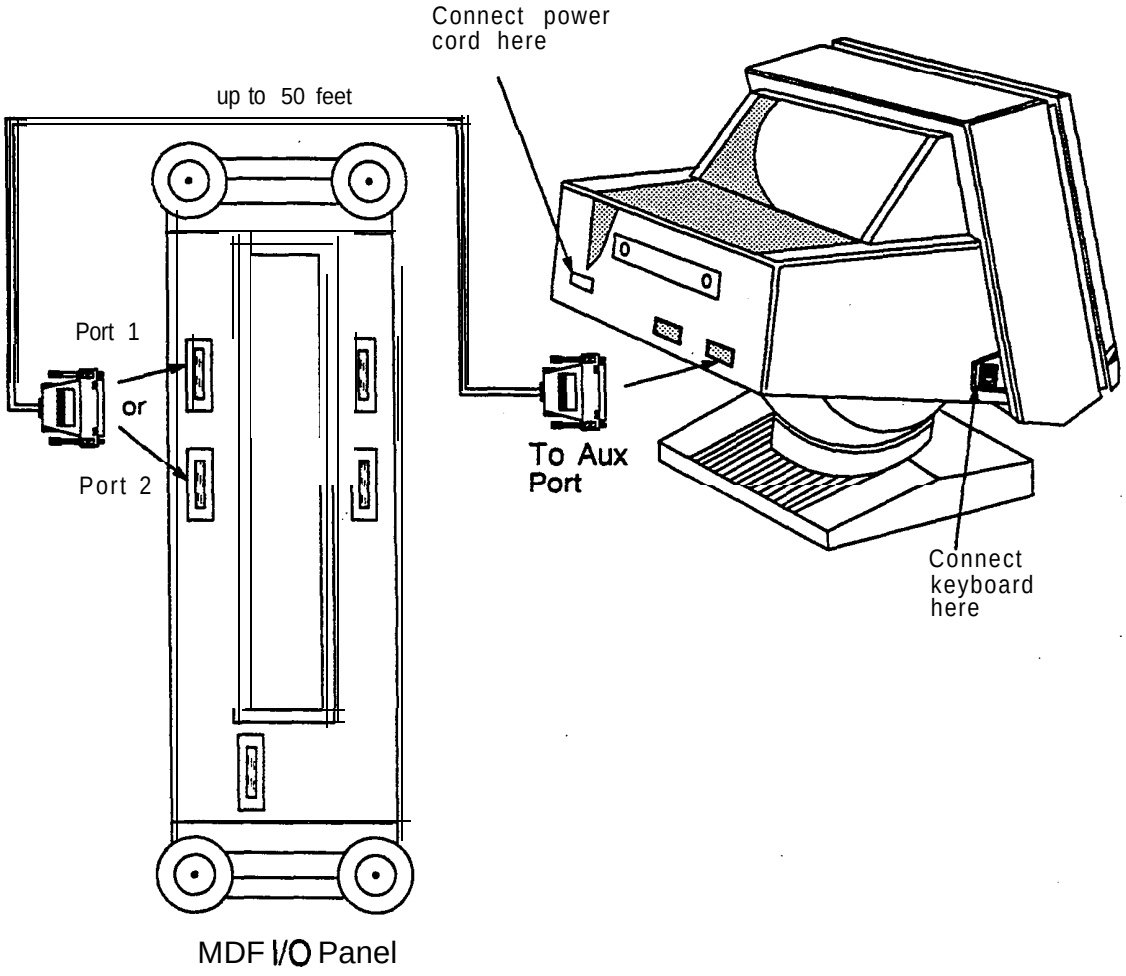


Figure 2-1 Wiring An RS-232 Terminal

2.9 SUPERVISOR TERMINAL – LSI DCM

In addition to the I/O ports provided on the MDF, the use of the LSI Data Control Module (p/n 15340) adds six asynchronous I/O ports to the system. These additional ports are accessed using the Data Bus of the system. **DDIs,** or Display phones, can be wired to CRT terminals, or printers, and programmed to use one of these six I/O ports.

The six additional I/O ports (5 through **10)** can be used for programming, terminals, printers, or ACD Supervisor's terminals. The maximum number of printers supported by the system is still four.

Software version 4.51 is the lowest software level that will support the use of the ***LSI*** *DCM* card. The LSI DCM cannot be used in the 108 port cabinet.

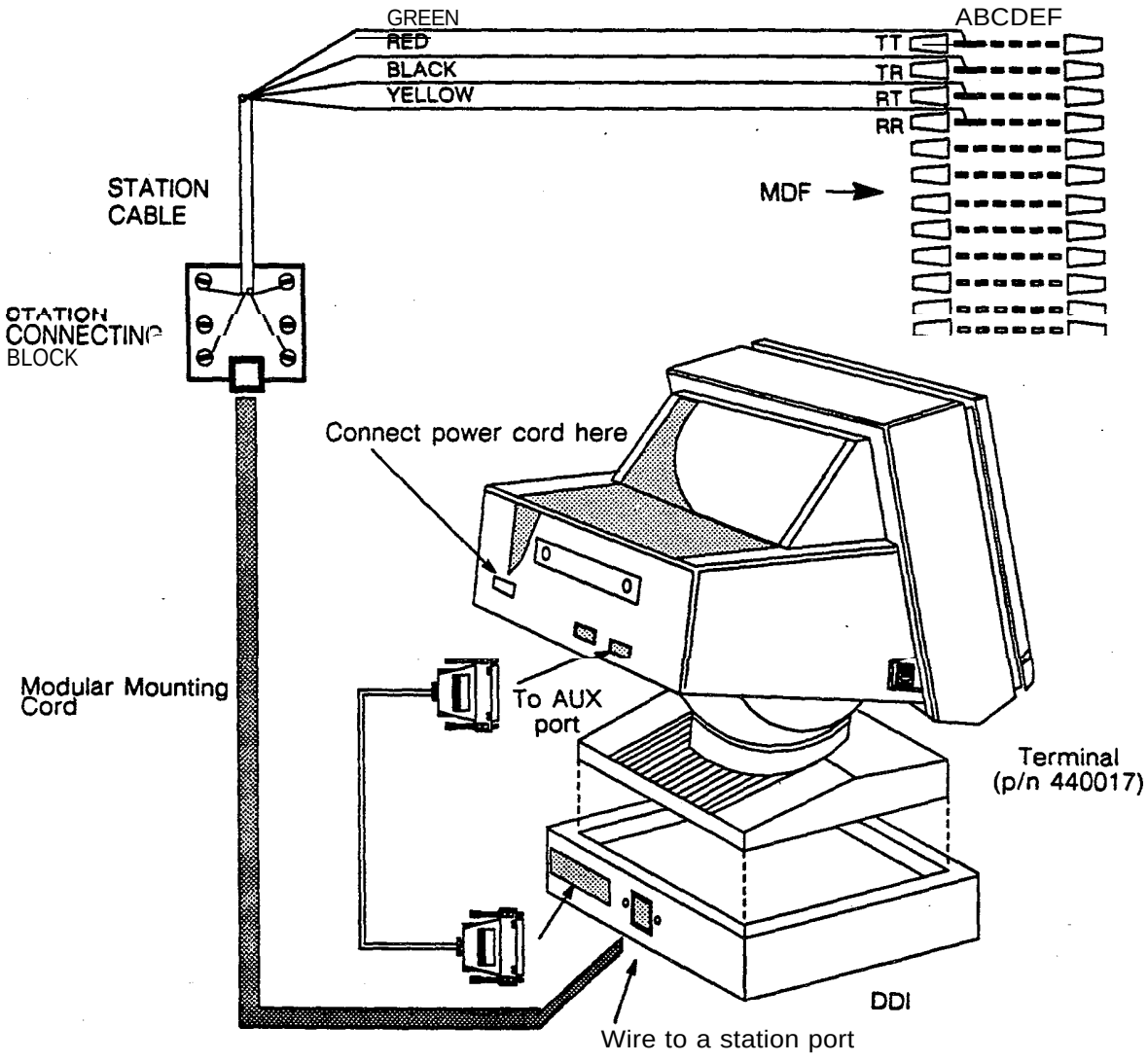


Figure 2-12 Wiring A Terminal To A DDI

2.9.1 INSTALLATION

The ***LSI DCM*** card is installed in card slot 522. If a Data Control Module is already installed in this slot, remove it. The LSI DCM provides the DCM functions. The LSI DCM card must be installed and removed only when the system power is turned off.

After the DCM card has been installed, when *the Main Menu* is accessed, the letters DCM 3 appear next to "Options" in the upper right comer. If a regular DCM installed, the letters DCM 0, or DCM 1, appear next to the word "Options".

For each of the I/O ports to be used, a DDI, or Display phone, should be installed onto a station port. Information on how to install a DDI, or Display phone, can be found *in the Installation,* and *Cabling* **sections** of *the Technical Manual.* A printer, terminal, or computer can then be wired to the DDI, or Display phone. The DDI, or Display phone, is programmed to work with one of the additional **I/O** ports using the *System Programming* screen. Once the DDI, or Display phone, is designated as an **I/O** port, *Data* calls cannot be made to or from it..

The DDI and Display phone can be located up to 1200 feet from the cabinet. The RS-232 cable that is connected from the DDI, or Display phone, to the terminal, printer, or other RS-232 device, must be less than 50 feet in length.

Different RS-232 cables will be required depending on the device being connected. When interfacing with the ISOETEC terminal (p/n **440017),** use a cable with pins 2 and 3 reversed, and pin 7 straight through. Do not use pin 20 on the terminal side of the cable or terminal lock up problems will occur. Connect this cable to the AUX port of the terminal.

2.9.2 TERMINAL SET-UP RS-232

The programming of the terminal setup must be changed to convert it from RS-422 to RS-232. To convert, follow the instructions provided in section **2.8.1.**

2.9.3 PROGRAMMING

The System Programming screen (B screen) is used to connect *Data ports* to the 6 **I/O** ports provided by the LSI DCM. This programming is done in the *Port* area of the *System Programming* screen, and not with the Data Menu (T screen). See Figure 2-14.

> *NOTE: When programming the ports provided by the LSZ DCM it is important to enter all the parameters for the I/O port, such as BAUD RATE, PARITY, and PRINTER information PRIOR to entering the data port number.*

To program a data port to access one of the **I/O** ports as a programming terminal, or ACD supervisor's terminal:

1. Press the letter B from the *Main Menu* to enter the *System Programming* screen.
2. Press the letter P to enter into *the Port* area of *the System Programming* screen.
3. Press the letter I to increment to one of the I/O port numbers 5 to 10. **I/O** port numbers 5 - 10 are the ports which are supported by the LSI DCM.
4. Press the RETURN key to reach *Speed.*
5. Press the I key until the desired baud rate appears.
6. Press the TAB key to move the cursor to *Protocol.*
7. Press the I key until the desired protocol appears.

8. Press P.

9. Press the RETURN key until the cursor reaches *Data Prt___*.

10. Enter the 3-digit data port number (001 to 228) of the DDI, or Display phone, you would like to assign to this I/O port. Once the data port number is entered, the "N" next to installed will change to a "Y" for Yes installed. The data port is the hardware port the DDI. or Display phone, is connected to. The port number can be determined from *the System Configuration* programming screen.

This port is now active as a programming terminal. Repeat this procedure for each port desired. To remove the port, enter a 000 for *Data Prt. This* will *change the* **"Y"** next to installed to "N" for No.

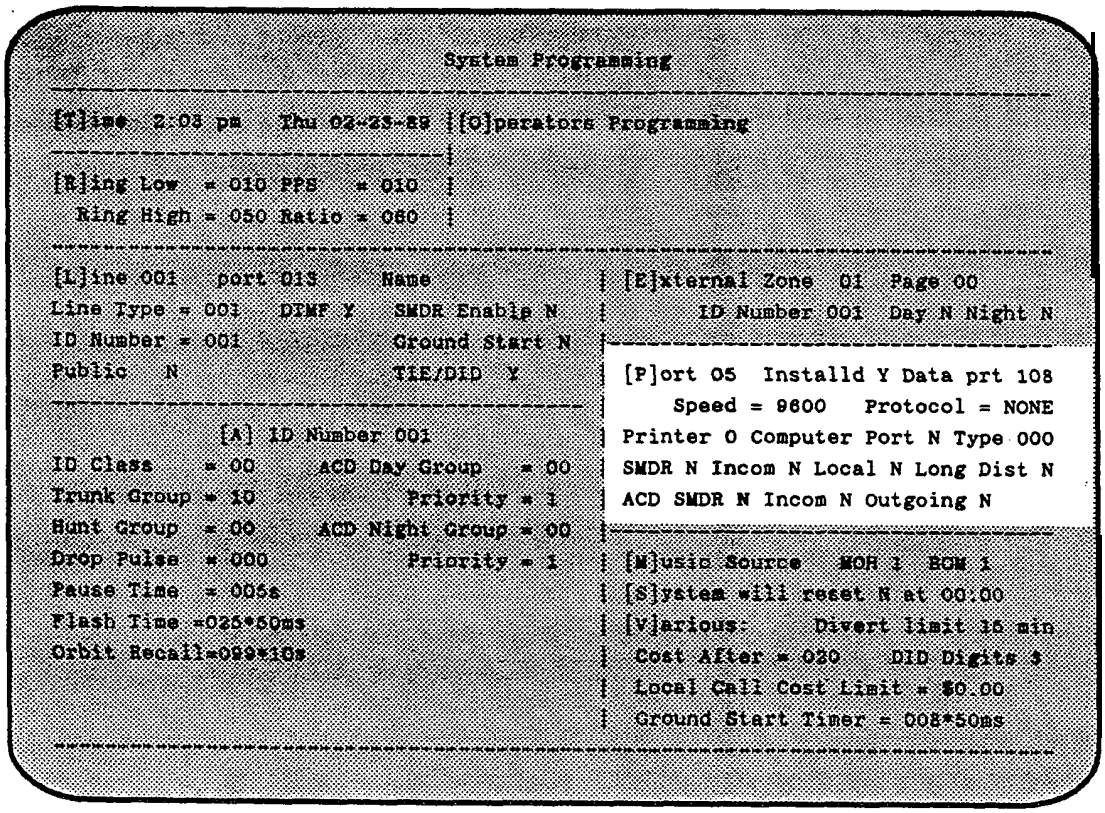


Figure 2-13 System Programming Screen

2.10 PRINTER FOR ACD REPORTS

Some ACD applications will require printed ACD Statistics. The system has 4 **I/O** ports (two RS-422 and two **RS-232)** that can be configured for terminal, and printer applications.

In addition to the I/O ports provided on the MDF, the use of the **LSI** Data Control Module **(p/n** 15340) adds six asynchronous I/O ports to the system. **DDIs** can be wired to printers and programmed to use one of these six **I/O** ports.

The OKIDATA@ printer (EISI p/n 440136) is recommended for use with the system. This is a serial printer, which is factory set to operate at 1200 baud. To connect this printer, an RS-232 cable with pins **2,3,7,and** 20 wired straight through is needed. This cable should be connected from port 1 or 2 on the **I/O** panel to the DB-25 connector located on the back of the printer.

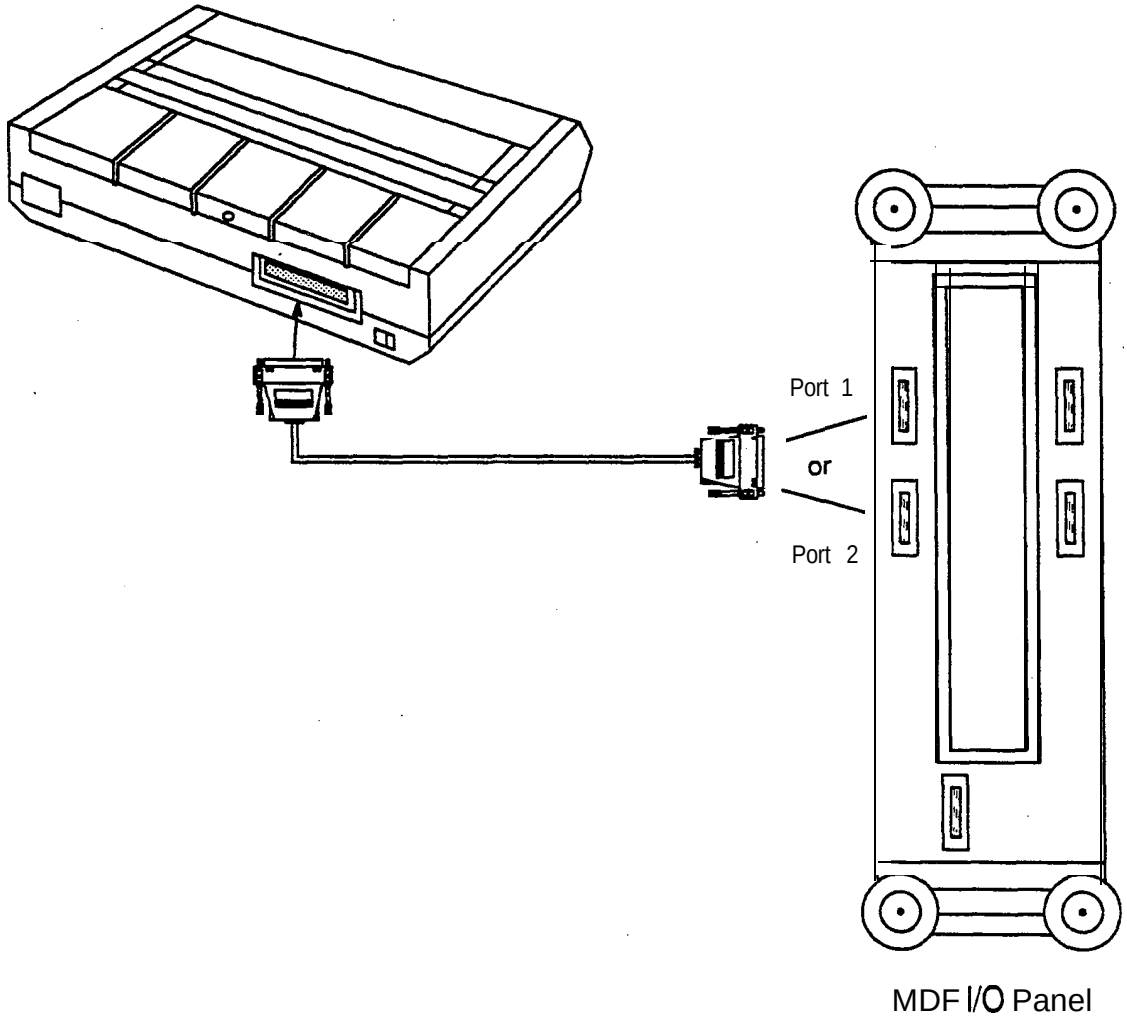


Figure 2– 14 Printer Installation

2.11 AEC DISCONNECT DETECTION UNIT

The Automation Electronics Corp. Detection Disconnect Unit (EISI p/n 440142) is a device which detects tone (dial tone, reorder tone, etc.), and upon detection, opens the loop of a line for one second. Tones in the range of 340 to 640 Hz can be detected. Each unit can be connected to 12 loop start lines.

The unit would typically be used in connections between a system and a PBX, Centrex, or other type of line that does not provide a disconnect signal of its own.

A disconnect signal is important when using either of the Report feature packages. The system must know when the incoming-caller has hung up. The unit can also be used to ensure disconnection after a DISA or unsupervised conference call.

AEC has developed special software for ISOETEC to simplify the installation and enhance the product's performance. The unit has the ability to learn the cadence of the tone used to indicate disconnection. To enable this option, set all switches to the off position (see table 5.1 in the AEC installation manual),

If the system power is battery backed, the AEC unit should also be battery backed.

Refer to the manufacturer's installation manual for mounting and switch options.

NOTE:. The ACD feature should not be installed in conjunction with a PBX that does not provide either a disconnect signal, or some tone on disconnect.

WIRING

LINE NUMBER	DESIGNATION	INSIDE (RJ-71) TO	OUTSIDE SYSTEM
1	TIP	WHT/BLU	WHT/BLU
	spare	BLU/WHT	BLU/WHT
1	RING	WHT/ORG	WHT/ORG
	spare	ORG/WHT	ORG/WHT
2	TIP	WHT/GRN	WHT/GRN
	spare	GRN/WHT	GRN/WHT
2	RING	WHT/BRN	WHT/BRN
	spare	BRN/WHT	BRN/WHT
3	TIP	WHT/SLT	WHT/SLT
	spare	SLT/WHT	SLT/WHT
3	RING	RED/BLU	RED/BLU
	spare	BLU/RED	BLU/RED
4	TIP	RED/ORG	RED/ORG
	spare	ORG/RED	ORG/RED
4	RING	RED/GRN	RED/GRN
	spare	GRN/RED	GRN/RED
5	TIP	RED/BRN	RED/BRN
	spare	BRN/RED	BRN/RED
5	RING	RED/S LT	RED/SLT
	spare	SLT/RED	SLT/RED
6	TIP	BLWBLU	BLK/BLU
	spare	BLU/BLK	BLU/BLK
6	RING	BLK/ORG	BLWORG
	spare	ORG/BLK	ORG/BLK
12	TIP	VIO/GRN	VIO/GRN
	spare	GRNMO	GRNMO
12	RING	VIO/BRN	VIO/BRN
	spare	BRNMO	BRN/VIO

Section 3
Programming Information

3.1 INTRODUCTION

The ISOETEC Digital System is a stored-program switching system. The operating system is stored in EPROM, and configuration information is stored in battery backed RAM.

The microprocessor-controlled system is designed to be programmed either on-site, or remotely. The menu-driven program allows each system to be customized for individual customer requirements. An external CRT and keyboard are used to enter the configuration information. The system is also equipped with a built-in 300/1200 baud, auto-answer MODEM to provide off-site programming and maintenance capabilities. Any function that can be accomplished by the on-site programming terminals can be accomplished remotely through the MODEM.

3.2 CONNECTING THE PROGRAMMING TERMINAL

System programming can be accomplished from any one of the input/output ports, including the port used as the operator position. Programming is accomplished by means of menu-driven programming screens. Four types of terminals are supported. These are:

1. ISOETEC (The ISOETEC terminal and the ISOETEC Integrated terminal are supported with this terminal type).
2. QUME (109)
3. IBM/compatible
4. Wyse (WYSE 50, NOT the Integrated terminal).

Connect the terminal to one of the input/output ports using the wiring instructions found *in the Cabling and Cross Connection* section of the *ISOETEC Digital System Technical Manual.* The default baud rate for the ports is 9600 baud.

3.3 ACCESSING THE PROGRAMMING SCREENS

Once the programming terminal has been connected, the programming screens may be accessed. To begin:

1. Press the ESCAPE key.

The system will prompt for a password. Access to the programming screens is protected by eight levels of passwords. Each level of password progressively allows more access to programming. Thus, an operator may be provided with a password to level 1 to access programming of the directory information, but prevented from making any changes to system programming. Level 8 allows the most access, and is used for all programming and maintenance functions.

2. Enter the password of the level to be accessed.
3. Press the RETURN key. If the correct password has been entered, *the Main Menu* will appear.
4. Enter the letter corresponding to the screen for the function to be performed. For example, to move to the *Station Programming* screen, press the A key.

To return to the *Main Menu* from any programming screen, press the ESCAPE key.

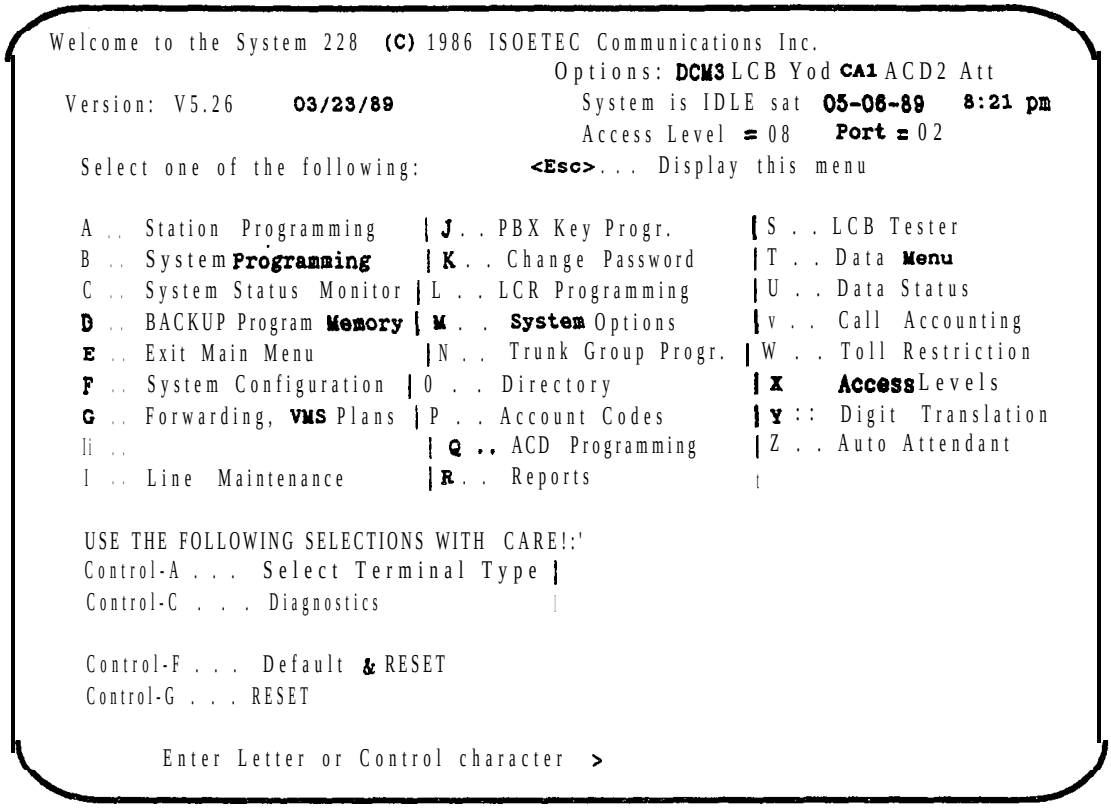


Figure 3-l Main Menu

The upper right comer of *the Main Menu* lists which options are installed in the system. The following abbreviations are used to indicate the installed options:

DCMO - The standard Data Control Module is installed.
DCM1 - The standard Data Control Module is installed.
DCM3 - The LSI version of the Data Control Module is installed.
LCR - Least Cost Routing is installed.
Mod - Memory Module Ill is installed.
CA1 - Call Accounting Reports Option I is installed.
CA2 - Call Accounting Reports Option Ii is installed (cannot be installed with ACD).
ACDO - Basic ACD is installed.
ACD1 - Dynamic ACD is installed.
ACD2 - Advanced ACD is installed.
ACD3 - Custom ACD is installed.
Att - Automated Attendant is installed.
Dir - Dial By Name
Sil - Silent Monitor
VMS - Voice Message System integration

3.4 ACCESS LEVEL PROGRAMMING

Access to the various programming screens is controlled by 8 programmable passwords. Software versions 2.00 and above have an enhancement that allows the programmer to define which passwords allow access to the different programming screens. This definition is accomplished on the *Access Levels* programming screen. The *Access* Levels programming screen itself can only be programmed from access level 8. The password protection scheme is arranged such that any screen that can be accessed by a particular level password can also be accessed by passwords accessing higher levels. For example, if *the* ***Station*** *Programming* screen is only to be accessed by a programmer using access level 6, it can also be **accessed** by a programmer using access levels 7 or 8.

3.4.1 WHAT TO PROGRAM

The Access Levels programming and default access levels are listed below. The screen is divided into 4 major areas:

1. Access programming for the System menus
2. Access programming for the *Reports* menus
3. Access programming for Call *Accounting Reports Option* menu,
4. Access programming for the ***ACD*** menus

Each major area lists the screens associated with it, and the access level required to reach it. The access level for each screen can be changed to suit the requirements of the individual installation.

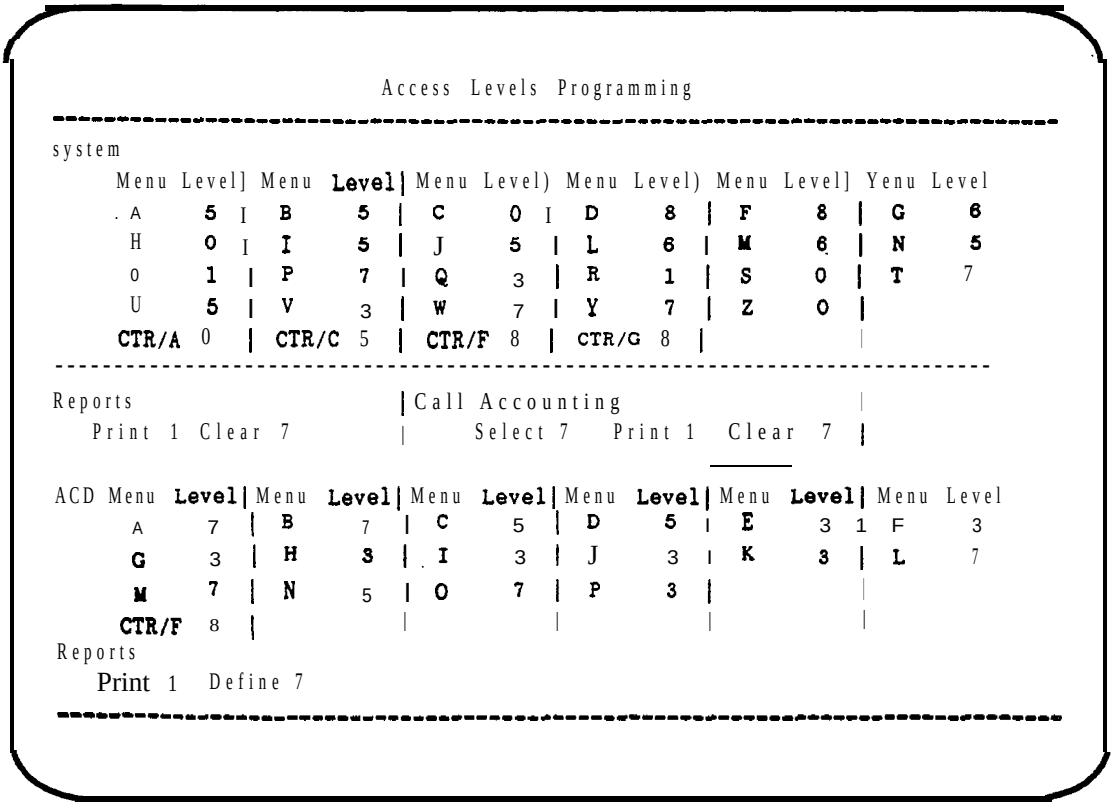


Figure 3-2 Access Level Programming Screen

3.4.2 HOW TO PROGRAM

The Access ***Levels*** programming screen can only be reached when using the password assigned to access level 8 (the manager's password).

If not already on the *Access Levels* programming screen, from the *Main Menu,* press the X key. The *Access* Levels programming screen appears with the cursor at *the* access level for *the A - Station Programming* screen.

1. Enter the number of the access level desired for the A programming screen.
2. Press the RETURN key.
3. Press the RETURN key a second time to move the cursor to the next entry position.
4. Continue entering the access levels for the different programming screens, pressing the RETURN key after each entry.

The RETURN key is used to advance the cursor to the next entry to be made. The directional arrow keys (up, down, left, and right) can also be used to move the cursor to the desired letter.

> *NOTE: When upgrading a system that was programmed with a previously released software version, note that the* Access *Levels programming screen may contain random information. This random information must be cleared before attempting access to the different programmed screens. To clear the information, just enter an appropriate access level for every programming screen.*

3.5CHANGINGPASSWORDS

3.5.1 INTRODUCTION

Access to the various programming screens is controlled by eight programmable passwords. In software versions previous to 2.00, each password could only be changed from within its own access level. Software versions 2.00 and above change this scheme such that all passwords must be changed at access level 8. The password to access level 8 must be known to change passwords.

3.5.2 HOW TO CHANGE PASSWORDS

Enter system programming by typing the level 8 password at the "ENTER PASSWORD >" prompt and press the RETURN key. The programming *Main Menu* appears.

1. Press the K key. The system prompts for the manager's password. The manager's password is the password to access level 8.
2. Enter the level 8 password, and press the RETURN key. *The Password Definition* screen. appears.
3. Using the RETURN key, or the UP and DOWN arrow keys, move the cursor to the password to be changed.
4. Enter the new password. The screen will not echo the characters typed.
5. Press the RETURN key. The system prompts for the password again for verification.
6. Enter the new password again exactly as before.
7. Press the RETURN key. If the two entries agree, the screen displays "Password was changed." If the two entries do not agree, the screen displays "Password was NOT changed."

```
Password  Definition
---------------------

Level
1     : . . . . . . . .
2     : . . . . . . . .
3     :  Password  was  changed
4     : . . . . . . . .
5     : . . . . . . . .
6     : . . . . . . . .
7     : . . . . . . . .
(Manager)  8     : . . . . . . . .
```

8. Press the ESCAPE key to leave the programming screen, and return to the Main *Menu.*

3.5.3 DEFAULT PASSWORDS

The default passwords for each level of system access are:

	Password
Access level 1	LEVEL1
Access level 2	LEVEL2
Access level 3	LEVEL3
Access level 4	LEVEL4
Access level 5	LEVEL5
Access level 6	LEVEL6
Access level 7	LEVEL7
Access level 8	LEVEL8

3.6 CHECKING THE ACD PACKAGE

Once ACD is activated, test to ensure the proper package is installed. Remember that there are 4 possible ACD packages. Press Q from the *Main Menu.* If the *ACD Main Menu* appears, one of the 4 packages has been loaded. Depending on which package is installed, the *ACD Main Menu* appears as follows:

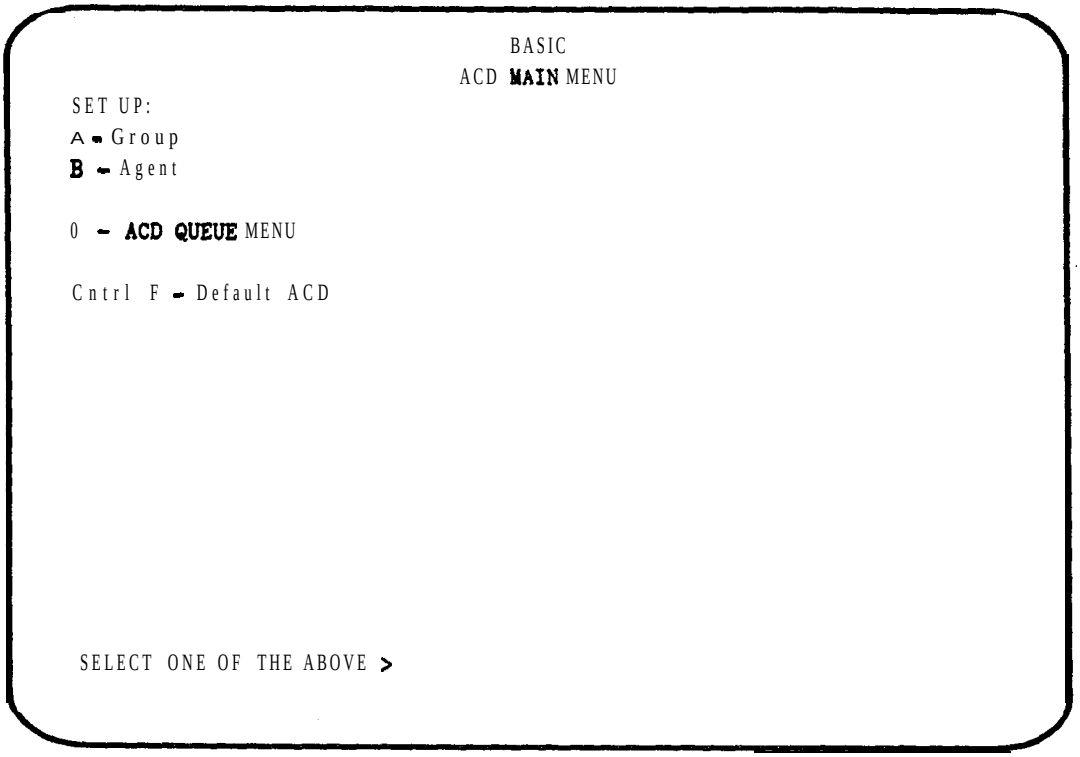


Figure 3-3 Basic ACD Main Menu

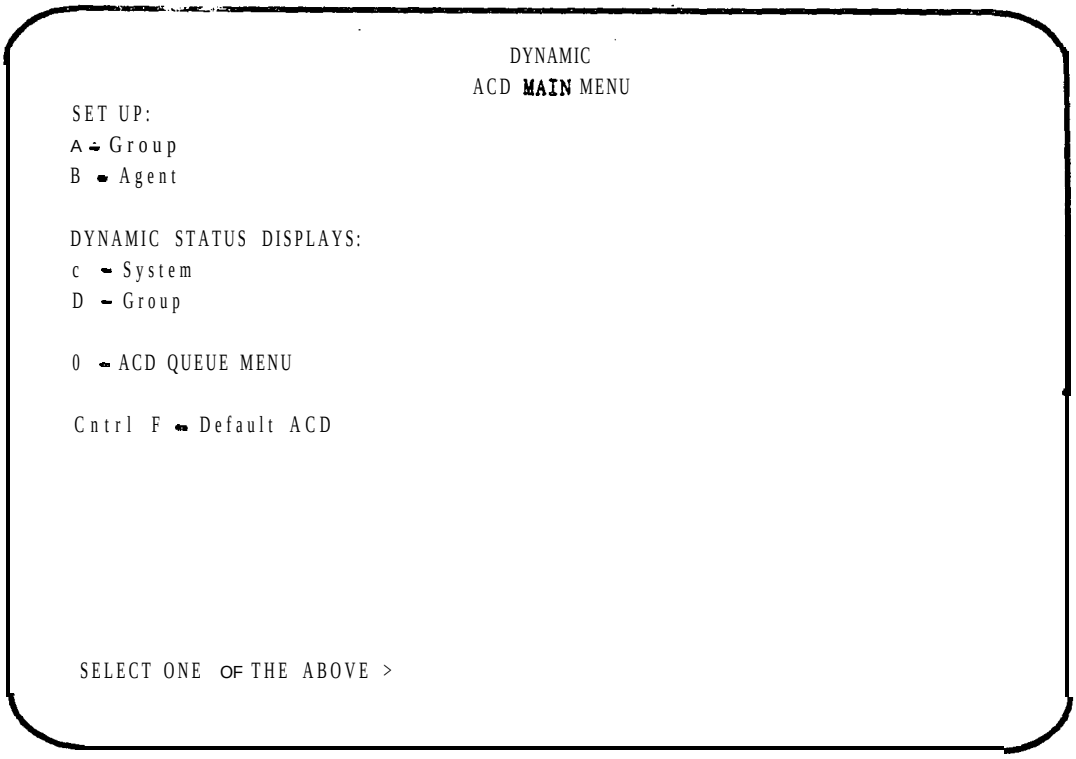


Figure 3-4 Dynamic ACD Main Menu

```
                        ACD MAIN MENU
SET UP:                              I I - CALL QUALIFICATION REPORTS:
A - Group                            |     1. Cumulative
B - Agent                            |     2. Daily
                                     | J - ACD GROUP SUMMARY REPORTS:
DYNAMIC STATUS DISPLAYS:             |     1. Cumulative
C - system                           |     2. Daily
D - Group                            | K - SYSTEM SUMMARY REPORTS
                                     |     1. Cumulative
E[1-4/21-24] - AGNT ACTIVITY REPORTS:|     2. Daily
                                     |
                                     | L - PRINT SCHEDULER
F[1/21] - GRP ACTIVITY REPORTS:      |
                                     | M - CLEAR REPORTS
                                     |
G[1/21] - SYS ACTIVITY BY GROUP:     | O - ACD QUEUE MENU
                                     |
                                     | Cntrl F - Default ACD
H[1/21] - SYSTEM ACTIVITY:           |
                                     |
                                     |
                                     |
SELECT ONE OF THE ABOVE >
```

Figure 3-5 Advanced ACD Main Menu

```
                        ACD MAIN MENU
SET UP:                              | I - CALL QUALIFICATION REPORTS:
A - Group                            |     1. Cumulative
B - Agent                            |     2. Daily
                                     | J - ACD GROUP SUMMARY REPORTS
DYNAHIC STATUS DISPLAYS:             |     1. Cumulative
C - System                           |     2. Daily
D - Group                            | K - SYSTEM SUMMARY REPORTS
                                     |     1. Cumulative
E [1-40] - AGENT ACTIVITY REPORTS:   |     2. Daily
                                     |
                                     | L - PRINT SCHEDULER
F [1-40] - GROUP ACTIVITY REPORTS:   |
                                     | M - CLEAR REPORTS
                                     |
G [1-40] - SYSTEM ACTIVITY BY GROUP: | N - SYSTEM PERFORMANCE
                                     |
                                     | 0 - ACD QUEUE MENU
H [1-40] - SYSTEM ACTIVITY:          |
                                     | P - AGENT SUMMARY REPORT
                                     |     1. Cumulative
                                     |     2. Daily
SELECT ONE OF THE ABOVE >            | Cntrl F - Default ACD
```

Figure 3-6 Custom ACD Main Menu

3.6.1 IN CASE OF TROUBLE

Symptom

The *ACD* Main *Menu* screen cannot be reached.

Possible Causes

Is the Memory Module III installed?

Is the basic system running?

Has the package been activated by an authorized service center?

Has the proper password been used?

The information above has been provided to help identify which package is installed in the system, and to aid in insuring that all hardware and software is working properly. How to program these different packages, and their specifics will be discussed in detail in the following sections.

Section 4
Basic ACD

4.1 INTRODUCTION

Basic ACD is the operational part of ACD. This feature package contains the call routing and handling capabilities of *Automatic Call* Distribution without the real time displays, or statistical reports. This section provides the information necessary to setup, and program Basic ACD.

ACD provides the capability to automatically route incoming calls to an intended call handler (an ACD AGENT). The basic functions of ACD are:

ROUTE — Incoming calls to an available *AGENT* in such a manner that calls are distributed evenly among agents. Each incoming call is presented to the agent that has been available the longest. Normally, calls are handled on a first in, first answered basis. However, incoming calls can be assigned priorities to circumvent this.

HANDLE — Incoming calls when all designated agents are busy. This could include answering incoming calls, and connecting them to a recorded message. The call could then be placed on hold and connected to music until an agent becomes available to answer the call. Or, calls could be routed to a secondary group of agents, or a particular extension within the system.

The enhanced ACD packages allow dynamic observation of the system, and provide statistical information about *Agent. ACD group,* and *System* performance.

4.2 BASIC COMPONENTS

The ACD feature has several components:

INCOMING LINES — The system can have a maximum of 216 trunks (allowing for at least 12 stations). These lines may be local Central Office trunks, Incoming WATS lines (800 numbers), Foreign Exchange lines, or Direct Inward Dial lines.

AGENT POSITIONS — Agent positions are telephone extensions that have been programmed to be part of ACD. The telephone becomes an agent position when an ACD agent uses that extension to log into ACD. The system supports 200 ACD agents. The number of ACD positions depends on how your system has been configured .

RECORDER POSITIONS — One of the choices in handling calls when all agents are busy is to send the call to a recorded announcement. This is accomplished by connecting a recording/announcement device to one of the station ports.

SUPERVISOR POSITION — The ACD SUPERVISOR'S telephone can also be equipped with feature keys that may not be appropriate for an AGENT'S telephone.

4.3 DEFINITIONS

The following definitions are provided to help explain certain key words that are used throughout this section:

AGENT	A person assigned to answer a certain group of incoming lines.
SPLIT	A label given to a number of AGENTS designated to handle calls from specific INCOMING LINES.
SEQUENCE	The programmed manner in which a call is handled when an agent in a particular SPLIT is not available to answer the incoming call.
QUEUE	The sequence that the calls are directed to when all agents are busy.
ACD TRUNK GROUP	Incoming trunks which are arranged into groups and are defined to ring a particular ACD SPLIT.
ACD GROUP	The combination of incoming trunks, the agents assigned to handle the incoming calls, and the sequence of events followed when all agents in a particular split are busy. There are 15 ACD groups.
LOOK BACK OVERLFOW	Each ACD group has the ability to include backup SPLITS and their routing patterns.
LOG ON/OFF	The process an agent uses to inform the system that ACD calls can be routed to the telephone the AGENT is using.
FEATURE KEYS	The programmable buttons on the telephones.
ACD SUPERVISOR	The person responsible for the moment to moment operation of one or more ACD GROUPS. The ACD supervisor monitors call activity, aids agents with difficult calls, and assigns agents to SPLITS as needed.
ACD MANAGER	The person responsible for the overall performance of the ACD system. The ACD Manager programs the ACD features of the system, and reviews the statistical reports.
SYSTEM MANAGER	The person responsible for the programming and operation of the entire telephone system.

4.4 BASIC OPERATION

Understanding how the system operates may help in the design and programming of your ACD. When the system detects an incoming trunk call, it determines which ACD SPLIT to route the call to. The call then rings on the AGENT POSITION that has been available the longest. If the call is not answered, that AGENT POSITION is made unavailable for a period of time, and the call rings at the next AGENT POSITION.

An ACD AGENT can be assigned to answer calls from two different splits. One SPLIT is considered the agent's PRIMARY SPLIT, the other is considered the agent's SECONDARY SPLIT. Calls are sent first to agents whose PRIMARY SPLIT is the same as the incoming call's ACD TRUNK GROUP. If an available agent is not found, the system attempts to send the call to an agent whose SECONDARY SPLIT is the same as the incoming call's ACD TRUNK GROUP.

If NO agents are available in the designated SPLIT, the system carries out the instructions contained in the QUEUE SEQUENCE for that particular ACD GROUP. The SEQUENCE contains 10 instruction boxes. A command is entered into each of the boxes to determine what to do with the call until an agent is available. The following commands are available for each instruction box:

DELAY from 1 to 999 seconds before continuing to the next instruction box.

CONNECT the call to MUSIC for 1 to 999 seconds.

CONNECT the call to a RECORDING (1 through 36).

GOT0 a designated instruction box.

RE-ROUTE the call to an extension number.

RE-ROUTE the call to another ACD GROUP.

RE-ROUTE the call to an outside telephone number.

RE-ROUTE the call to a STATION HUNT GROUP.

RELEASE (hang up) the call.

4.5 INITIAL PLANNING

Determine which incoming lines are to be directed to ACD, and which lines are to be answered by which SPLIT. Incoming lines can be programmed to a different SPLIT when the system is in the NIGHT mode.

Determine which of the system's extensions are to be a part of ACD.

Determine how calls are to be handled when agents in a SPLIT are busy. A different SEQUENCE is possible for each ACD SPLIT. Each SEQUENCE can also be programmed differently for DAY and NIGHT mode.

Determine how many RECORDING DEVICES are needed. At least one recording is needed for each different message.

4.6 DEFAULTING ACD

After ACD has been loaded into the system, and before any programming, the memory used for ACD should be defaulted. This removes any random information that may be in ACD memory. This also removes any intentional programming, so use it with care.

From the programming *Main Menu,* press the *Q* key. The *ACD Main Menu* appears.

1. Press and hold down the CONTROL key. At the same time, press the F key. The DEFAULT screen appears. This only defaults the memory used for ACD and not the system configuration.
2. Press 0 and then K. (If you have changed your mind about defaulting ACD, press the ESCAPE key.)
3. Press the RETURN key twice. ACD is now ready for programming. *The ACD Main Menu* appears.

4.7 WHAT DO I HAVE TO PROGRAM TO MAKE ACD WORK?

INCOMING LINES	Must be programmed into ACD groups. This is accomplished with the *System Programming* screen (B-screen).
EXTENSIONS	Must be assigned certain feature keys for ACD. This is accomplished with the *Station Programming* screen (A-screen).
ACD SEQUENCE	Must be programmed for each ACD GROUP. This is accomplished with the *ACD Group Setup* programming screen (ACD A-screen).
ACD AGENTS	Must be programmed. This is accomplished with the *ACD Agent Setup* programming screen (ACD B-screen).

4.8 OPTIONAL PROGRAMMING

In addition to the programming required to make ACD operate, there are several programming screens than can be used with ACD to enhance its performance.

TRUNK GROUP PROGRAMMING	*The Trunk Group Programming* screen has several functions. Two of the functions are useful for ACD. The system can be placed in the NIGHT mode based on the time of day, and day of the week. Also, each ACD GROUP can be placed in the NIGHT SEQUENCE based on the time of day, and day of the week.
ACD QUEUE MENU	The ACD Queue menu also has several functions. The ACD feature has methods of informing you of how many calls are waiting to be answered. The RELAY SENSOR INTERFACE (RSI) can be programmed for a use with external lamps. The *ACD* Queue menu is used to program the flash rates, and how many waiting calls each rate represents. Another function of the menu is to adjust the priority of calls that have been waiting in QUEUE.
REMOTE PROGRAMMING	A built-in MODEM allows the system to be programmed from a remote location. The system is also equipped with a BACKUP utility which allows ACD programming and statistics to be saved on a personal computer.

4.9 SYSTEM PROGRAMMING SCREEN

The System Programming screen is used to assign incoming trunks to an ACD TRUNK GROUP, and to assign the trunk a priority. Lines which are to be handled by ACD MUST NOT be programmed to ring on extensions.

4.9.1 WHAT TO PROGRAM

Each line (trunk) to be used by ACD is assigned a Day Group (Split) and a Night Group (Split). This split is the group number (l-15) of the agents assigned to answer calls from this line. Determine the ACD group number to which lines are to be directed in the DAY mode and in the NIGHT mode, and enter this information for each line ID number.

Each line can also be given a Day and Night priority. When the system detects a ringing trunk programmed with an ACD Group number, the priority assigned to the line is checked. The call is then routed into the ACD group based on its priority. This is used to have desired lines routed to agent positions before other lines. A priority of 1 gives the line the highest priority, meaning it is routed to an agent before any lines with a

priority of 2, 3. or 4. A priority of 4 gives the line the lowest priority. Determine the priority for each line assigned to ACD for the DAY mode and the NIGHT mode.

NOTE: Calls transferred into ACD *are automatically assigned a priority of I, regardless of the priority assigned to the line in* System Programming.

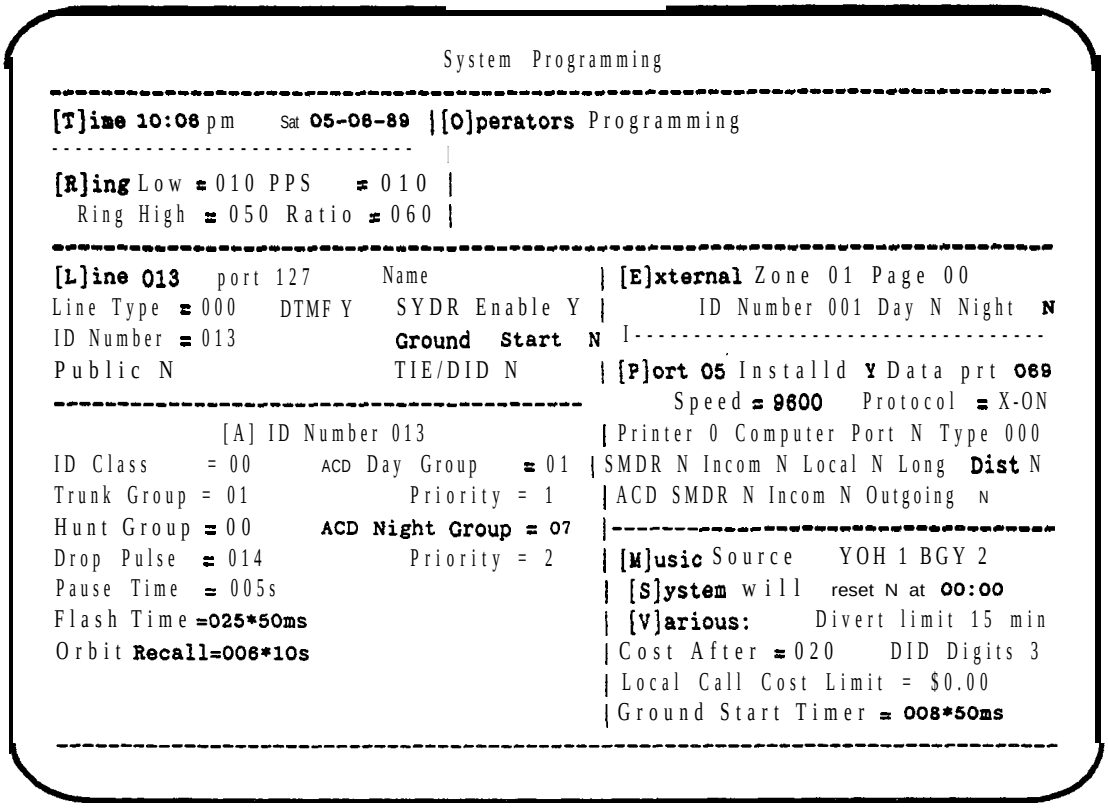


Figure 4-l System Programming Screen

There is an additional timer value on *the System Programming* screen that may need to be programmed. *This* timer, *Divert Limit,* has been added to limit the amount of time two trunks can stay connected together after being connected by *Call Divert, Call Forward, or ACD Forward To Speed Dial. The Divert Limit* is entered in minutes. Valid entries are from 0 to 99. The value of 0 indicates that there is no limit.

Determine the value of the *Divert Limit* timer, and enter this information in *the Various* area of the *System Programming* screen.

4.9.2 DEFAULT VALUES

ACD Day Group = 0
Day Priority = 1
ACD Night Group = 0
Night Priority = 1

Divert Limit = 15 minutes

4.9.3 HOW TO PROGRAM

The ESCAPE key can be pressed from any programming screen to return to *the Main Menu.*

1. From the *Main Menu,* press B to enter the System Programming screen. The screen appears with the cursor in the Gperator area.
2. Press A to enter into ID number area. The cursor appears on the ID number.
3. Press I to increment, or D to decrement through the line ID numbers, or enter the desired three digit ID number from 001 to 128, and press the RETURN key.
4. Once **the** proper line ID number has been entered, press the RETURN key until the cursor is next to *ACD Day Group.*
5. Enter the two digit ACD DAY GROUP number (0 1 to 15) for this line ID, and press the RETURN key.
6. Press the RETURN key again. The cursor moves *to Priority.*

   NOTE: A priority of 1 gives the line ID the highest priority, meaning if *will be answered before any lines programmed with a priority of 2, 3* ***or*** *4. Entering a 4 gives that line ID the lowest line priority.*

7. Enter a Day Priority from 1 to 4 for that particular line ID number, and press the RETURN key.
8. Press the RETURN key. The cursor moves to *ACD Night Group.*

   NOTE: A two digit group number from 01 to 15 can be entered. ACD Night Group will be referenced when the SYSTEM is entered into NIGHT mode.

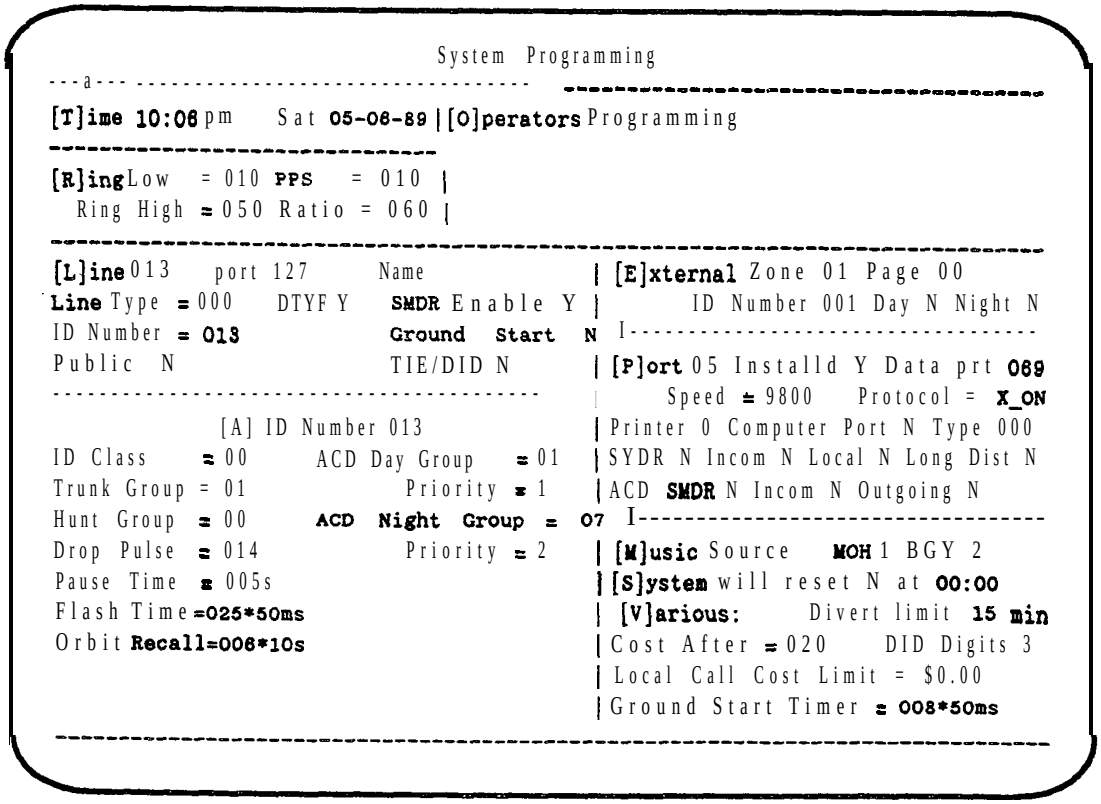


Figure 4-2 System Programming Screen

9. Enter the ACD Night Group number, and press the RETURN key.
10. Press the RETURN key again. The cursor moves to *Priority* for the night group.
11. Enter a Night Priority from 1 to 4 for that particular line ID number, and press the RETURN key.
12. Continue programming the remaining line IDs.
13. Press the V key. The cursor moves to the *Various* area.
14. Press the RETURN key until the cursor reaches *Divert Limit.*
15. Enter the value for the *Divert* Limit in minutes, and press the RETURN key.

4.10 STATIONPROGRAMMING

The Station Programming screen is used to assign ACD feature keys (buttons) to telephones, and assign recorder numbers to extensions connected to announcement devices.

Feature keys are assigned to telephones by programming each key with a code number representing the function of the key. Some keys may require additional programming, called a sub-code.

The following keys MUST be programmed on each telephone used for ACD:

4.10.1 TRUNK GROUP KEY

Stations access outgoing outside lines, and answer incoming outside line calls by use of the TRUNK GROUP key. The CO lines are arranged into groups in *System Programming.* Stations are then given the means to access a line in these groups through the use of the TRUNK GROUP key. Enter a TRUNK GROUP key for each Trunk Group that the station is permitted to use on the Station Programming Configuration sheets. The sub-code area of each key position is used to indicate the number of the Trunk Group that the key is to access. The key code for a TRUNK GROUP key is 300. The sub-codes range from 1 through 10 for the 10 trunk groups. Sub-code 20 is used when the TRUNK GROUP key is used to access the LEAST COST ROUTING feature. For example, if a station is to access trunk group 2, enter on the Station Programming Configuration sheet key code 300 with a sub-code of 2 into a key position, If a station is to have a LEAST COST ROUTING key, enter a key code of 300 with a sub-code of 20 on the Station Programming Configuration sheet into a key position. On the Station Programming Configuration sheet, the sub-code is entered immediately to the right of the key position. A station may be programmed for as many TRUNK GROUP keys as will fit on the station.

> *NOTE: It is recommended that a station have at least two TRUNK GROUP keys to allow for receiving a second call, or to make a conference.*

Normally, an incoming call will ring on the first available TRUNK GROUP key on the telephone beginning at the top left key. It will ring on that TRUNK GROUP key regardless of which TRUNK GROUP the key is programmed for. To force a call ringing a station from a trunk group to ring a key programmed for that trunk group, Group In should be programmed Y (yes). Stations which are programmed Y (yes) for *Group In* must have a TRUNK GROUP key for each trunk group that the station will receive calls from. *Group In is* found in *the Timers* area of the Station Programming screen.

> *NOTE: Single Line Telephones, 6-key Telephones, and any extensions serving as Recorders must be programmed with at least one, and preferably more, LCR keys even though the telephones do not physically have keys.*

4.10.2 DIRECT TRUNK APPEARANCE KEY

Any trunk connected to the system may appear as an individual trunk on any station. Enter the line number for the particular trunk (00 l-228) to be programmed in a key position on the Station Programming Configuration sheets. A station may have as many direct trunk appearances as will fit on the station.

4.10.3 ACD LOG KEY

The ACD LOG key is used to notify the system that an ACD agent has logged in, and which extension the agent is using. This key is necessary on any telephone that is to be used with Automatic Call Distribution. Enter the key code for the ACD **LOG** key (key code 822) in a key position for each station used with ACD on the Station Programming Configuration sheets. Only one ACD LOG key is needed per station.

> *NOTE: This key can also be programmed with* a *sub-code* ***(001-200)*** *which indicates an ACD agent number to shorten the log in sequence. A sub-code of 201 may also be used. This key, when pressed, will log the agent onto a pre-programmed ACD group, starting with agent number 200. Example:* ***The first*** *agent to log on will be agent 200, the second 199, the third 198, etc.*

The following keys, although not absolutely necessary, are STRONGLY suggested:

4.10.4 ACD QUALIFY KEY

A **3-digit** number can be entered at the end of each call to describesthe purpose or type of call. The ACD QUALIFY key **is** needed to enter this 3-digit number. Enter the key code for the ACD QUALIFY key (key code 825) in a key position for each desired station on the Station Programming Configuration sheets.

The QUALIFY key can also be programmed with a sub-code (001-200). This sub-code can be the actual QUALIFICATION CODE to be entered. Thus, the key has only to be pressed.

> *NOTE: Multiple qualifications of ACD calls (up to 12 qualifications) can be done for as long as the wrap up time permits. Once the wrap up time ends, qualifications CANNOT be entered.*

4.10.5 ACD UNAVAILABLE **KEY**

An ACD agent uses this key to advise the system not to send calls to the agent. Enter the key code for the ACD UNAVAILABLE key (key code 826) in a key position for each station on the Station Programming Configuration sheets. Only one ACD UNAVAILABLE key is needed per station.

4.10.6 ACD WRAP KEY

As an agent completes a call, there is a certain amount of time allotted to complete any paper work associated with the call. The WRAP UP key LED lights to indicate when an agent is in this wrap up time. If the agent does not require the full amount of time to complete this work, the WRAP key can be used to make the agent **available** for another call. Enter the key code for the WRAP key (key code 823) in a key position for each desired station. Only one WRAP key is needed per station.

> *NOTE: If* Forced Qualify *is enabled, the wrap time is extended until the call has been qualified.*

The following keys are optional:

4.10.7 RELEASE KEY

A RELEASE key is placed on a station that is using a HEADSET rather **than** the handset. The RELEASE key is used in place of the switch-hook. For each station needing a RELEASE key, enter the key code for a RELEASE key (key code 8 11) in a key position on the Station Programming Configuration sheets. Only one **RELEASE** key is to be programmed per station.

4.10.8 ACD HELP KEY

This key is used with Automatic Call Distribution to allow an agent to request help from a supervisor. When this key is used, a visual indication is given to the ACD supervisor via the system programming terminal. Enter the key code for the HELP key (key code 827) in a key position for each desired station. Only one HELP key is required per station.

NOTE: The use of this key is not supported in Basic ACD. It requires Dynamic, Advanced, or Custom ACD. .

4.10.9 ACD QUEUE KEY

The LED of the ACD QUEUE key is used to give a visual indication of the number of calls in queue waiting to be answered. Three different flash rates indicate one, two, or more calls waiting in queue. There is an ACD QUEUE key for each of the ACD groups. Which ACD group the key is for is specified in the sub-code (01-15). Enter the key code for the QUEUE key (key code 831) in a key position for each desired station.

4.10.10 BAD LINE KEY

The BAD LINE key is used in conjunction with Least Cost Routing to help identify bad lines within a facility or Other Common Carrier service. The use of the BAD LINE key will increment a counter in *the Line Utilization* screen of the Reports *Menu.* If a station is authorized to make such a report, enter the key code for the BAD LINE key (key code 8 19) into a key position on the Station Programming Configuration sheets. Only one BAD LINE key is used per station.

4.10.11 PARK KEY

The PARK key is used in applications where the 10 zones of the *Orbit* feature are not enough to meet the customers needs. The PARK key enables each trunk to be placed in its own park zone. When the PARK key is pressed, the call goes to a park zone that is equal to the trunk number. For example, line 53 would be sent to park zone 53. Although the feature can be used with 17-key, 28-key, and display telephones, it is only useful with display telephones. The park zone number (trunk number) must be known to retrieve the call. Enter the key code for the PARK key (key code 834) into a key position on the Station Programming Configuration sheets. Only one key is used per station.

4.10.12 SPLIT KEY

The SPLIT key allows a station user to place a call on hold, and switch to a waiting call. The user may then switch back and forth between the two calls with the use of one key. Enter the key code for a *SPLIT key* (key code 805) in a key position on the Station Programming Configuration sheets for each station.

4.10.13 STATION SPEED KEY

A STATION SPEED dial key allows a station to dial an outside number which is stored in station memory by pressing a single key. A station can store up to 30 speed dial numbers with up to 30 digits each. A key can be programmed to access any one of the 30 speed dial numbers. Enter the key code for a STATION SPEED key (key code 600) in a key position on the Station Programming Configuration sheets. To program the key to access the particular station speed number, enter the number (l-30) of the particular station speed number in the sub-code area for each key. A station may have as many STATION SPEED keys as will fit on the station.

4.10.14 SYSTEM SPEED KEY

A station may have a key programmed that will dial one of the outside numbers stored in system memory. The system can store up to 999 outside numbers with eleven digits in each number. Enter the key code for a SYSTEM SPEED key (key code 7+ the memory location of the stored number 001 through 999) in a key position on the Station Programming Configuration sheets. A station may have as many SYSTEM SPEED keys as will fit on the station.

In addition to the keys listed previously, the following keys may be placed on an ACD supervisor's telephone:

4.10.15 ACD NIGHT KEY

The ACD NIGHT key is used to place an individual ACD group into the NIGHT mode. While in the ACD NIGHT mode, calls to the ACD group follow the NIGHT program sequence for that group. The ACD NIGHT key does not place the system into the NIGHT mode, only the ACD group. The ACD NIGHT key does not affect trunks being directed to ACD when the system is in the NIGHT mode. Enter the key code for the ACD NIGHT key (key code 832) in a key position for each authorized station. This key also uses a sub-code (01-15) indicating which ACD group is to be placed in the NIGHT mode. One ACD NIGHT key can be used for each ACD group.

4.10.16 SILENT MONITOR KEY

The SILENT MONITOR key is used in applications where is it necessary to monitor the conversation on outside line calls of a particular station. This feature is similar to the BARGE IN feature, but does not need to be activated for each call made by the monitored station. Enter the'key code for the SILENT MONITOR key (key code 833) in a key position for each authorized station. Only one key is required per station.

The Remote Silent Monitor feature also requires the use of the SILENT MONITOR key.

This feature must be installed by an authorized service center using *the remote programming* feature before use.

NOTE: The use of this feature may *be prohibited in some states. Check state, and local laws before using this feature.*

4.10.17 UNI KEY

The **UNI** key can be programmed on a station to allow incoming calls, on a line that does not appear on a station, to reach the station. For each station to use the **UNI** key enter the code (key code 400, sub-code 011) in a key position on the Station Programming Configuration sheets. A station usually only needs one **UNI** key but any number may be programmed.

4.10.18 BARGE IN KEY

The BARGE IN key is provided to allow an authorized party to enter into an existing conversation. The stations which are being entered into must be programmed to allow such entry. If a station is to be permitted to enter a conversation in this manner, enter the key code of a BARGE IN key (key code 816) into a key position for that station on the Station Programming Configuration sheets. Only one BARGE IN key is used per station.

NOTE: The use of this feature may be prohibited in some states. Check slate, and local laws before using this feature.

4.10.19 ACD SUPERVISOR KEY

This key code (824) has been provided for future use, and has no meaning in present software versions.

This **key** may be placed on any telephone in the system:

4.10.20 FORWARD TO ACD

A key code has been designed to forward a station LO an ACD group. Any outside line call ringing, or transferred, to a station can be directed to an ACD group with the use of this key. The specific ACD group

(01-15) is designated with the sub-code of the key, Enter the key code for the FORWARD TO ACD key (key code 835) in a key position for each desired station.

NOTE: Internal calls to an extension are not *forwarded to the ACD Group.*

4.10.21 VMS (VOICE MESSAGE SYSTEM) KEY

The VMS key is used in conjunction with the VMS (Voice Message System). This key's LED will light to indicate that a message has been received for that station in the voice message system. Enter the key code for a VMS key (also called a MAIL key) (key code 830) in a key position on the Station Programming Configuration sheets. Only one VMS key may be programmed on a station.

4.10.22 DEFAULT KEY VALUES

Key 1 300 LCR	Key 2 300 LCR
Key 3 300 LCR	Key 4 300 LCR
Key 5 818 Tie Line	Key 6 818 Tie Line
Key 7 3001 DSS key	Key 8 3002 DSS key
Key 9 3003 DSS key	Key 10 3004 DSS key
Key 11 3005 DSS key	Key 12 3006 DSS key
Key 13 600 Station Speed 1	Key 14 600 Station Speed 2
Key 15 600 Station Speed 3	Key 16 600 Station Speed 4
Key 17 700 System Speed 1	Key 18 700 System Speed 2
Key 19 810 Page All Zones	Key 20 802 Night Answer
Key 21 803 DND	Key 22 809 Call Forward

4.10.23 HOW TO PROGRAM

If not already on the *Station Programming* screen, from the *Main Menu* press the A key. The ESCAPE key can be pressed from any programming screen to return to the *Main Menu.*

1. When the *Station Programming* screen is entered, the cursor is at the extension number position. The extension number of the station to be programmed can be entered. The I and D keys can be used to Increment and Decrement the extension number.
2. Enter the extension number of the station to be programmed.
3. Press the RETURN key.
4. Press the K key. The cursor moves to the *Keys* area.
5. Press the RETURN key to reach the key to be programmed.
6. Enter the desired key code, and press the RETURN key.
7. If the key requires a sub code, press the S key. The cursor moves to the sub-code section of the key.
8. Enter the sub-code for the key, and press the RETURN key.

NOTE: If a key position is to have the same value on all stations, the copy function may be used. Press the C key after entering the value of a key before moving on to the next key.

Table 4-l Key Code Summary

Key Codes	Sub-key Codes	Description
0001 - 0228	-	DIRECT TRUNK APPEARANCE
0300	1-10	TRUNK GROUP
0300	20	LCR
400	11	UNI
600	I-30	STATION SPEED
700	I-200	SYSTEM SPEED
800		NIGHT MODE
801		MIC MUTE
802		NIGHT ANSWER
803		DO NOT DISTURB
804		MESSAGE WAITING
805		SPLIT
806		ADD ON
807		CALL BACK
808	I-36	PICK U P
809	1-228	CALL FORWARD
810	60-69	PAGE
811		RELEASE
812		PATCH
813		ACCOUNT
814		SAVE/REPEAT
815	I-40	PBX
816		BARGE IN
817		not used
818		ICM
819		BAD LINE
820		SERIAL
821		IN/OUT
822	I-201	ACD LOG
823		ACD WRAP UP
824		ACD SUPERVISOR (future use)
825	I-200	ACD QUALIFY
826		ACD UNAVAILABLE
827		ACD HELP
828	1-228	DATA HOT LINE
829		DATA ON/OFF
830		VMS
831	1-15	ACD QUEUE
832	1-15	ACD NIGHT
833		SILENT MONITOR
834		PARK
835	1-15	FORWARD TO ACD
836		HANDSET BARGE IN
837		DND OVERRIDE
838		UNSUPERVISED CONFERENCE
901 - 936	I-201	RINGING GROUP PICK UP
3001 - 3999 *	0000	DIRECT STATION SELECTION *
3001 - 3999 *	101-148	CALL COVERAGE (PILOT) *
7001 - 7999		SYSTEM SPEED

* Where 3 is the leading digit for extension numbers. The leading digit for the key code is the same as the leading digit for the extension numbers.

9. Press the RETURN key to advance to the next key.

Continue programming the remaining keys. Remember to enter the sub-codes for the keys that require them.

> *NOTE: Program only those keys that appear on the station to be programmed, enter a key code of zero for the remainder. That is, for a digital 28 key phone, program 22 keys. For the digital display phone, program 20 keys, etc.*

The RETURN key will move the cursor from key to key. The TAB key is used to move the cursor between the two columns. The UP and DOWN arrow keys may also be used to move the cursor.

The LEFT and RIGHT arrow keys may be used to scroll the key code HELP menu at the top of the KEY area.

Press the E key to change the extension number. The cursor will move to the top left corner of the screen. Enter the new extension number to be programmed. Press the RETURN key. The I and D keys can be used to Increment and Decrement the extension number while in the KEYS area.

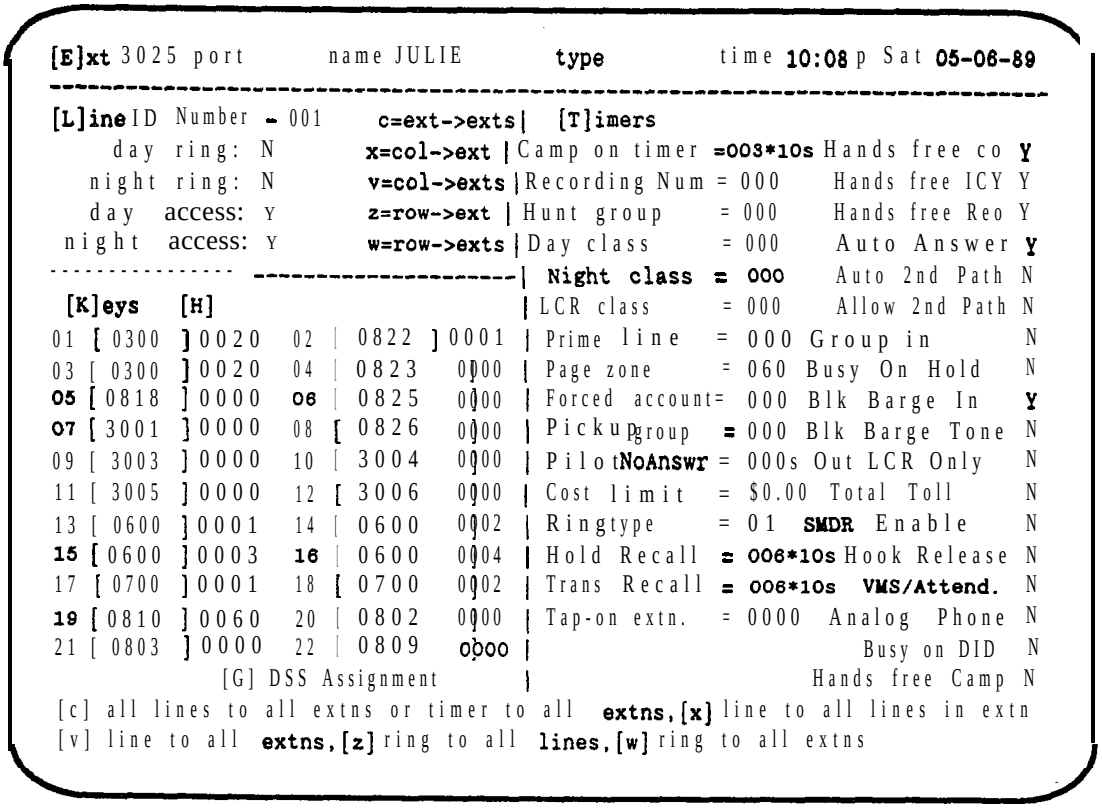


Figure 4-3 Station Programming Screen

4.11 ASSIGNING A RECORDING NUMBER

Each recorder is connected to an extension. This extension is programmed with a recording number to identify it to ACD. This number is used in the ACD SEQUENCE to route a call to the proper recorded message. A Digital Voice Announcer is connected directly to a digital port, any other voice announcement device is connected to the system via an OPX Interface.

The system allows one recorder to answer multiple incoming calls. Any incoming calls that are ringing the system at the same time can be routed to the same recorder. There is no limit to the amount of recorders available on a system, however, there are 36 recording numbers. Also, more than one extension can be assigned to the same recorder number.

If not already in the Station Programming screen, from the Main Menu, press the A key. The ESCAPE key can be pressed from any programming screen to return to the Main Menu.

1. When the Station Programming screen is entered, the cursor is at the extension number position. The extension number of the station to be programmed can be entered. The I key and the D key can be used to Increment and Decrement the extension number.
2. Enter the extension number of the station to be programmed.
3. Press the RETURN key.
4. Press T to enter the timer section of the Station Programming screen. The cursor moves to the Timers area.
5. Press the RETURN key to move the cursor to the Recording Number.
6. Enter the 3 digit recorder number (001-036) and press the RETURN key. The number used for the recorder should match one of the numbers that are entered into the ACD GROUP SEQUENCES.
7. Continue programming the remaining recorders.

The E key may be used to move the cursor to the Extension number area.

The C key CANNOT be used to copy recorder numbers.

4.12 ACD GROUP SETUP PROGRAMMING SCREEN

The ACD Group *Setup* programming screen is used to define what happens to an incoming call if all agents in the ACD SPLIT are busy. There is a DAY and a NIGHT SETUP screen for each of the 15 ACD GROUPS. *The Setup* screen can be used to name an ACD GROUP.

Each SETUP screen contains two separate programming areas. The first area, called the No *Answer Return To* Queue area, defines how long an agent's telephone may ring before the system tries another agent. This area is also used to define how long the system presumes an agent is not available before attempting to route a call to him.

The second area is the *Cull Sequence* area. This is the sequence of events the system executes if all agents logged into the ACD GROUP are busy (or, if there are no agents logged into the group).

The CALL SEQUENCE area is made up of 10 instruction boxes. Each box is filled with a command. Any box can be filled with any one of the available commands. The system executes the commands contained in each box beginning with the box labeled 1, until an agent becomes available, or a command routes the call out of the ACD group. Several commands require additional information to be programmed.

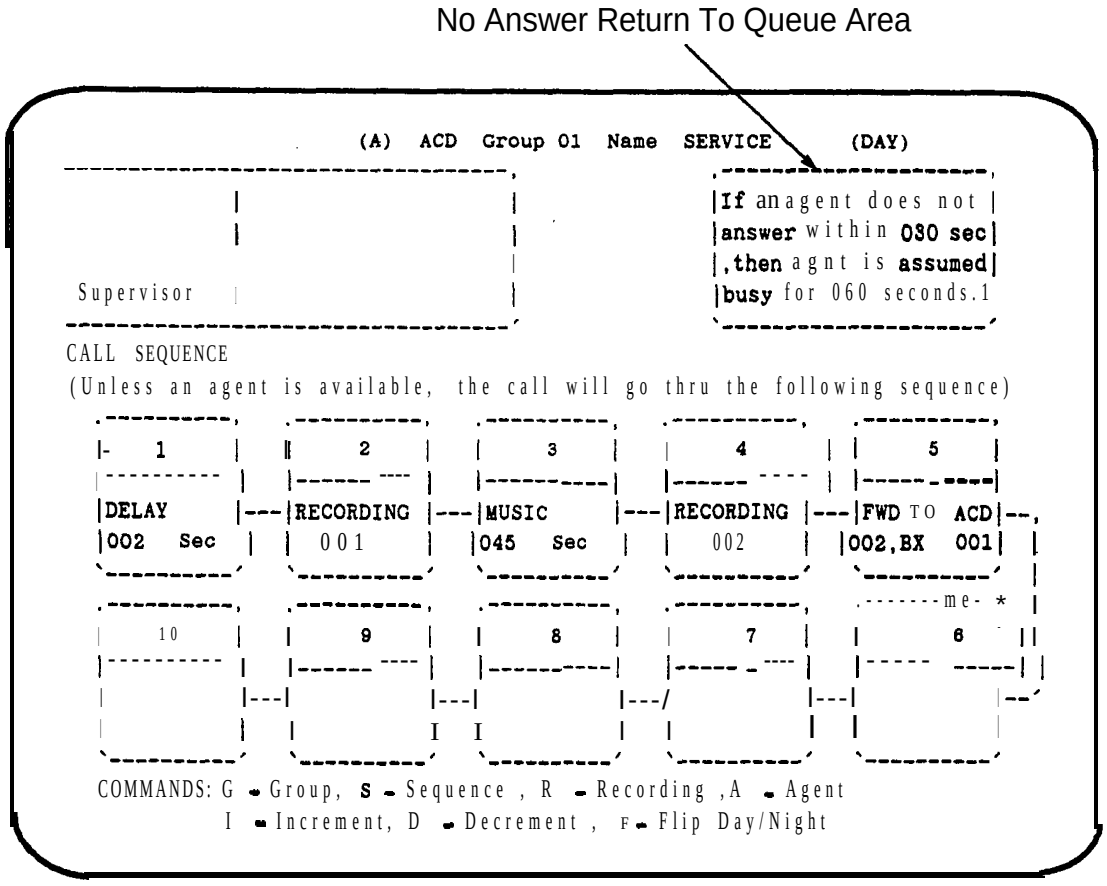


Figure 4-4 ACD Group Setup Programming Screen

4.12.1 AVAILABLE COMMANDS

D E L A Y ___ Seconds	Wait the indicated number of seconds before moving to the next instruction box. A number from 1 through 999 may be entered. This is useful in adjusting the number of rings an outside caller hears before listening to the recorded announcement.
RECORDING ___	Incoming calls are sent to the extension number that has this recording number assigned to it. The extension should be connected to a ***Digital** Voice **Announcer*** (or a recorder, via an OPXI or an OPX port card) that has some sort of an informative message to the caller. A recording number (01-36) should be entered. This number corresponds to *the recording number* entered in the *Station Programming* screen.
MUSIC ___	Connects the incoming call to the Music On Hold (MOH) source for the time specified. The time in seconds (001-999) should be entered.
FORWARD TO ACD ___,BX ___	Redirect the incoming call to the ACD GROUP SEQUENCE that is specified, and to a particular box within that SEQUENCE that is specified. This is the command used for look *back overflow.* If a call is overflowed to another *ACD Group,* the call is routed to the first available agent in either ACD Group. A call may be directed to an ACD Group with only one agent to provide a look back rather than using FORWARD TO EXT.
FORWARD TO EXT __	Redirect the incoming call to the extension that is specified. If that extension does not answer the call, it will recall the main operator. This command is used to direct a call out of the ACD system. Do not use this command to overflow a call to another split.
GOT0 BOX ___	The system goes to the box indicated within the same ACD sequence for the next command. This can be used to form an instruction loop.
FORWARD TO SYSTEM SPEED DIAL #___	Redirect the incoming call to a line from TRUNK GROUP ONE. (highest numbered line in group one will be picked first, and then continue to the lowest) , and dial the system speed dial number specified in the box. Once the number is dialed, the lines are connected together. Although the system can store 999 *System Speed Dial* numbers, only the first 200 numbers are available to be used with ACD. *Forward To System Speed Dial* is affected by *the* timer for *Divert Limit.*
FORWARD TO HUNT GROUP __	Redirect the incoming call to the system HUNT GROUP indicated. The HUNT GROUP must have at least one station in it.
RELEASE LINE	Disconnect the call from the system. This may be used if you wish to play a message to the caller, but not process the call any further. For example, after a night greeting is played, the call can be disconnected.
BLANK	Do nothing, not part of the sequence.

4.12.2 HOW TO PROGRAM ACD GROUP SETUP

From the programming *Main Menu,* press the *Q* key. The *ACD Main Menu* appears. The ESCAPE key can be pressed from any ACD programming screen to return to the *ACD Main Menu.*

1. Press the A key. The *ACD Group Setup* screen appears with the cursor located next to *ACD Group.* The cursor can be returned to this location at any time by pressing the G key.
2. Enter the number of the ACD Group to be programmed, and press the RETURN key. The I and D keys can also be used to increment and decrement the ACD Group number.
3. Press the RETURN key again. The cursor moves to Name.
4. Enter an appropriate name for the ACD group (up to 10 characters), and press the RETURN key.
5. Press the A key. The cursor moves to the *Agent* area.
6. Enter the time, in seconds, that the system is to wait for an agent in the group to answer, and press the RETURN key.
7. Press the RETURN key a second time.
8. Enter the time, in seconds, the system considers an agent busy if the agent does not answer a call, and press the RETURN key.
9. Press the **S** key. The cursor moves to the CALL SEQUENCE area.
10. Use the I and D keys to scroll through the commands until the desired command is found. If the command requires an entry, enter the required information, and press the RETURN key.

    NOTE: To enter the command RELEASE LINE, use *the I or D key until RELEASE LINE appears in the box. Press the B key, and then the RETURN key.*

11. Press the RETURN key to move the cursor to the next instruction box. Continue programming each desired box.
12. **Continue programming** all desired ACD GROUP SETUPS.

4.12.3 CLEARING AN INSTRUCTION BOX

If a box already contains information, you may change it to any other command using the I and D keys. If you wish to clear the box entirely, press the I or D key until the box is blank. Then press the B key. The box is now blank.

4.12.4 ACD NIGHT SEQUENCES

Press F while in the desired *ACD Group Setup* screen to program the NIGHT sequences. The parameters and programming are identical to the DAY sequences. The NIGHT SEQUENCES are executed when the ACD GROUP is in the NIGHT mode, not when the system is in the NIGHT mode.

4.13 ACD AGENT SETUP PROGRAMMING SCREEN

The *ACD Agent Setup* screen is used to assign an agent number to each agent, and to customize certain options for each agent. These options are:

NAME	Up to ten characters can be entered to identify each agent. Once entered, the RETURN or TAB key must be pressed to validate the entry.
WRAP	The time, in seconds (000 to 999). can be entered to indicate the amount of wrap time for each agent.
ZAP	This should only be used when an agent is using a headset. When ZAP is set to Y (yes), incoming calls routed to the agent are automatically connected. The agent does not have to press any buttons to answer the call. The agent hears a tone prior to the call's connection. There are two tones that are emitted. One tone is for calls from the agent's primary split, and the other tone is for the secondary split. When ZAP is N (no), the agent must answer the call.
LOG START	Press C to enter the present time and date from the system. This time and date indicates when the agent started.
ACD QUALIFY	Enter a Y (yes) to force the agent to QUALIFY each ACD call received.
NACD QUALIFY	Enter a Y (yes) to force the agent to QUALIFY every non-ACD CO call. In order to qualify non-ACD calls, it is necessary to have wrap non-ACD set to Y (yes)..
WRAP NON ACD	Enter a Y (yes) to set a wrap time after non-ACD calls. This must be set to yes to qualify non-ACD calls.
PRIM	Enter a two digit number from 00 to 15 to indicate the primary group that the agent logs onto whenever the LOG key is pressed.
SECD	Enter a two digit number from 00 to 15 to indicate the secondary group that the agent logs onto whenever the LOG key is pressed.
PRI	Enter a single digit number from 0 to 2 for the agent's priority in his primary group. An agent has a priority of 3 in his secondary group. The highest priority for receiving calls is 0, and the lowest is 2.
PRT	Enter a Y (yes) to print this agent on the *Agent Summary* report when using the printer scheduler. The *Agent Summary* report is only available in *Custom ACD.*

4.13.1 HOW TO PROGRAM ACD AGENT SETUP

From *the Main Menu,* press the *Q* key. *The ACD Main Menu* appears. The ESCAPE key can be pressed from any ACD programming screen to return to the *ACD Main Menu.*

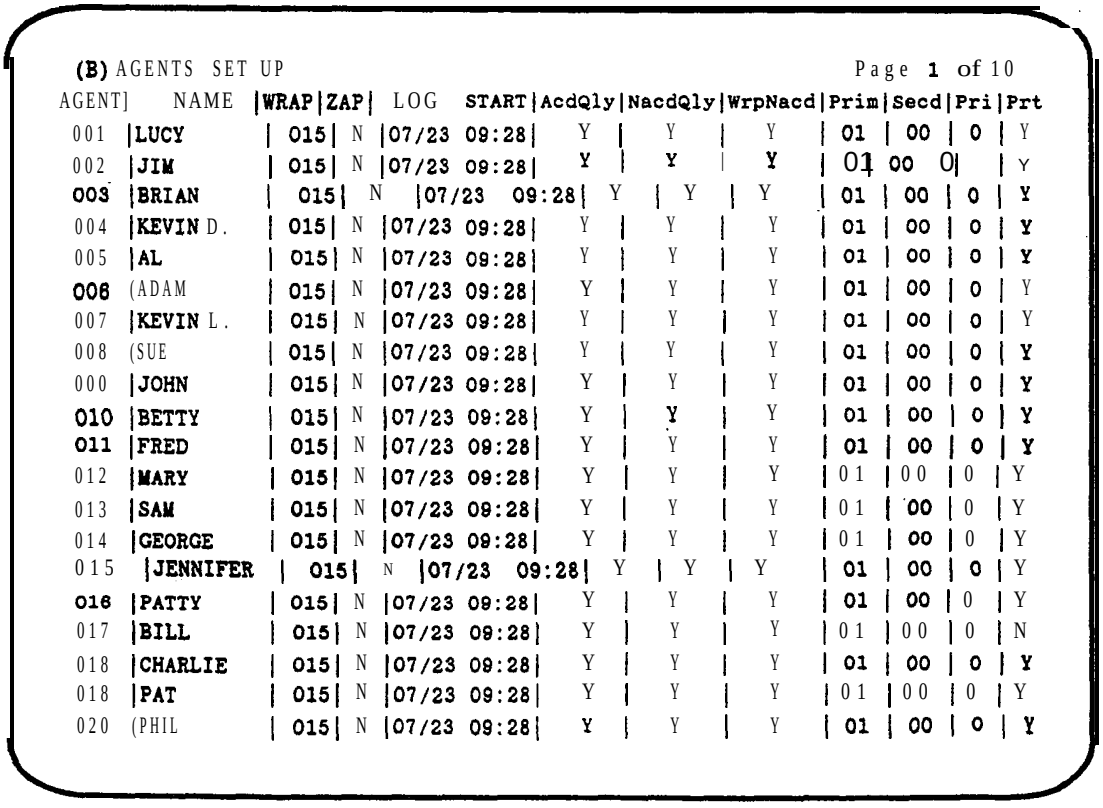
1. Press B from the *ACD Main Menu.* The *ACD Agent Setup* screen appears *with the* cursor *in the NAME* area.
2. Enter the AGENT'S name (up to 10 characters). Press the RETURN key.
3. Press the TAB key. The cursor moves to *WRAP.*
4. Enter the wrap time, and press the RETURN key.
5. Press the TAB key. The cursor moves to ZAP.
6. Enter Y (yes) or N (no).
7. Press the TAB key.
8. Continue programming the remainder of the screen.

NOTE: Press the TAB key to move horizontally, and the RETURN key to move vertically on the agent setup screen. Both keys validate the entries.

The C key can be pressed to copy the entry to all other agents except for the *Name* and *Log Start sections.*

Press the SHIFT key and the **'@'** key, simultaneously, to' move the cursor to the *Page* area.

The I or D key can then be used to increment or decrement through the available pages. Press RETURN to enter. The page number can also be entered directly. Once the desired page number has been entered, press the RETURN key.



(B) AGENTS SET UP — Page 1 of 10

AGENT]	NAME	WRAP	ZAP	LOG	START	AcdQly	NacdQly	WrpNacd	Prim	Secd	Pri	Prt
001	LUCY	015	N	07/23	09:28	Y	Y	Y	01	00	0	Y
002	JIM	015	N	07/23	09:28	Y	Y	Y	01	00	0	Y
003	BRIAN	015	N	07/23	09:28	Y	Y	Y	01	00	0	Y
004	KEVIN D.	015	N	07/23	09:28	Y	Y	Y	01	00	0	Y
005	AL	015	N	07/23	09:28	Y	Y	Y	01	00	0	Y
006	(ADAM	015	N	07/23	09:28	Y	Y	Y	01	00	0	Y
007	KEVIN L.	015	N	07/23	09:28	Y	Y	Y	01	00	0	Y
008	(SUE	015	N	07/23	09:28	Y	Y	Y	01	00	0	Y
000	JOHN	015	N	07/23	09:28	Y	Y	Y	01	00	0	Y
010	BETTY	015	N	07/23	09:28	Y	Y	Y	01	00	0	Y
011	FRED	015	N	07/23	09:28	Y	Y	Y	01	00	0	Y
012	MARY	015	N	07/23	09:28	Y	Y	Y	01	00	0	Y
013	SAM	015	N	07/23	09:28	Y	Y	Y	01	00	0	Y
014	GEORGE	015	N	07/23	09:28	Y	Y	Y	01	00	0	Y
015	JENNIFER	015	N	07/23	09:28	Y	Y	Y	01	00	0	Y
016	PATTY	015	N	07/23	09:28	Y	Y	Y	01	00	0	Y
017	BILL	015	N	07/23	09:28	Y	Y	Y	01	00	0	N
018	CHARLIE	015	N	07/23	09:28	Y	Y	Y	01	00	0	Y
018	PAT	015	N	07/23	09:28	Y	Y	Y	01	00	0	Y
020	(PHIL	015	N	07/23	09:28	Y	Y	Y	01	00	0	Y

Figure 4-5 ACD Agent Setup Screen

4.14 NIGHT OPERATION

A distinction must be made between the system being in the NIGHT mode, and an ACD GROUP being in the NIGHT mode. The system is placed in the NIGHT mode by a key on the operator's station, or by programming the *Trunk Group Programming* screen to automatically place the system in NIGHT.

When the system is in NIGHT, incoming ACD calls are routed to the ACD group indicated on the *System Programming* screen as the *ACD Night group.*

An ACD GROUP is placed in the NIGHT mode by an ACD NIGHT key programmed on a supervisor's telephone. Each ACD GROUP can be placed in night separately. The *Trunk Group Programming* screen can be used to automatically place an ACD GROUP in NIGHT.

When an ACD GROUP is in NIGHT, an incoming call follows the ACD NIGHT SEQUENCE for that group if all agents in the group are busy.

When ACD calls are in queue, they are following the commands contained in the instruction boxes. When the ACD group switches from DAY to NIGHT mode, the calls that are in queue following the instruction in one of the boxes at the time of the switch, follow the instruction in the same box number of the NIGHT sequence.

For example, a call that was in instruction box 2 of the DAY'SEQUENCE for GROUP 1 is sent to box 2 of the NIGHT SEQUENCE for GROUP 1 when the ACD Group switches from DAY to NIGHT mode. This may present a problem if the DAY SEQUENCE box 2 is MUSIC, and the NIGHT SEQUENCE box 2 is RELEASE LINE.

The same is true when the ACD group switches from NIGHT to DAY. Calls following the NIGHT SEQUENCE switch to the same instruction box in the DAY SEQUENCE.

4.15 AUTOMATIC SYSTEM NIGHT MODE

The system can be placed into the NIGHT mode using the *Trunk Group Programming* screen. NIGHT mode can be activated and deactivated on a weekday, on Saturday, or on Sunday, beginning at any time, and ending at any time.

4.15.1 WHAT TO PROGRAM

Determine at what time the system is to enter the NIGHT mode, and at what time the system is to leave the NIGHT mode.

4.15.2 HOW TO PROGRAM AUTOMATIC NIGHT MODE

If not already on the *Trunk Group Programming* screen, from the *Main Menu,* press the N key. If the cursor is *in* another portion of the *Trunk Group Programming* screen, press SHIFT and '$' simultaneously.

1. If *the Trunk Group Programming* screen is to be used to place the system in the NIGHT mode, press the Y key.
2. Press the TAB key.
3. If NIGHT mode is to be activated automatically at any time on a weekday, press Y. Otherwise, this should be N.
4. Press the TAB key. The cursor moves to the START column.
5. Enter the time NIGHT mode is to start in 24-hour clock format.
6. Press the TAB key. The cursor moves to the STOP column.

7. Enter the time NIGHT mode is to stop in 24-hour clock format.
8. Press the TAB key. The cursor moves to the SATURDAY ENABLE column.
9. If NIGHT mode is to be active at any time on Saturday, press Y. Otherwise, this should be N.
10. Press the TAB key. The cursor moves to the START column.
11. Enter the time NIGHT mode is to start in 24-hour clock format.
12. Press the TAB key. The cursor moves to the STOP column.
13. Enter the time NIGHT mode is to stop in 24-hour clock format.
14. Press the TAB key. The cursor moves to the SUNDAY ENABLE column.
15. If NIGHT mode is to be active at any time on Sunday, press Y. Otherwise, this should be N.
16. Press the TAB key. The cursor moves to the START column.
17. Enter the time NIGHT mode is to start in 24-hour clock format.
18. Press the TAB key. The cursor moves to the STOP column.'
19. Enter the time NIGHT mode is to stop in 24-hour clock format.

Make certain the system clock is properly set on the *System* Programming screen.

The system will enter the NIGHT mode the next time the system clock reaches the time indicated in a START column.

The NIGHT key on the operator's position overrides the automatic NIGHT mode.

Trunk Group Programming '@' --> 1st group

Grp #	Name	Call Diversion Out grp	Dial	System Speed BIN (1-200)	Weekdays Enable	start	stop	Saturday Enable	start	stop	Sunday Enable	start	stop
1	ABC	01	002		Y	11:40	12:00	N	00:00	00:00	N	00:00	00:00
2		00			N	00:00	00:00	N	00:00	00:00	N	00:00	00:00
3		00			N	00:00	00:00	N	00:00	00:00	N	00:00	00:00
4		00			N	00:00	00:00	N	00:00	00:00	N	00:00	00:00
5		00			N	00:00	00:00	N	00:00	00:00	N	00:00	00:00
6		00			N	00:00	00:00	N	00:00	00:00	N	00:00	00:00
7		00			N	00:00	00:00	N	00:00	00:00	N	00:00	00:00
8		00			N	00:00	00:00	N	00:00	00:00	N	00:00	00:00
9		00			N	00:00	00:00	N	00:00	00:00	N	00:00	00:00
10					N	00:00	00:00	N	00:00	00:00	N	00:00	00:00
The system will automatically switch to Night Mode [$] Y at					Y	17:58	11:00	Y	00:00	00:00	Y	00:00	00:00

Figure 4-6 Trunk Group Programming Screen

4.16 ACD GROUP NIGHT MODE

Each of the 15 ACD GROUP SEQUENCES can be placed in the NIGHT SEQUENCE automatically using *the Trunk Group Programming* screen. NIGHT mode can be activated and deactivated on a weekday, on Saturday, or on Sunday, beginning at any time, and ending at any time.

4.16.1 WHAT TO PROGRAM

Determine at what time each of the 15 ACD GROUPS are to enter the NIGHT mode, and at what time each of the 15 ACD GROUPS are to leave the NIGHT mode.

4.16.2 HOW TO PROGRAM ACD GROUP NIGHT MODE

If not already on *the Trunk Group Programming* screen, from the *Main Menu,* press the N key. If the cursor is in another portion of *the Trunk Group Programming* screen, press SHIFT and '%' simultaneously.

1. If *the Trunk Group Programming* screen is to be used to place any of the ACD GROUPS in the NIGHT mode, press the Y key.
2. Press the RETURN key.
3. Enter the number of the ACD GROUP to be programmed, and press the RETURN key.
4. Press the TAB key.
5. If NIGHT mode is to be activated automatically at any time on a weekday, press Y. Otherwise, this should be N.
6. Press the TAB key. The cursor moves to the START column.

```
                        Trunk Group Programming      '@' --> 1st group
--------------------------------------------------------------------------
              |  Call Diversion  |  Weekdays  |  Saturday  |  Sunday
Grp|          |Out| System Speed |Enable      |Enable      |Enable
 # |Name      |grp|Dial BIN (1-200)| |start|stop | |start|stop | |start|stop
---|----------|---|----------------|--|-----|-----|--|-----|-----|--|-----|----
  1|ABC       | 01|002           | Y|11:40|12:00| N|00:00|00:00| N|00:00|00:00
  2 I         | 00|              | N|00:00|00:00| N|00:00|00:00| N|00:00|00:00
  3|          | 00|              | N|00:00|00:00| N|00:00|00:00| N|00:00|00:00
  4|          | 00|              | N|00:00|00:00| N|00:00|00:00| N|00:00|00:00
  5|          | 00|              | N|00:00|00:00| N|00:00|00:00| N|00:00|00:00
  6|          | 00|              | N|00:00|00:00| N|00:00|00:00| N|00:00|00:00
  7|          | 00|              | N|00:00|00:00| N|00:00|00:00| N|00:00|00:00
  8|          | 00|              | N|00:00|00:00| N|00:00|00:00| N|00:00|00:00
  9|          | 00|              | N|00:00|00:00| N|00:00|00:00| N|00:00|00:00
 10|          |   |              | N|00:00|00:00| N|00:00|00:00| N|00:00|00:00
-------------------------------|--| ----- | -----|--| ----- | -----|--| ----- |----
The system will automatically  ||        |     ||       |     ||       |
  switch to Night Mode [$] Y at | Y|17:58|11:00| Y|00:00|00:00| Y|00:00|00:00
ACD Groups will automatically  ||        |     |        |     |   |     |
  switch to Night Mode [%] Y at | |      |     | I      |     |   |     |
                  ACD Group  01 | N|00:00|00:00| N|00:00|00:00| N|00:00|00:00
```

Figure 4-7 Trunk Group Programming Screen

7. Enter the time NIGHT mode is to start in 24-hour clock format.
8. Press the TAB key. The cursor moves to the STOP column.
9. Enter the time NIGHT mode is to stop in 24-hour clock format.
10. Press the TAB key. The cursor moves to the SATURDAY ENABLE column.
11. If NIGHT mode is to be active at any time on Saturday, press Y. Otherwise, this should be N.
12. Press the TAB key. The cursor moves to the START column.
13. Enter the time NIGHT mode is to start in 24-hour clock format.
14. Press the TAB key. The cursor moves to the STOP column.
15. Enter the time NIGHT mode is to stop in 24-hour clock format.
16. Press the TAB key. The cursor moves to the SUNDAY ENABLE column.
17. If NIGHT mode is to be active at any time on Sunday, press Y. Otherwise, this should be N.
18. Press the TAB key. The cursor moves to the START column.
19. Enter the time NIGHT mode is to start in 24-hour clock format.
20. Press the TAB key. The cursor moves to the STOP column.
21. Enter the time NIGHT mode is to stop in 24-hour clock format.
22. Press the RETURN key. Continue programming the remaining ACD GROUPS.

Make certain the system clock is properly set on the *System Programming* screen.

The ACD GROUP will begin to divert calls the next time the system clock reaches the time indicated in a START column.

4.17 ACD QUEUE MENU

4.17.1 CALL WAITING INDICATORS

The Relay/Sensor Interface (RSI) can be used with ACD to provide an indication of how many calls are waiting to be answered. Each RSI is equipped with 3 pairs of contacts which can be wired as a switch in a series circuit to an external lamp (or buzzer). This lamp can then be made to flash at 3 different rates. Each rate can be programmed to represent the number of calls waiting to be answered.

An ACD QUEUE key can be programmed on a telephone to perform a similar function. The key is used to make it easy to know how many calls are in each ACD GROUP'S queue. The flash rate of the LED is used to provide this information.

4.17.2 WHAT TO PROGRAM

The *ACD* Queue Menu is divided into 3 separate areas. Two of these areas are used for the queue lights. The small box in the upper right corner is used to program the flash rates used with the RSI. The time the relay contacts spend OPEN and CLOSED is entered in increments of 50 milliseconds.

The large box on the left side of the screen is used to define the number of calls waiting in each ACD GROUP that each flash rate represents.

The flash rates for the QUEUE key LEDs programmed on telephones are fixed, however, the number of calls indicated by the flash rates can be programmed in the Queue *LED* area of the screen.

Rate 1 = LED is on steadily
Rate 2 = LED is flashing. slowly
Rate 3 = LED is flashing quickly

Determine the amount of time an external light is to turn ON and turn OFF for each of the three flash rates. Divide each time by 50 milliseconds. These are the numbers to be enter in the FLASH RATE area. For example :

FLASH RATE 1 is to be ON for 1 second, and OFF for 1/4 second. Program ON = 20 & OFF = 5
FLASH RATE 2 is to be ON for 1/2 second, and OFF for 1/2 second. Program ON = 10 & OFF = 10
FLASH RATE 3 is to be ON for 1/4 second, and OFF for 1/4 second. Program ON = 5 & OFF = 5

Determine the extension number each Relay/Sensor Interface is connected to.

Determine which ACD GROUP is to use each pair of contacts of the RSI. An RSI has 3 pairs of contacts. These contacts are labeled A, B, and C from left to right looking at the back of the RSI.

Determine how many calls are to be represented by each of the 3 flash rates for each ACD GROUP.

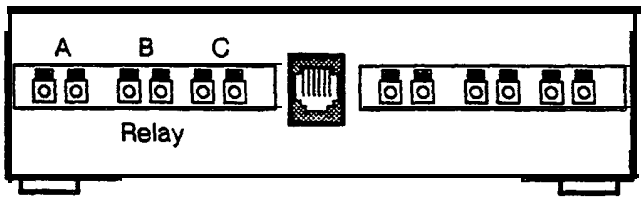


Figure 4-8 Relay/Sensor Interface

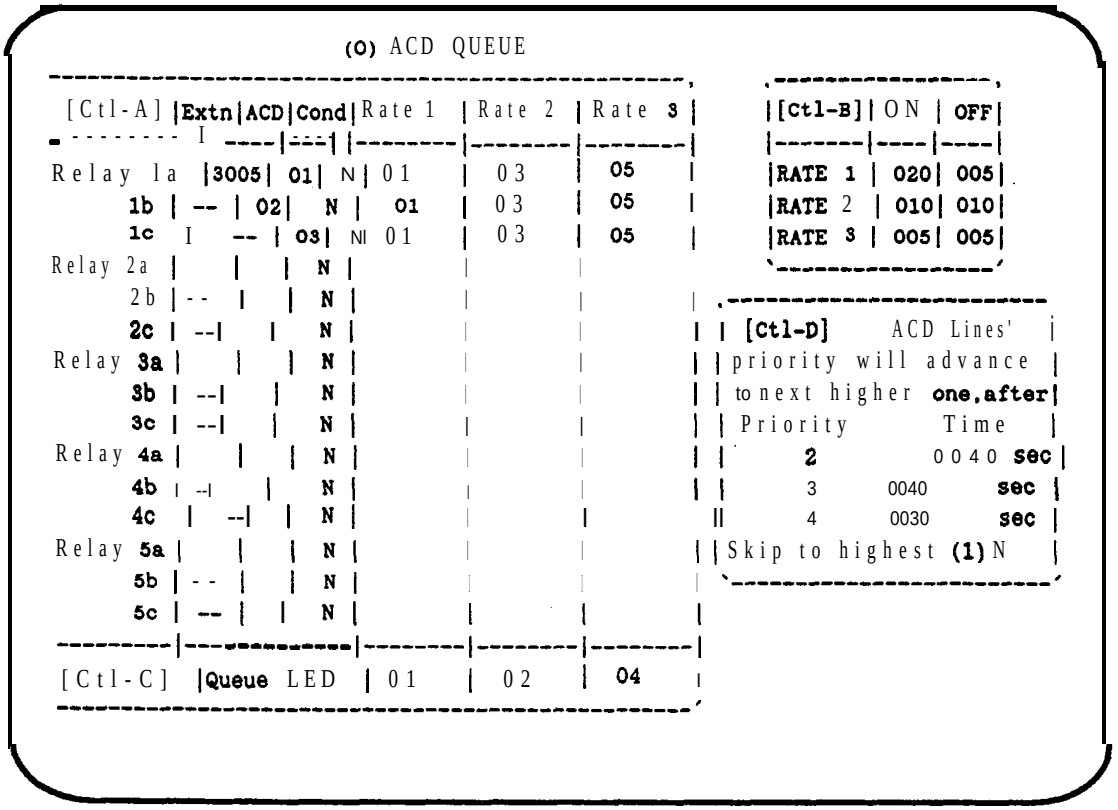


Figure 4-9 ACD Queue Menu

4.17.3 HOW TO PROGRAM

From the *ACD Main* Menu, press the 0 key. The *ACD* Queue *Menu* appears.

FLASH **RATE**

1. Press the CONTROL and B keys simultaneously. The cursor moves to the *flash rate* area.
2. Enter the ON time for RATE 1, and press the RETURN key. Remember this value is in 50 millisecond increments.
3. Press the RETURN key again.
4. Enter the ON TIME for **RATE** 2, and press the RETURN key.
5. Press the RETURN key again.
6. Enter the ON TIME for RATE 3, and press the RETURN key.
7. Press the RETURN key.
8. Press the TAB key.
9. Enter the OFF time for RATE 1, and press the RETURN key.
10. Press the RETURN key again.
11. Enter the remaining OFF times using the RETURN key to enter the value and move the cursor to the next entry.

QUEUE KEY LEDS

1. Press the CONTROL and C key simultaneously.
2. Enter the number of calls RATE 1 is to indicate, and press the RETURN key.
3. Press the RETURN key again.
4. Enter the number of calls RATE 2 is to indicate, and press the RETURN key.
5. Press the RETURN key again.
6. Enter the number of calls RATE 3 is to indicate, and press the RETURN key.
7. Press the RETURN key again.

RELAY CONTACTS

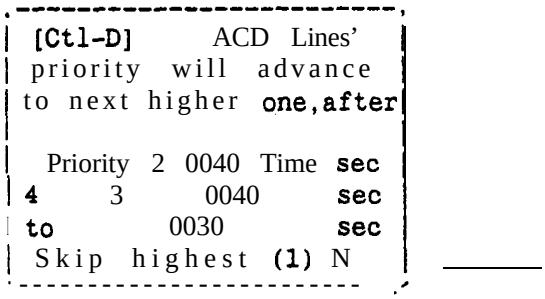
1. Press the CONTROL and A key simultaneously. The cursor moves to the large RELAY programming area.
2. Enter the extension number the RSI is connected to, and press the RETURN key.
3. Press the TAB key.
4. Enter the ACD GROUP the relay contact is to be used with, and press the RETURN key.
5. Press the TAB key TWICE. The COND column is not used at this time.
6. Enter the number of calls RATE 1 is to indicate, and press the RETURN key.
7. Press the TAB key.
8. Enter the number of calls RATE 2 is to indicate, and press the RETURN key.
9. Press the TAB key.
10. Enter the number of calls RATE 3 is to indicate, and press the **RETURN** key.
11. Press the TAB key twice.
12. Press the RETURN key.
13. Continue from step 4 for the remaining 2 contacts.
14. Program the remaining Relay/Sensor Interfaces.

4.18 CHANGING A CALL'S PRIORITY

The *ACD Queue Menu* is also used to change the priority of an ACD call if the call has been waiting in queue for a long period of time. The priority of a call can be changed to the next higher priority, or can be changed immediately to the highest priority.

4.18.1 WHAT TO PROGRAM

Determine, for each priority, how long (in seconds) a call may remain in queue before it is assigned a higher priority. The priority of a call can be changed to the next higher priority, or can be changed immediately to the highest priority. This is programmed *with the Skip to highest* parameter on the *ACD Queue Menu,* and is set for **all** *calls.* If *Skip to highest* is programmed N (no), the priority of a call is changed to the next highest priority if it has remained in queue the amount of time programmed for that priority. If *Skip to highest is* programmed Y (yes), the priority of a call is changed to the highest priority (priority 1) if it has remained in queue the amount of time programmed.



Determine if it is desired to advanced the call to the next higher priority, or directly to the highest priority.

4.18.2 HOW TO PROGRAM

From the *ACD Main Menu,* press the 0 key. The *ACD* Queue *Menu* appears.

1. Press the **CONTROL** and D keys simultaneously.
2. Enter the time, in seconds, a call can remain in queue before advancing for PRIORITY 2, and press the RETURN key.
3. Press the RETURN key.
4. Enter the time, in seconds, a call can remain in queue before advancing for PRIORITY 3, and press the RETURN key.
5. Press the RETURN key.
6. Enter the time, in seconds, a call can remain in queue before **advancing** for PRIORITY 4, and press the RETURN key.
7. Press the RETURN key.
8. If a call is to advance directly to the highest priority, enter Y (yes). Otherwise, this entry should be left N **(no).**

4.19 REMOTE PROGRAMMING

The system is equipped with a built-in **300/1200** baud MODEM which permits a technician to access the system from a remote location. The remote location requires only a terminal (one that is supported by system screen graphics) and a MODEM. The technician can then carry out any programming or maintenance that can be accomplished from an on-site programming terminal.

This feature could also be of use to a company communications manager to access a system from another location. A personal computer, with suitable terminal emulation software, can be used in place of a terminal. The system's BACKUP and RESTORE feature can then be utilized.

Access to the MODEM is gained by either programming a trunk to be answered by the MODEM, or by **transferring** to the MODEM.

A trunk can be programmed to be answered by the MODEM by assigning the trunk a MODEM line type (250 or 25 1). The line type is programmed on *the System Programming* screen. A trunk with a line type of 250 is answered by the MODEM at all times. A trunk with a line type of 25 1 is answered by the MODEM whenever the system is in the NIGHT mode.

A trunk can be transferred to the MODEM by transferring the call to extension 99 or **9#** (not 3099 or **309#).**

A trunk can be transferred to the MODEM by the Integrated Operator Terminal by pressing the **[IVIE]** key and dialing 99. Refer to *the Operator Terminal User Guide.*

When the built-in MODEM answers, carrier tone is heard. The remote MODEM can then be turned on.

Press the ESCAPE key. The system prompts for a password. Enter your password.

4.20 BACKUP PROGRAM MEMORY

The system has a utility which permits the system configuration to be saved on a storage device. The saved configuration can then be reloaded at a later time. This storage device is usually a personal computer.

ACD programming is saved independent of the system configuration.

There are too many possible combinations of personal computers and MODEMS to give detailed instructions on saving/restoring the system configuration. Instructions are given on how to tell the system to transmit the information to the personal computer.

Using a personal computer with suitable communications software, and a MODEM. call the system, and connect with the system MODEM. The system's MODEM supports either 300 or 1200 baud. The system uses XMODEM protocol to send/receive system configuration. The call can be transferred to the MODEM from a station by the following procedure:

1. Press the **TRAN/CON** key. Internal dial tone is heard.
2. Dial 99, and replace the handset. -The call is transferred to the MODEM.

Once the connection is established, press the ESCAPE key. The system prompts for a password. Enter the appropriate password. *The Main Menu* appears.

1. **Press** *the* D key. *The Backup* screen appears.

There are 3 choices of interest to the ACD programmer: *Save* PROGRAM *memory, Save ACD memory,* and *Restore.*

2. Press S or A depending on what is to be saved. If a file is being sent to the system press R for RESTORE.

3. The system is ready to begin transmitting (or receiving) the desired configuration.
4. Issue the appropriate command to the personal computer to save (or send) the fiie.

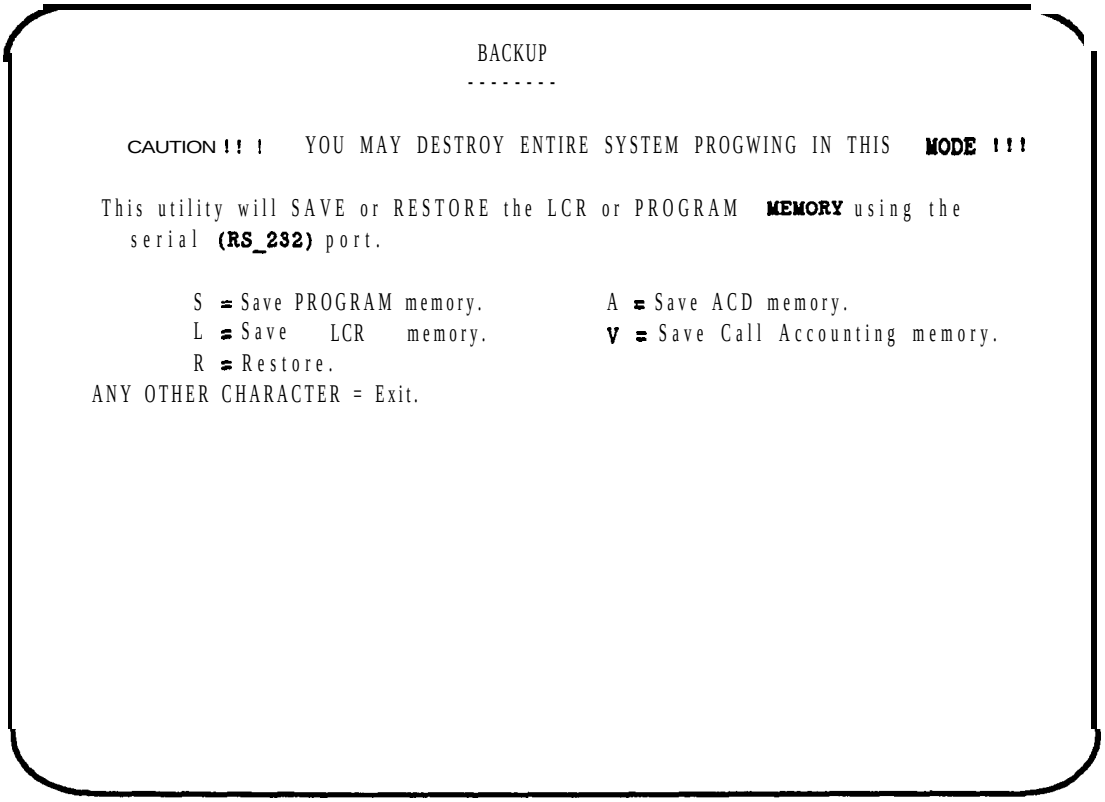


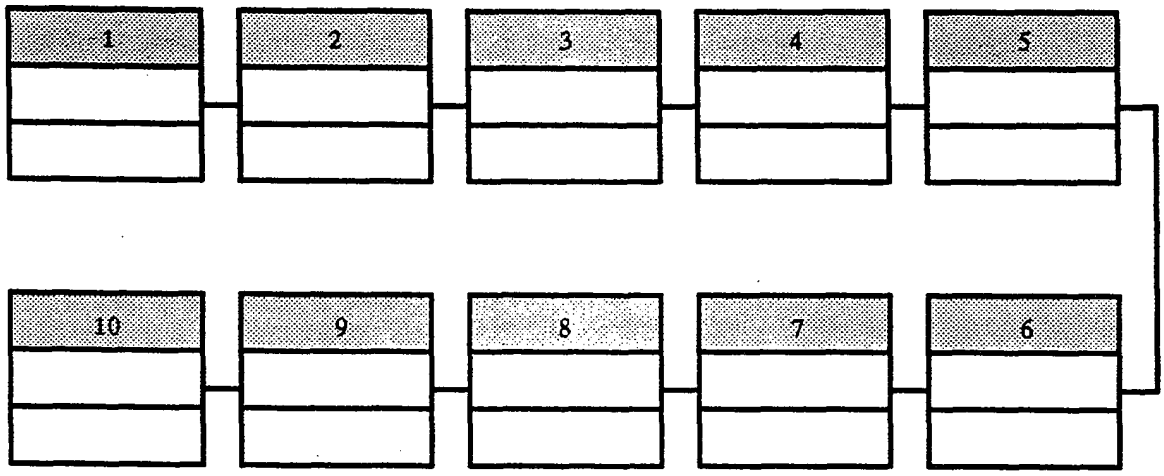
Figure 4-10 Backup Memory Screen

ACD GROUP SETUP

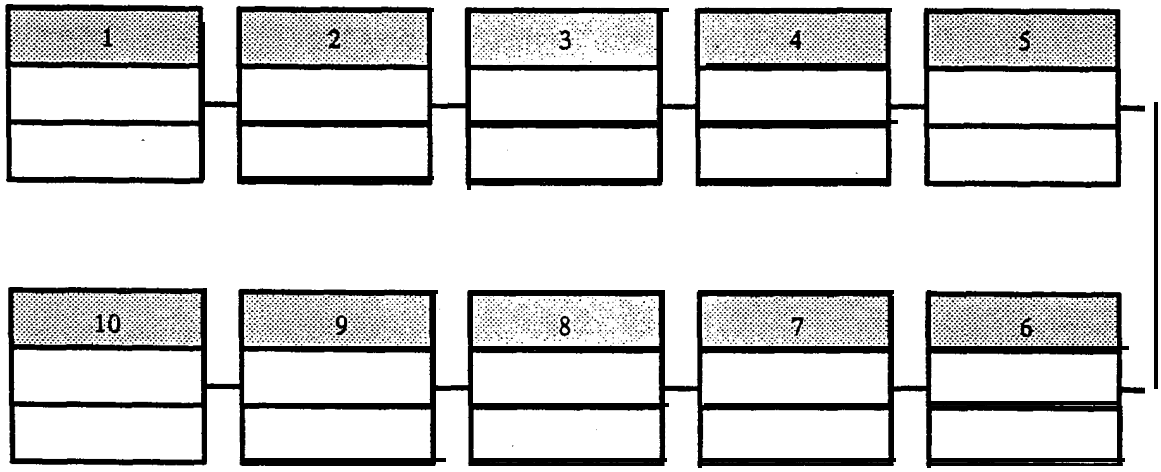
(A) ACD Group _____ Name _____

If an agent does not answer within _____ second, the agent is presumed busy for _____ seconds.

CALL SEQUENCE DAY



CALL SEQUENCE NIGHT



DELAY from 1 to 999 seconds

CONNECT to MUSIC for 1 to 999 seconds

RECORDING (1 through 36)

GOT0 a designated instruction box

FORWARD TO extension number

FORWARD to ACD GROUP

FORWARD STATION HUNT GROUP

RELEASE

FORWARD SYSTEM SPEED DIAL NUMBER (1 through 200)

ACD TRUNK CONFIGURATION

Telephone Number	Type of Service	Line Number	Trunk Group	ACD Day		ACD Night	
				Group	Priority	Group	Priority

This page may be reproduced as necessary.

ACD Agent Configuration

Agent Number	Agent Name	Wrap (secs)	Zap (Y/N)	ACDQly (Y/N)	NACDQly (Y/N)	WrpNACD (Y/N)	Prim 1-15	Sec 1-15	Pri 0-2	Prt (Y/N)

This page may be reproduced as necessary.

Station Keys Configuration

Extension _____ Name _____

Key	Code	Sub-code	Label	Key	Code	Sub-code	Label
01				02			
03				04			
05				06			
07				08			
09				10			
11				12			
13				14			
15				16			
17				18			
19				20			
21				22			

Extension _____ Name _____

Key	Code	Sub-code	Label	Key	Code	Sub-code	Label
01				02			
03				04			
05				06			
07				08			
09				10			
11				12			
13				14			
15				16			
17				18			
19				20			
2i				22			

Section 5
Operation

5.1 INTRODUCTION

This section contains information regarding the operation of an AGENT POSITION. The information presented is an expanded version of the ACD AGENT USER GUIDE with information that may be of interest to the ACD Manager. Several features which might be used from an ACD Manager's or Supervisor's telephone have also been included.

An AGENT POSITION is an ISOETEC® Digital Telephone programmed with the feature keys necessary for ACD operation.

With the introduction of software version 5.26 for the system, 6-key and Single Line Telephones may also be used as ACD AGENT positions. Agents using these telephones perform ACD functions by dialing codes from the dial pad, rather than pressing feature keys. However, these telephones cannot be given an ACD queue indication on the telephone and cannot use a RELEASE key for a headset.

With the use of flexible numbering for extensions, it must be noted that the dial codes on your system, especially extension numbers, may be different than the ones used in this section. List in the space provided below any differences between the dial codes listed, and the actual dial codes used in your system.

EXTENSION numbers range from _____ through _____

CALLING an agent _____ plus the AGENT NUMBER (001 - 200).

TRANSFERRING a call to another AGENT NUMBER _____ plus the AGENT NUMBER (001 - 200).

TRANSFERRING a call to another ACD GROUP _____ plus the GROUP NUMBER (01 - 15).

5.2 THE TELEPHONES

The ACD Agent can use either a 6-key phone, a 17-key phone, a 28-key phone, or a 29-key Display Phone. A Single Line telephone can also be used.

The 6-key and Single Line phones have no programmable feature keys.

The 17-key phone has eleven programmable feature keys, and six "fixed" keys.

The 28-key phone has 22 programmable feature keys, and six "fixed" keys.

The Display Phone has 20 programmable feature keys and the standard six "fixed" keys as well as three "soft" keys whose use is flexible, dependent upon what feature or function is being used.

Programmable keys may be changed to suit the user's feature requirements, while "fixed" keys always remain as their assigned function. The feature keys can be programmed to suit your specific business needs. Some of the feature keys must be devoted to ACD. A description of the "fixed" keys, whose function may not be changed, follows:

HOLD — Places your current call on Hold.

TR/CON Places your current call on Hold while it awaits Transfer, Orbit, or Conferencing functions.

PROG Used in a specified sequence in order to enable programming of different features. The [PROG] key LED will time out after approximately six seconds.

NOTE: If the [PROG] key LED goes out before you have entered the necessary information, you have waited too long, and the programming period has timed out. Programming will have to be initiated again.

VOLUME UP/ DOWN Adjusts the volume to comfortable levels. The volume adjustments apply to the function to which you are currently connected. To increase speaker volume press VOLUME ▲ key. To decrease speaker volume press VOLUME ▼ key. The volume can be set, and placed in memory, for the following functions:

1. Handset on Outside call.
2. Handset on Internal call.
3. Hands Free on Outside call.
4. Hands Free on an Internal call.
5. Page volume.
6. Internal Ringing volume.
7. Outside Line Ringing volume.
8. Background Music volume.

The 28-key phone, and the display phone have the following additional key:

HF Hands Free – Allows you LO converse with another party on *Internal and External* calls without having to lift the handset.

The 17-key phone has the following additional key:

VA Voice Announce – Allows you to converse with another party on *Internal* calls without having to lift the handset. Hands Free conversations with Outside parties are not possible with this telephone set.

The 6-key phone has the following additional key:

OUT The OUT key is used to place outside line calls.

5.3 BEFORE YOU BEGIN RECEIVING CALLS

An agent may use any telephone that has been programmed for use with ACD. Before the system routes ACD calls to you, the system needs to know who you are (your agent number), what incoming calls are to be directed to your telephone (your group number), and the priority you have for receiving calls in the group. The process of giving this information to the system is called "LOG ON".

Depending on how your system has been programmed, you may log on automatically, by pressing the [LOG] key, or manually, by following a prescribed procedure. Each agent must also be assigned a PRIORITY number, 0 through 2. in order to log on manually.

As an agent, you have been assigned a 3-digit agent number, an ACD group number, and a priority number. You may want to record them below for easy recall.

Group Number: _____

Agent Number: _____

Priority Number: _____

During the course of the day, you may have to leave your telephone, or temporarily stop receiving calls. You use the UNAVAILABLE key to tell the system to stop sending you calls.

An indication can be left on the supervisor's terminal that you need assistance with the [HELP] key.

NOTE: The HELP key is not available in Basic ACD.

Certain types of businesses need information about each telephone call. You can enter a 3-digit *qualification* code into system memory for each call. The QUALIFY key is used to enter this code. The ACD Manager defines what each 3-digit code means.

5.4 LOG ON

The LOG key on your phone is used to log (sign) you on or off the system, so that you can answer calls. The system can keep statistical information for each agent. A maximum of 200 people can each be assigned a 3-digit agent number (001 through 200). In addition, up to 15 distinct ACD Groups, numbered 01 through 15, can be designated.

When an agent is logged off, the agent and the extension the agent is using are no longer in the ACD system. ACD calls will not be routed to the agent.

Once an agent is logged on, that number belongs to that agent, and cannot be used to log in on any other ACD station.

PROGRAMMING

Required: A [LOG] key (key code 822) must be programmed in *Station* Programming.

Affected By: The [LOG] key sub-code. The PRIMARY and SECONDARY splits on the *Agent Setup* screen.

How To: Log On When System Is Programmed For AUTOMATIC Log On.

	ACTION	RESULT	COMMENT
1.	Press the [LOG] key.	The [LOG] key LED flashes.	The [LOG] key LED flashes for up to 6 seconds, waiting for your 3-digit agent number.
2.	Enter your 3-digit agent number [0] [0] [1] through [ABC 2] [0] [0] on the dial pad of your phone.	The [LOG] key LED is lit steadily.	You are now available to receive ACD calls. Statistics will be kept until you have logged off.

LOG ON, cont.

How To: Log On When System Is Programmed For MANUAL Log On.

ACTION	RESULT	COMMENT
1. Press the [LOG] key.	The [LOG] key LED flashes.	The [LOG] key LED flashes for up to 6 seconds, waiting for you to dial [*].
2. Press [*] on the dial pad of your phone.		
3. On the dial pad, enter your priority number [0], [1], or [ABC 2].		Priority numbers are assigned by the ACD Manager so that those agents best equipped to handle ACD calls can be designated to answer the majority of those calls. 0 is the highest priority, and 2 is the lowest.
4. Before the 6 second time out, enter your 2-digit group number [0][1] through [1][JKL 5] on the dial pad of your phone.	The [LOG] key LED flashes slowly.	
5. Enter your 3-digit agent number [0][0][1] through [ABC 2][0][0].	The [LOG] key LED lights steadily.	You are now available to receive ACD calls. Statistics will be kept until you have logged off.

5.5 LOG OFF

When you have completed taking calls for the the day, or are directed to log in on another ACD group you must LOG OFF.

How To: Log Off.

ACTION	RESULT	COMMENT
1. Press the lighted [LOG] key.	The [LOG] key LED goes out. You are logged off, and no longer active in the ACD system.	This means that statistics will stop accumulating until you LOG ON again.

5.6 UNAVAILABLE KEY

If you have to leave your work area, or you have to perform an activity which requires your full attention, you must inform the system that you will not be available to receive ACD calls. Your UNAVAILABLE key may be labeled [UNAVL], or [NOT AVAIL].

During the time you are "not-available," you are still able to receive non-ACD calls transferred to your extension, and intercom calls (calls from another extension in your system). To block these types of calls a DND key is necessary.

The system automatically makes you unavailable if you do not answer an ACD call directed to you within a programmed amount of time. In effect, your phone becomes "busied out" by the system for a period of time. The UNAVAILABLE key LED lights to indicate your status. When the programmed period has elapsed, the LED goes out. The system then considers you to be available for ACD calls.

PROGRAMMING

Required: The ACD [UNAVAILABLE] key (key code 826) must be programmed in Station Programming.

Affected By: The *ACD Group Setup* screen. The system can make an agent unavailable if an ACD call is not answered by the agent.

How To: Make Your Station Unavailable For ACD Calls.

ACTION	RESULT	COMMENT
1. Press the [UNAVAILABLE] key.	The LED next to the [UNAVAILABLE] key blinks.	ACD calls will not be routed to you, but you are still logged on the ACD system. The system will record this time as "not available".

After you have completed your work, and are to begin receiving calls again, the unavailable key is used again.

How To: Make Your Station Available -For ACD Calls.

ACTION	RESULT	COMMENT
1. Press, the [UNAVAILABLE] key.	You are now available to receive ACD calls.	

5.7 DO NOT DISTURB - [DND] KEY

An agent's telephone could be equipped with a Do Not Disturb key. The [DND] key is used to block all incoming calls and pages. This does not prevent the agent from placing calls, or using other features.

PROGRAMMING

Required: A [DND] key (key code 803) must be programmed in *Station Programming.*

How To: Block Pages Only.

ACTION	RESULT	COMMENT
1. Press the [DND] key once.	The [DND] key LED lights.	System paging is blocked at your telephone. This does not prevent you from making pages.

How To: Block All Calls And Pages.

ACTION	RESULT	COMMENT
1. Press the [DND] key twice.	The [DND) key LED blinks.	All incoming calls, pages, and background music are blocked.

How To: Turn Off DND.

ACTION	RESULT	COMMENT
1. Press the [DND] key a third time;	The [DND] key LED goes out.	

5.8 ANSWERING CALLS - HANDSET

An ACD call will ring at your extension when you are the next available agent in your ACD Group.

There are two distinct ring tones which indicate an ACD call. One is the tone indicating a call from your primary split, and the other tone indicates a call from your secondary split.

An ACD call may be answered using the handset on your extension, or a headset if one is available for your use.

PROGRAMMING

Required: At least one trunk appearance key (Direct Appearance, Trunk Group, or LCR) must be programmed in Station Programming.

Affected By: Auto Answer, and Group In in Station Programming.

How To: Answer An Incoming ACD Call Using The Handset.

	ACTION	RESULT	COMMENT
1.	Upon hearing your telephone ring, lift the handset.	You will automatically be connected to the incoming call.	If *Auto* Answer is programmed No, the [OUTSIDE LINE] key must be pressed to answer the call.

5.9 ANSWERING CALLS - HEADSET

When using a headset in place of the handset, your extension can be programmed so that you are automatically connected to the incoming call. A warning tone, 3 beeps in the headset, is heard before the calf is connected. In order to do this, the "Zap" feature must be programmed to "Yes." When using a headset with your telephone, you will be using a [RELEASE] key which may be labeled [RLS] on your telephone.

NOTE: If your agent number has "Zap" programmed to "Yes," make certain you have logged off, or pressed your [UNAVAILABLE] key before removing your headset. If you fail to do this, ACD calls will continue to be directed to you.

PROGRAMMING

Required: At least one trunk appearance key (Direct Appearance, Trunk Group, or LCR) and a RELEASE key must be programmed in **Station Programming.**

Affected By: Auto Answer, and Group In in Station *Programming.* Zap in ACD *Agent Setup.*

How To: Answer An ACD Call Using A Headset When "Zap" Is Programmed YES.

ACTION	RESULT	COMMENT
1. An incoming call is indicated by 3 beeps heard in. your headset.	You are automatically connected to the incoming call.	
2. Press the [RELEASE] key to end the call.		You can now wrap up or qualify the call.

How To: Answer An ACD Call With Headset When "Zap" Is Programmed NO.

ACTION	RESULT	COMMENT
1. Press the [RELEASE] key.	You are connected to the incoming call.	An incoming call is indicated by ring tone in the headset.
2. Press the [RELEASE] key to end the call.		

5.10 QUEUE KEY LED

Your extension may have an LED (one of the lights which is next to a programmable key on your phone) programmed to use as an indication of how many calls are waiting to be answered. The key next to this LED has no function.

The purpose of the QUEUE key LED is to make it easy for you to know how many ACD calls are in queue (waiting) to be answered. The flash rate of this LED gives you this information.

The LED indicates by its flash rate how many ACD calls are waiting to be answered. The number of calls waiting, represented by the flash rate is assigned in system programming on the *ACD Queue Menu.*

Rate 1 = LED is steadily lit.
Rate 2 = LED flashes slowly.
Rate 3 = LED flashes rapidly.

An external indicator may be used with your system to indicate how many ACD calls are in queue to be answered. This is generally a light on the wall which blinks at different rates – each rate of blinking indicating a certain amount of waiting calls

PROGRAMMING

Required: One or more ACD [QUE] keys (key code 831) must be programmed in *Station* Programming. A key is available for each of the 15 ACD Groups. The flash rates for the external indicators must be programmed on the ACD Queue Menu.

5.11 HELP

Whenever you are unable to leave your work area, and you wish to request assistance from your supervisor, press the HELP key.

NOTE: The use of this key is not available in the Basic ACD package.

Once you press the HELP key, the LED will flash rapidly, and your request for help will be signaled to your supervisor's display terminal. The supervisor may then:

1. Search through the ACD groups and agents to determine who is requesting help.
2. Determine what the problem is. If it is deemed appropriate, the supervisor may initiate a three-way conversation in order to directly address the matter.

When the problem has been solved, or if you wish to cancel your help call, press the blinking HELP key once, and the LED will go out.

PROGRAMMING

Required: An ACD [HELP] key (key code 827) must be programmed in Station *Programming.*

How To: Request Help From Your Supervisor.

ACTION	RESULT	COMMENT
1. Press the [HELP] key.	The [HELP] key LED blinks rapidly.	Your request for assistance is signaled to your supervisor on the ACD terminal.

How To: Cancel Your Request For.

ACTION	RESULT	COMMENT
2. Press the blinking [HELP] key.	The [HELP] key LED goes out.	Your request is canceled.

5.12 WRAP UP

When you complete an ACD call, there is a predetermined *wrap up* time which allows you to complete any extra work which might relate to the call. During this *wrap up* time, you are not able to receive another ACD call. You may, however, receive intercom calls, and non-ACD outside line calls.

When the programmed *wrap up* time is over, the WRAP UP key LED will go out, and you will automatically become available for an ACD call. You may resume work before the *wrap up* time has ended, but you cannot extend the *wrap up* time. If you need more time you must use your UNAVAILABLE key.

The system may also be programmed such that the WRAP UP key may also be used for completed non-ACD outside line calls.

PROGRAMMING

Required: A [WRAP UP] key (key code 823) must be programmed in Station Programming.

Affected By: The Wrap timer, ACD Qualify, non-ACD Qualify, and Wrap non-ACD in *ACD Agent Setup.*

How To: Wrap Up An ACD Or Non-ACD Call.

ACTION	RESULT	COMMENT
1. After completing an ACD or non-ACD call, replace the handset, or press the [RELEASE] key if using a headset.	The LED next to the [WRAP UP] key blinks rapidly.	The blinking LED indicates that you are in wrap up time.

Non-ACD wrap up must be programmed for an agent in order to function.

If you do not need the wrap up time to complete paperwork or other work related to the last ACD call, press the [WRAP UP] key once, and LED will go out. You are now available for another ACD call.

If your agent number is programmed for Forced Qualification, the [WRAP UP] key LED will not go out until the call has been qualified.

5.13 QUALIFY KEY

The QUALIFY key provides an easy way for you to describe each ACD call you receive, or any non-ACD Outside line calls you initiate. As many as 200 qualification categories are available, one of which will help you categorize your last call. The qualification time must take place during the *wrap up* time immediately after the call has been terminated.

The ACD Manager may wish to require a qualification code be entered instead of making it an option. This is called FORCED QUALIFICATION. With Forced Qualification, wrap up will go beyond its pre-programmed time, and the wrap up LED will not go out until the terminated ACD call is qualified..

An ACD or non-ACD call can be qualified for more than one activity. Multiple qualifications must be done during the wrap up time. Up to 12 qualification codes may be entered. The ACD Manager will keep you informed of any recent changes, or additions to your specific qualification list.

The Qualification categories for your group can be listed on the following pages.

PROGRAMMING

Required: A [QUALIFICATION] key (key code 825) must be programmed in Station *Programming.*

Affected By: ACD Qualify, and non-ACD Qualify in *ACD Agent Setup.*

How To: Qualify An ACD Or Non-ACD Outside Line Call.

	ACTION	RESULT	COMMENT
1.	After completing an ACD or non-ACD call, replace the handset, or press the [RELEASE] key if using a headset.	The LED next to the [WRAP UP] key blinks rapidly.	Non-ACD calls may be qualified only if your system is programmed for this function.
2.	During the wrap up time, press the [QUALIFY] key once.	The LED next to the [QUALIFY] key blinks rapidly.	
3.	Enter the appropriate 3-digit qualification number from [0][0][1] through [ABC 2][0][0].	The LED next to the [QUALIFY] key goes out.	The 3-digit qualification number (001-200) should correspond to the nature of the call you have just completed.

If multiple qualification is necessary, repeat steps 2 and 3 again.

5.14 CALL QUALIFYING LIST

For reference, you may record your most frequently used qualification codes below.

ENTER	FOR	ENTER	FOR
001		026	
002		027	
003		028	
004		029	
005		030	
006		031	
007		032	
008		033	
009		034	
010		035	
011		036	
012		037	
013		038	
014		039	
015		040	
016		041	
017		042	
018		043	
019		044	
020		045	
021		046	
022		017	
023		048	
024		049	
025		050	

CALL QUALIFYING LIST, cont.

For reference, you may record your most frequently used qualification codes below.

ENTER	FOR	ENTER	FOR
051		076	
052		077	
053		078	
054		079	
055		080	
056		081	
057		082	
058		083	
059		084	
060		085	
061		086	
062		087	
063		088	
064		089	
065		090	
066		091	
067		092	
068		093	
069		094	
070		095	
071		096	
072		097	
073		098	
074		099	
075		100	

CALL QUALIFYING LIST, cont.

For reference, you may record your most frequently used qualification codes below.

ENTER	FOR	ENTER	FOR
101		126	
102		127	
103		128	
104		129	
105		130	
106		131	
107		132	
108		133	
109		134	
110		135	
111		136	
112		137	
113		138	
114		139	
115		140	
116		141	
117		142	
118		143	
119		144	
120		135	
121		146	
122		147	
123		148	
124		149	
125		150	

CALL QUALIFYING LIST, cont.

For reference, you may record your most frequently used qualification codes below.

ENTER	FOR	ENTER	FOR
151		176	
152		177	
153		178	
154		179	
155		180	
156		181	
157		182	
158		183	
159		184	
160		185	
161		186	
162		187	
163		188	
164		189	
165		190	
166		191	
167		192	
168		193	
169		194	
170		195	
171		196	
172		197	
173		198	
174		199	
175		200	

5.15 INTERCOM CALLS

You may call another extension, or a specific agent in your system by using the intercom.

How To: Call Another EXTENSION In Your System Using EXTENSION NUMBER.

ACTION	RESULT	COMMENT
1. Lift the handset, or press the [RELEASE] key.	Internal dial tone is heard.	
2. Dial the desired 4-digit extension number.	The called extension's hands free is activated, and the [HF] key LED blinks.	The intercom call is complete.
or		
Dial [1] + the 4-digit extension number to ring the extension.	The called extension rings.	

How To: Call Another EXTENSION In Your System Using AGENT NUMBER.

ACTION	RESULT	COMMENT
1. Lift the handset, or press the [RELEASE] key.	Internal dial tone is heard.	
2. Dial [TUV 8] plus the desired agent number [0] [0] [1] through [ABC 2] [0] [0].		The call will ring at whatever extension the desired agent is logged on to. If the called agent's extension is in DND, a fast busy tone will be heard. If the agent is logged off, a fast busy tone will be heard,

5.76TRANSFERRINGCALLS

Calls may be transferred from one extension to another extension, to another ACD Group, or to a specific ACD agent's number.

NOTE: Should a call be transferred to you, the ACD system will search for your assigned agent number, and find you regardless of the extension to which you are logged on.

How To: Transfer A Call To ANOTHER AGENT.

ACTION	RESULT	COMMENT
1. While on a call, press the [TR/CON] key.	The call is placed on hold.	
2. Dial TUV 8 plus the desired agent number LED 0 0 1 through ABC 2 0 0 .	Double tone is heard and hands free is activated at the called extension. The [HF] key lights.	If the called agent is busy, the call will be camped on to the busy extension.
3. Announce the call, and replace the handset.	The call is transferred to the desired agent at the extension the agent is using.	You may choose to replace the handset after dialing the agent number, and not announce the call.

If an agent is not logged on, a fast busy tone will be heard. You may reconnect to the call, if you wish, by pressing the blinking [OUTSIDE LINE] key where the call is waiting.

If the called extension has the HF Receive option programmed to No, the called agent's extension will ring instead of voice announce.

TRANSFERRING CALLS, cont.

How To: Transfer An Outside Line Call To ANOTHER EXTENSION.

ACTION	RESULT	COMMENT
1. While on a call, press the [TR/CON] key.	Internal dial tone is heard.	
2. Dial the desired extension number DEF 3 0 0 1 through DEF 3 WXY 9 WXY 9 WXY 9 for Voice Announce. or You may dial [1] plus the desired extension number DEF 3 0 0 1 through DEF 3 WXY 9 WXY 9 WXY 9 in order to make the called extension ring.	The speaker is activated at the called extension. The [HF] key LED blinks.	If the *Hands Free Receive* option is programmed to No, the called extension will ring instead of activating hands free.

NOTE: With the use of *Flexible Numbering,* the leading digit for extension numbers in your system may not be 3.

TRANSFERRING CALLS, cont.

How To: Transfer A Call To Another ACD GROUP.

ACTION	RESULT	COMMENT
1. While on a call, press the [TR/CON] key.	Internal dial tone is heard.	
2. Dial GHI 4 PRS 7 plus the Group number LED 0 1 through 1 JKL 5.	Confirmation tone is heard, and the [OUTSIDE LINE] key goes out. The [WRAP] key LED lights, and qualifying may be done at this time.	The call will go into queue in that group, and wait for the next available agent, or will ring the next available agent's phone.
3. Replace the handset.	Transfer is complete.	

How To: Transfer A Call To An ACD GROUP From The Operator's Terminal.

ACTION	RESULT	COMMENT
1. While on a call, press the [IVIE] key.		The [IVIE] key is the Second *Transfer* key.
2. Dial TUV 8 plus the Group number 0 1 through 1 JKL 5.	Confirmation tone is heard.	The call will go into queue in that group, and wait for the next available agent, or will ring the next available agent's phone.
3. Press the [RIs] key.	Transfer is complete.	

5.17 HOLD

Any external call may be placed on either Inclusive or Exclusive Hold. If an external call is placed on Inclusive Hold, anyone with access to that outside line can answer the call. If an external call is placed on Exclusive Hold, the call can only be answered at the station which placed the call on hold.

NOTE: If the LED above your [HOLD] key is flashing, another extension has left a message for you. Refer to the pages on MESSAGE WAITING in the Station User Guide.

How To: Use Inclusive Hold.

ACTION	RESULT	COMMENT
1. While on a call, press the [HOLD] key.	The [OUTSIDE LINE] key LED blinks rapidly.	Press the [HOLD] key only once. If another extension has a *direct appearance* key of the line on hold, the LED next to the key will blink. Trunk group keys on other extensions will not indicate your call on hold.

How To: Use Exclusive Hold.

ACTION	RESULT	COMMENT
1. While on a call. press the [HOLD] key twice.	The [OUTSIDE LINE] key LED blinks slowly.	No other users in the system are able to remove the call from Hold.

How To: Reconnect To An Outside Line Call On Hold.

ACTION	RESULT	COMMENT
1. Press the [OUTSIDE LINE] key which has the call on Hold.	The [OUTSIDE LINE] key LED stops blinking.	

5.18 SPLIT KEY

The SPLIT key is used to place a current call on Hold and answer another incoming, or camped-on, call by pressing one key. The user can use the SPLIT key to toggle back and forth between the two calls.

PROGRAMMING

Required: A [SPLIT] key (key code 805) is required.

How To: Use The SPLIT Key.

ACTION	RESULT	COMMENT
While on a first call, a double tone is heard indicating that an Incoming call is waiting to be answered.		
1. Press the blinking [SPLIT] key.	The first call is put on Hold automatically, and second call is connected.	The [SPLIT] key LED will blink.
2. Press the blinking [SPLIT] key.	Second call is put on Hold, and first call is re-connected.	

To drop one call and go back to the desired call, press the [OUTSIDE LINE] key which is on Hold. After ending one call, do not use the [SPLIT] key to go back to remaining call. The [SPLIT] key is used for going back and forth between calls.

5.19 PARK KEY

The PARK key is used in applications where the 10 zones of the *Orbit* feature are not enough to meet the customers needs. The PARK key enables each trunk to be placed in its own park zone. When the PARK key is pressed, the calf goes to a park zone that is equal to the trunk number. For example, line 53 would be sent to park zone 53. Although the feature can be used with 17-key, 28-key, and display telephones, it is only useful with display telephones. The park zone number (trunk number) must be known to retrieve the call.

PROGRAMMING

Required: A [PARK] key (key code 834) is required.

How To: Use The [PARK] Key.

ACTION	RESULT	COMMENT
1. While on an outside line call, press the [PARK] key.	The call is placed in a park zone with the same number as the 3-digit outside line number.	

How To: Retrieve A Parked Call.

ACTION	RESULT	COMMENT
1. Lift the handset, or press the [HF] key.	Internal dial tone is heard.	
2. Press the -(PARK] key, and dial the 3-digit park zone number. e.g. [0] [5] [3].	The call is connected.	

5.20 PLACING OUTSIDE LINE CALLS

Outside line calls can be made by any extension in the system. An outside line call is any call made using a CO line, trunk, or a tie line. With the exception of Single Line telephones, these outside lines are accessed by stations using the programmed feature keys. The feature keys can be programmed to access a particular line, a group of lines, or *Least Cost Routing.*

The Single Line telephones can place outside line calls by dialing an access code which selects a line from a group of lines, or *Least Cost Routing* can be used. A Single Line telephone cannot access outside lines individually. The digital telephones can select an outside line (or group) by dialing an access code.

The 28-key and Dispiay telephones have a built-in speaker and microphone, in addition to the handset, which permits hands free conversation on outside line calls.

A phone with *In/Out* active cannot place calls,

PROGRAMMING

Required: At least one [OUTSIDE LINE] key (a trunk group, direct appearance for the desired line, UNI, or LCR key) must be programmed on extensions which are to place outside line calls. At least one [LCR] key MUST be programmed on extensions connected to Single Line telephones and 6-key telephones.

Affected By: *Day and Night Access, Toll Restriction (Day and Night* Class), *Forced Account Codes, Cost Limit and Total Toll, LCR Class, Prime Line, Hands Free Co, and Out LCR on/y* on the *Station Programming* screen. When the Alternate *Dialing* option is programmed Y (yes), stations cannot dial access trunks except for those allowed by *Altema te Dialing.*

How To: Place Outside Line Calls.

	ACTION	RESULT	COMMENT
1.	Lift the handset.	Internal dial tone is heard.	To place the call hands free, skip this step and begin with step 2.
2.	Press an idle [OUTSIDE LINE] key.	The [OUTSIDE LINE] key LED will light. Dial tone is heard.	Before pressing an [OUTSIDE LINE] key, be sure the OUTSIDE LINE is idle, i.e., the [OUTSIDE LINE] key LED is not lit.
3.	Dial the desired telephone number.	Dialing pulses/tones are heard in handset.	

PLACING OUTSIDE LINE CALLS, cont.

How To: Place An Outside Call Using A 6-key Telephone.

ACTION	RESULT	COMMENT
1. Lift the handset.	internal dial tone is heard.	

To place the call hands free, skip this step and begin with step 2. The 6-key telephone can dial a call hands free, but the handset must be used for the conversation.

2.	Press the [OUT] key.	Dial tone is heard.	
3.	Dial the desired telephone number.	The system selects a line and dials the telephone number.	If the system does not select a line, but gives a busy signal, the *Trunk Queueing* feature may be used.

The [OUT] key on the 6-key telephone does not select a line directly, but uses the system's LCR feature. If there is no LCR data base loaded, the system selects an idle line in Trunk Group 1.

How To: Place An Outside Call On A Single Line Telephone.

ACTION	RESULT	COMMENT
1. Lift the handset.	Internal dial tone is heard.	
2. Dial [9] +-the desired outside line trunk group [1] through [9] or [0] for trunk group 10. Dial [9] [*] for LCR.	Dial tone is heard.	
3. Dial the outside telephone number.	A few moments after you stop dialing, the system selects a line in the desired trunk group and dials the outside number.	If the system does not select a line, but gives a busy signal, the *Trunk Queueing* feature may be used.

PLACING OUTSIDE LINE CALLS, cont.

How To: Place Outside Line Calls By Dial Accessing A Line.

ACTION	RESULT	COMMENT
1. Lift the handset.	Internal dial tone is heard.	
2. Dial [9] + the 3 digit line number (001-228) of the desired line.	Dial tone is heard.	If the system does not select a line, but gives a busy signal, the Trunk *Queueing* feature may be used.
3. Dial the desired telephone number.		

How To: Place Outside Line Calls By Dial Accessing A Trunk Group.

ACTION	RESULT	COMMENT
1. Lift the handset.	Internal dial tone is heard.	
2. Dial [9] [3] + the 2 digit trunk group number (01-10) of the desired trunk group.	Dial tone is heard.	If the system does not select a line, but gives a busy signal, the *Trunk Queueing* feature may be used.
3. Dial the desired telephone number.		

5.21 STATION SPEED DIAL

For convenience, a station user may program frequently used external numbers (e.g., business contacts, private numbers, etc.) into system memory. This enables the user to dial the programmed numbers with the press of a key, or by dialing a short code. An extension can store up to *30 station speed dial* numbers and a speed dial number can contain up to 30 digits. Each speed dial number is stored in a memory location called a *bin.* A *station speed dial* number can be programmed and accessed using either of two methods:

A 2-digit bin number for dialing the code manually.

A dedicated feature key programmed as a [STATION SPEED DIAL] key.

The user may use either method separately, or a combination of both methods up to a maximum of 30 Station Speed Dial numbers,

A *station speed dial* number may also be chained (joined) to another *station speed dial* number, *or* to a *system speed dial* number.

Station Speed Dial numbers are subject to toll restriction.

This section describes the programming and use of *station speed dial* bins.

PROGRAMMING

Required: At least one [OUTSIDE LINE] key (a trunk group, direct appearance for the desired line, UNI, or LCR key) must be programmed on the desired extensions.

Optional : A [STATION SPEED] key (code 600) may be programmed on the 17-key, 28-key, and Display Phone. The sub-code indicates the speed dial bin number.

Affected By: The *Pause Timer* on the *System Programming* screen. See also *Placing Outside Line Calls.*

STATION SPEED DIAL, cont.

How To: Program A Station Speed Dial Bin Number.

ACTION	RESULT	COMMENT
1. Without lifting the handset, press the [PROG] key.	The [PROG] key LED is lights steadily.	
2. Dial the desired bin number (01-30).	The [PROG] key LED will begin to blink.	When entering the bin number, if the [PROG] key LED goes out, the bin number entered is already dedicated to a [STATION SPEED DIAL] key. The user may use the dedicated key or initiate the procedure again using another bin number.
3. Dial the telephone number.		Up to 30 digits may be entered.
4. Press the [PROG] key.	The [PROG] key LED goes out.	Programming ends. The telephone number is stored in memory.

Pauses between digits may be entered by dialing [*] [1] . This enters a pause of fixed duration. The length of the pause is determined from the *Pause Timer* on the System *Programming* screen.

An automatic pause, which waits for dial tone, can be entered by dialing [*] [4].

To enter a [*] into the actual dialed number, press [*] twice, although it still counts as one digit.

If the [PROG] key LED goes out before you have finished entering the necessary information, you have waited too long, and the programming mode has timed out. Begin the process over again.

STATION SPEED DIAL, cont.

How To: Chain A Station Speed Dial Number To Another.

ACTION	RESULT	COMMENT
1. Without lifting the handset, press the [PROG] key.	The [PROG] key LED is lights steadily.	
2. Dial the desired bin number (01-30).	The [PROG] key LED will begin to blink.	When entering the bin number, if the [PROG] key LED goes out, the bin number entered is already dedicated to a (STATION SPEED DIAL] key. The user may use the dedicated key or initiate the procedure again using another bin number.
3. Dial the telephone number.		Up to 30 digits may be entered. When this bin is used to dial out, the system dials this number first, then the number contained in the second bin.
4. Dial [*] [2].		This is the command to chain to another *station speed dial* number.
5. Dial the two digit number (01-30) of the bin to chain to.		
6. Press the [PROG] key.	The [PROG] key LED goes out.	Programming ends. The telephone number is stored in memory.

Continue the chaining process by programming the bin that has been chained to. Program this bin the same as any other station speed dial number. This bin can also be chained to another.

STATION SPEED DIAL, cont.

How To: Chain A Station Speed Dial Number To A System Speed Dial Number.

ACTION	RESULT	COMMENT
1. Without lifting the handset, press the [PROG] key.	The [PROG] key LED is lights steadily.	
2. Dial the desired bin number (01-30).	The [PROG] key LED will begin to blink.	When entering the bin number, if the [PROG] key LED goes out, the bin number entered is already dedicated to a [STATION SPEED DIAL] key. The user may use the dedicated key or initiate the procedure again using another bin number.
3. Dial the telephone number.		Up to 30 digits may be entered. When this bin is used to dial out, the system dials this number first, then the number contained in the system *speed* dial bin.
4. Dial [*] [3].		This is the command to chain to a system *speed* dial number.
5. Dial the three digit number (001-200) of the bin to chain to.		
6. Press the [PROG] key.	The [PROG] key LED goes out.	Programming ends. The telephone number is stored in memory.

STATION SPEED DIAL, cont.

How To: Use Station Speed Dial.

ACTION	RESULT	COMMENT
1. Lift the handset.	internal dial tone is heard.	With hands free use, ignore step 1, and begin with step 2.
2. Select an outside line.	The [OUTSIDE LINE] key LED blinks slowly. External dial tone is heard.	With hands free operation, the [HF] key LED will light.
3. Press [PROG] key.	The [PROG] key LED will light.	
4. Dial desired bin number 01 through 30.	Speed dialing digits is heard in handset. [PROG] key LED goes out.	

5.22 STATION SPEED DIAL KEY

For convenience, a station user may program frequently used external numbers (e.g., business contacts, private numbers, etc.) into system memory. This enables the user to dial the programmed numbers with the press of a key, or by dialing a short code. An extension can store up to *30 station speed dial* numbers and a speed dial number can contain up to 30 digits. Each speed dial number is stored in a memory location called a *bin.* A *station speed dial* number can be programmed and accessed using either of two methods:

A dedicated feature key programmed as a [STATION SPEED DIAL] key

A 2-digit bin number for dialing the code manually.

The user may use either method separately, or a combination of both methods up to a maximum of 30 Station Speed Dial numbers.

A *station speed dial* number may also be chained (joined) to another *station speed dial* number, or to a *system speed dial* number.

Station Speed Dial numbers are subject to toll restriction.

This section describes the programming and use of a dedicated [STATION SPEED DIAL] key.

PROGRAMMING

Required: A [STATION SPEED DIAL] key must be programmed on each desired station for each desired Station Speed Dial bin. The key code for a [STATION SPEED DIAL] key is 600. To program the key to access a particular station speed dial number, enter the bin number (01-30) in the sub-code area if the key.

At least one [OUTSIDE LINE] key (a trunk group, direct appearance for the desired line, UNI, or LCR key) must be programmed on the desired extensions.

Affected -By: The Pause *Timer* on the *System Programming* screen. *See* also *Placing Outside Line* Calls.

STATION SPEED DIAL KEY, cont.

How To: Program A [STATION SPEED DIAL] Key.

ACTION	RESULT	COMMENT
1. Without lifting the handset, press the [PROG] key.	The [FROG] key LED is lights steadily.	
2. Press the [STATION SPEED DIAL] key to be programmed.	The [PROG] key LED will begin to blink.	
3. Dial the telephone number.		Up to 30 digits may be entered. A pause counts as one digit.
4. Press the [PROG] key.	The [PROG] key LED goes out.	Programming ends. The telephone number is stored in memory.

Pauses between digits may be entered by dialing [*] [1] . This enters a pause of fixed duration. The length of the pause is determined from the Pause Timer on the System *Programming* screen.

An automatic pause, which waits for dial tone, can be entered by dialing [*] [4].

To enter a [*] into the actual dialed number, press [*] twice, although it still counts as one digit.

If the [PROG] key LED goes out before you have finished entering the necessary information, you have waited too long, and the programming mode has timed out. Begin the process over again.

STATION SPEED DIAL KEY, cont.

How To: Chain A Station Speed Dial Number To Another.

ACTION	RESULT	COMMENT
1. Without lifting the handset, press the [PROG] key.	The [PROG] key LED is lights steadily.	
2. Press the [STATION SPEED DIAL] key to be programmed.	The [PROG] key LED will begin to blink.	
3. Dial the telephone number.		Up to 30 digits may be entered.
4. Dial [*] [2].		This is the command to chain to another *station speed dial* number.
5. Dial the two digit number (01-30) of the bin to chain to.		
6. Press the [PROG] key.	The [PROG] key LED goes out.	Programming ends. The telephone number is stored in memory.

Continue the chaining process by programming the bin that has been chained to. Program this bin the same as any other station speed dial number. This bin can also be chained to another.

STATION SPEED DIAL KEY, cont.

How To: Chain A Station Speed Dial Number To A System Speed Dial Number.

ACTION	RESULT	COMMENT
1. Without lifting the handset, press the [PROG] key.	The [PROG] key LED is lights steadily.	
2. Press the [STATION SPEED DIAL] key to be programmed.	The [PROG] key LED will begin to blink.	
3. Dial the telephone number.		Up to 30 digits may be entered. When this bin is used to dial out, the system dials this number first, then the number contained in the system speed *dial* bin.
4. Dial [*][3].		This is the command to chain to a system *speed dial* number.
5. Dial the three digit number (001-200) of the bin to chain to.		
6. Press the [PROG] key.	The [PROG] key LED goes out.	Programming ends. The telephone number is stored in memory.

STATION SPEED DIAL KEY, cont.

How To: Use A [STATION SPEED DIAL] Key.

ACTION	RESULT	COMMENT
1. Lift the handset.	internal dial tone is heard.	With hands free use, ignore step 1, and begin with step 2.
2. Press an available [OUTSIDE LINE] key.	The [OUTSIDE LINE] key LED blinks slowly. External dial tone is heard.	With hands free operation, the [HF] key LED will light.
3. Press the desired [STATION SPEED DIAL] key.	The system dials the stored number on the outside line selected.	

5.23 SYSTEM SPEED DIAL

The system is capable of storing 999 System Speed Dial numbers with a maximum of 11 digits for each number. *These System Speed Dial* numbers must be programmed from an Operator's extension. Any telephone number which is frequently dialed by all extensions users in the system, can be programmed by the Operator to provide System Speed Dial as a time saving feature for all extension users.

System Speed *Dial* numbers are not subject to a station's toll restriction. Therefore, dialing *System Speed Dial Numbers* cannot be prevented by using any *of* the *Forced Account Code* features.

PROGRAMMING

Required: At least one [OUTSIDE LINE] key (a trunk group, direct appearance for the desired line, UNI, or LCR key) must be programmed on the desired extensions.

Optional: A [SYSTEM SPEED] key (key code 7001 through 7999) may be programmed on the 17-key, 28-key, and Display Phone.

The key code for a [SYSTEM SPEED] key found in software versions prior to 4.51 is also valid for the first 200 speed dial numbers. This previous key code was 700 where the sub-code indicates the speed dial bin number.

Affected By: See Placing Outside Line Calls.

How To: Program System Speed Dial Numbers On The Operator Terminal.

ACTION	RESULT	COMMENT
1. Without lifting the handset, or pressing the [RLS] key, press the [PGM] key at the Operator Station.		
2. Press [*] plus desired bin number (001-999) on dial pad.		
3. Dial desired telephone number up to 11 digits (pauses count as one digit).		Number to be stored can have a maximum of 30 digits. To enter a pause between digits, press [*] [1]. Automatic pauses which wait for dial tone are set by pressing [*] [4].
4. Press [PGM] key.		Programming ends. Repeat for as many bins as desired.

SYSTEM SPEED DIAL, cont.

How To: Use System Speed Dial.

ACTION	RESULT	COMMENT
1. Lift the handset.	Internal dial tone is heard.	With hands free use, ignore step 1, and begin with step 2.
2. Select an outside line.	The [OUTSIDE LINE] key LED blinks slowly. External dial tone is heard.	With hands free operation, the [HF] key LED will light.
3. Press [PROG] key.	The [PROG] key LED will light.	
4. Dial [*] on the dial pad.		Command for System Speed Dial.
5. Dial desired bin number 001-999.	Speed dialing of digits is heard in handset. The [PROG) key LED goes out.	

How To: Use A SYSTEM SPEED DIAL Key.

ACTION	RESULT	COMMENT
1. Lift the handset.	Internal dial tone is heard..	With hands free use, ignore step 1, and begin with step 2.
2. Select an outside line.	The [OUTSIDE LINE] key LED blinks slowly. External dial tone is heard.	With hands free operation, the [HF] key LED will light.
3. Press the desired [SYSTEM SPEED DIAL] key.	Speed dialing of digits is heard,	

5.24 ACD NIGHT KEY

The ACD NIGHT key is used to place an ACD Group into the NIGHT mode. In this mode, incoming calls to the group follow the programmed NIGHT SEQUENCE for the group if all agents are busy.

PROGRAMMING

Required: An [ACD NIGHT] key must be programmed in Station *Programming. A* [ACD NIGHT] key is available for each of the 15 ACD Groups.

Affected By: Programming of automatic ACD NIGHT mode on the Trunk Group Programming screen.

How To: Place An ACD Group In NIGHT mode.

ACTION	RESULT	COMMENT
1. Press the appropriate [ACD NIGHT] key.	The [ACD NIGHT] key LED flashes.	

How To: Place An ACD Group In DAY mode.

ACTION	RESULT	COMMENT
1. Press the appropriate [ACD NIGHT] key.	The [ACD NIGHT] key LED goes out.	

5.25 BAD LINE KEY

The system has a number of built-in tools to aid in trouble-shooting problems that may arise. A method available to the technician is the [BAD LINE] key. The [BAD LINE] key is a useful method that can determine a bad trunk. Any extension can be programmed with the [BAD LINE] key. The user can be instructed to press the key whenever a problem (such as a noisy line) is detected. Each time this key is pressed, it increments a counter for each line. This counter can be seen on the *F, G, and H reports. These* reports are found in the *Reports Menu.*

The column the technician must be sensitive to is labeled *B. CALS,* which indicates the number of times the [BAD LINE] key has been pressed for each trunk. Once identified, the trunk can then be tested, and appropriate corrective action can be taken.

In *the LCR Report,* the technician is not looking for the number of times the [BAD LINE] key has been pressed for each trunk, but is looking at the B. CALS column for information on each Service.

PROGRAMMING

Required: A [BAD LINE] key (key code 819) must be programmed for each desired extension.

Affected By: None.

How To: Use The [BAD LJNE] Key.

ACTION	RESULT	COMMENT
1. Press the [BAD LINE] key if a noisy line is heard. This step is to be repeated for each bad trunk line.		The total number of bad line calls will be reflected in the B. CALS column of the reports (F, G, and H) listed above.

5.26 VMS MAIL KEY

When the [MAIL] key is flashing on your phone, it means that someone has left a message for you in VMS. VMS is an optional feature which provides the telephone system with an integrated voice message system. A station can be forwarded such that VMS takes messages for you when you are unable to answer the call. Outside callers can be transferred to the VMS system to leave messages. Outside callers can be transferred directly to a VMS user's mailbox.

Each VMS user is assigned their own message space called a "mailbox" which is protected by a user determined password. Privacy is insured, as you are the only one that can review the messages left in your mailbox.

If your telephone has programmable feature keys, one of them is designated as your VMS key (or [MAIL] key). The LED beside this key flashes to indicate a message is waiting for you in your VMS mailbox.

If your telephone is a 6 key telephone (with no programmable keys), the PROG (program) key LED flashes to indicate a message waiting.

PROGRAMMING

Required: A [VMS] key (key code 830) is required on the 17-key, 28-key, and Display telephones. A 6-key telephone does not require a [VMS] key.

How To: Use The [MAIL] Key.

ACTION	RESULT	COMMENT
1. Lift the handset.	Internal dial tone is heard.	
2. Press the [MAIL] key on your phone.	Ring back tone is heard. The telephone system is ringing the VMS system. When VMS answers, it prompts you for your password.	
3. When VMS answers, enter your password. Follow the VMS system voice prompts to retrieve your messages.		

VMS MAIL KEY, cont.

How To: Retrieve Your Message With The B-key Telephone.

ACTION	RESULT	COMMENT
1. Lift the handset.	Internal dial tone is heard.	
2. Press the [PROG] [SPEED] key on your phone.	Ring back tone is heard. The telephone system is ringing the extension that left the message.	If the VMS system has left the message, your name prompt is heard. When VMS answers, it prompts you for your password.
3. (When VMS answers), enter your password. Follow the VMS system voice prompts to retrieve your messages.		

5.27 BARGE IN

An existing conversation between a station user and another party can be entered by an authorized third party. The third party may then converse with both other parties. The station being broken into must be programmed to allow such entry. When the conversation is broken into, a warning tone is heard.

PROGRAMMING

Required: A [BARGE] key must be programmed in Station Programming.

Affected By: The called station's Block Barge In, and Block Barge Tone in Station Programming. The called station's use of DND.

How To: Barge Into A Conversation.

	ACTION	RESULT	COMMENT
1.	Lift the handset.	Internal dial tone is heard.	
2.	Dial the desired extension number.	Busy tone is heard.	
3.	Press the [BARGE IN] key.	A brief warning tone is heard. The conversation is entered.	The warning tone is not heard if *Block* Barge *Tone* is programmed Yes at the called extension.
4.	To disconnect, replace the handset.		

5.28 SILENT MONITOR

Silent Monitor allows an authorized person to monitor the outside line calls made by another station. This feature permits monitoring only, the user cannot talk to the station being monitored. Silent monitor can be activated, and then any outside line call placed by the monitored station can be overheard.

While Silent Monitor is in use, calls cannot be placed from your extension, and your phone is busy to other callers.

NOTE: This feature must be added to system software by an authorized service center using the remote programming feature. This feature will not function until it is added.

NOTE: The use of this feature may be prohibited in some states. Consult state and local laws before using this feature.

PROGRAMMING

Required: A [SILENT MONITOR] key must be programmed in *Station Programming*. The feature must be added by an authorized service center.

How To: Use Silent Monitor.

ACTION	RESULT	COMMENT
1. Press the [HF] key.	Internal dial tone is heard.	The handset may be used with this feature.
2. Press the [SILENT MONITOR] key.		
3. Dial the desired extension number.	The [SILENT MONITOR] key LED flashes.	Any outside line call placed, or received by the monitored extension is heard in the speaker (of handset) of your telephone.

5.29 REMOTE SILENT MONITOR

The Remote Silent Monitor feature allows an outside party to call into the system and be transferred via a station to another station. The user who initiates the transfer MUST have a [SILENT MONITOR] key. The outside party can then monitor all CO calls that a station receives, but cannot monitor intercom calls.

NOTE: This feature *must be added to system software by an authorized service center using rhe remote programming feature. This feature will not function until it is added.*

NOTE: The use of this feature may be prohibited in some states. Consult state *and local laws before using this feature.*

PROGRAMMING

Required: A [SILENT MONITOR] key (key code 833) is required. The feature must be added by an authorized service center.

Affected By: *Block Barge* and *Block Barge Tone* in the *Timers* area of the *Station Programming* screen. An extension in *Do Not Disturb* cannot be monitored.

How To: Use The Remote Silent Monitor Feature.

ACTION	RESULT	COMMENT
1. (While on the outside line call), press the [TR/CON] key.	Dial tone is heard.	
2. Press the [SILENT MONITOR] key.		
3. Dial the desired extension number.	The called extension's outside line calls can now be monitored.	
4. When desired, the handset can be replaced.	The Outside caller will remain connected.	

As long as the outside party stays off-hook, he will monitor any CO calls that the monitored station receives. The [OUTSIDE LINE] key LED on the station that performed the transfer will remain lit as long as the outside party continues to monitor.

5.30 ACD OPERATION WITH A 6-KEY AND SINGLE LINE TELEPHONE

The 6-key telephone and the Single Line telephone can be used as agent positions with the use of software version 5.26 or higher. These telephones perform the necessary ACD functions by dialing codes on the dial pad. An agent using a 6-key or Single Line telephone can perform the following ACD functions:

Log on
Log off
Become Unavailable or Available
Qualify a call
Cancel remaining wrap up time
Request Help

A 6-key or Single Line telephone cannot:

Place an ACD group in the NIGHT mode
Watch the status of an ACD queue with a [QUEUE] key
Use a [RELEASE] key for a headset (the 6-key telephone can use Hook *Release.)*
Barge In or use Silent Monitor

PROGRAMMING

Required: The agent must be programmed on the *Agent Setup* screen.

Affected By: See the individual ACD functions discussed in previous sections.

How To: Log On When System Is Programmed For AUTOMATIC Log On.

ACTION	RESULT	COMMENT
1. Lift the handset.	Internal dial tone is heard.	
2. Dial PRS 7 DEF 3 0 plus the 3-digit Agent number (001-200).	Confirmation tone is heard. The agent is logged in.	
3. Replace the handset.		

ACD OPERATION WITH A 6-KEY AND SINGLE LINE TELEPHONE, cont.

How To: Log On When System Is Programmed For MANUAL Log On.

ACTION	RESULT	COMMENT
1. Lift the handset.	Internal dial tone is heard.	
2. Dial PRS 7 DEF 3 0 * plus your l-digit priority (O-2).		Priority numbers are assigned by the ACD Manager [0] through [2] so that those agents best equipped to handle ACD calls can be designated to answer the majority of those calls. 0 is the highest priority, and 2 is the lowest priority.
3. Dial your 2-digit group number (01–1 5).		
4. Dial your 3-digit agent number (001-200).	Confirmation tone is heard. The agent is logged in.	
5. Replace the handset.		

How To: Log Off.

ACTION	RESULT	COMMENT
1. Lift the handset.	Internal dial tone is heard.	
2. Dial PRS 7 DEF 3 1.	Confirmation tone is heard. The agent is logged off.	
3. Replace the handset.		

ACD OPERATION WITH A 6-KEY AND SINGLE LINE TELEPHONE, cont.

How To: Become Unavailable for ACD calls.

ACTION	RESULT	COMMENT
1. Lift the handset.	Internal dial tone is heard.	
2. Dial PRS 7 DEF 3 ABC 2.	Confirmation tone is heard. ACD calls will not be routed to the agent.	
3. Replace the handset.		

How To: Become Available for ACD calls.

ACTION	RESULT	COMMENT
1. Lift the handset.	Internal dial tone is heard.	
2. Dial PRS 7 DEF 3 DEF 3.	Confirmation tone is heard. ACD calls will be routed to the agent.	
3. Replace the handset.		

How To: Qualify An ACD Or Non-ACD Outside Line Call.

ACTION	RESULT	COMMENT
1. Lift the handset.	internal dial tone is heard.	Non-ACD calls may be qualified only if your system is programmed for this function.
2. Dial PRS 7 DEF 3 GHI 4.		
3. Dial the 3-digit qualification code (001-200).	Confirmation tone is heard.	The 3-digit qualification number (001 through 200). should correspond to the nature of the call you have just completed.
4. Replace the handset.		

ACD OPERATION WITH A 6-KEY AND SINGLE LINE TELEPHONE, cont.

How To: Request Help.

ACTION	RESULT	COMMENT
NOTE: This feature is not available with Basic ACD.		
1. Lift the handset.	Internal dial tone is heard.	
2. Dial PRS 7 DEF 3 JKL 5.	Confirmation tone is heard. The supervisor is alerted.	
3. Replace the handset.		

How To: Cancel Your Request Help From Your Supervisor.

ACTION	RESULT	COMMENT
1. Lift the handset.	Internal dial tone is heard.	
2. Dial PRS 7 DEF 3 MNO 6.	Confirmation tone is heard. The request is canceled.	
3. Replace the handset.		

How To: Cancel Any Remaining Wrap Up Time.

ACTION	RESULT	COMMENT
1. Lift the handset.	Internal dial tone is heard.	
2. Replace the handset.	Any remaining wrap up time is canceled. The agent is ready for another call.	

Section 6
Dynamic ACD

6.1 INTRODUCTION

Dynamic ACD adds a powerful management tool to the call routing and handling capabilities of Basic ACD. Dynamic ACD permits a CRT based supervisor position to be connected to the system. The supervisor's CRT gives you a window into the operation of the ACD system. Two dynamic (real time) status screens permit a supervisor to watch the operation of the ACD system. These two screens are used to monitor system activity in real time, spot peak periods, help agents with problems, and balance system load by moving agents from group to group.

The *ACD System Status* screen displays the activity of all 15 ACD groups simultaneously. The agent activity of any one group is also displayed.

The *ACD* Group *Status* screen shows the activity of all logged in agents in any one ACD group.

These two screens allow an ACD supervisor to monitor what is happening within the ACD groups. Agents can then be reassigned from one group to another based on the call traffic within a group. The number of calls waiting to be answered, and how long the oldest call has been waiting is also shown.

Either of the *Status* displays can be used to LOG an agent OFF the system, and place an ACD Group in NIGHT mode.

6.2 ACD SYSTEM STATUS

The *ACD System Status* display is divided into 3 areas. The area occupying most of the right half of the screen displays a summary of all ACD groups. This area lists the number of agents logged on, the number of agents available to receive calls, how many calls are waiting to be answered, and how long the oldest call has been waiting to be answered for each group.

The left half of the screen is devoted to displaying the current state of each agent in the displayed group. Any one of the 1.5 ACD groups can be displayed at one time. The first 20 agents (by agent number) are displayed. The ACD Group *Status* screen is used to display more than 20 agents. As each of the ACD groups is selected, this area is updated to display that ACD Group.

The box labeled *REC* at the bottom of the screen is used to notify the supervisor of a possible problem with one (or more) of the recorded announcement devices. If an extension designated as a recorder does not answer, the extension number and recorder number are displayed in this box.

6.2.1 HOW TO ACCESS THE ACD SYSTEM STATUS

The present activity of any one of the ACD Groups can be seen using this status screen.

Action: From the *ACD Main Menu,* press the C key. The ESCAPE key can be used at any time to return to the *ACD Main Menu.*

Commands: The UP and DOWN arrow keys are used to scroll through the 15 groups.

The CONTROL P and CONTROL C keys are used to log off individual agents.

The CONTROL N keys can be used to place the ACD Group in the night mode.

The D key can be used to reach the *ACD Group* Status screen without returning to the *ACD Main Menu.*

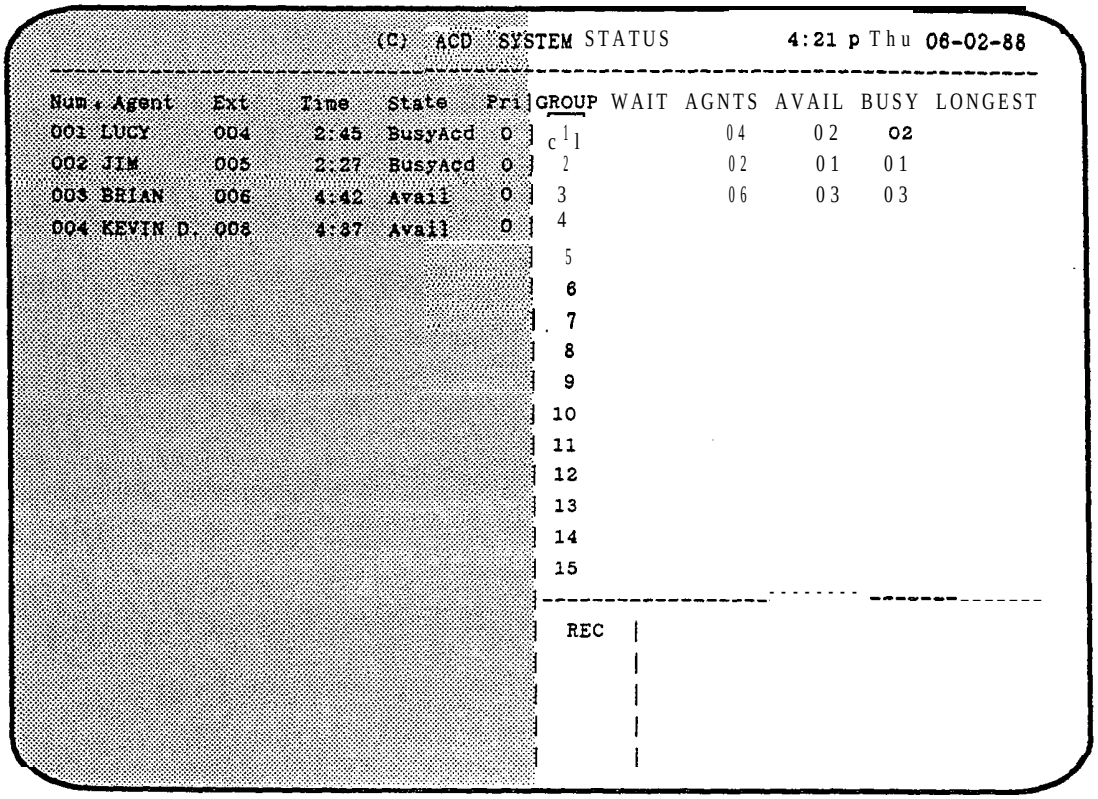


Figure 6-l ACD System Status

6.2.2 DEFINITIONS - GROUP AREA

GROUP — A line of information is represented for each of the 15 ACD groups. An "N" next to the group number indicates the group is in the night mode. Each line consists of the following:

WAIT — The number of calls waiting to be answered by an agent is listed for each group. This number should be kept as close to zero as possible. As this number begins to rise, make certain as many agents as possible are on ACD calls. If all agents are in fact on ACD calls, and the number of calls waiting to be answered is still high, thought should be given to temporarily assigning more agents to the group.

AGNTS — The number of agents that are presently logged into each group.

AVAIL — The number of agents who are free to receive ACD calls. This number should be kept as close to zero as possible. An available agent is sitting waiting for a call to arrive, or performing work that can be interrupted.

BUSY — The number of agents that are on ACD calls. This number should be kept as close as possible to the number of agents logged in. If the number of busy agents plus the number of available agents does not equal the number of agents logged on, a quick look at the AGENT area (or the GROUP STATUS screen) shows which agents are unavailable to take calls and why!

LONGEST — The amount of time the oldest ACD call has been waiting to be answered. This number should be as low as possible. How long will a customer remain on hold before hanging up?

6.2.3 DEFINITIONS – AGENT AREA

The left half of the *ACD System Status* screen displays the current state of the first 20 agents in the group shown.

NUM The information on each line corresponds to the agent number listed in this column. The agents are listed sequentially by agent number beginning with the lowest number.

AGENT The name of the agent assigned to each of the *agent numbers* is listed in this column. This name is the one that is entered on *the ACD Agent Setup* screen.

EXT The extension number of the telephone the agent is currently logged in from. Only the last 3 digits of the extension number are displayed.

TIME This column works in conjunction with the STATE column. It indicates the amount of time an agent has been in the STATE listed.

PRI The assigned priority (00-02) of the agent. A priority of 03 indicates the GROUP displayed is the agent's secondary SPLIT.

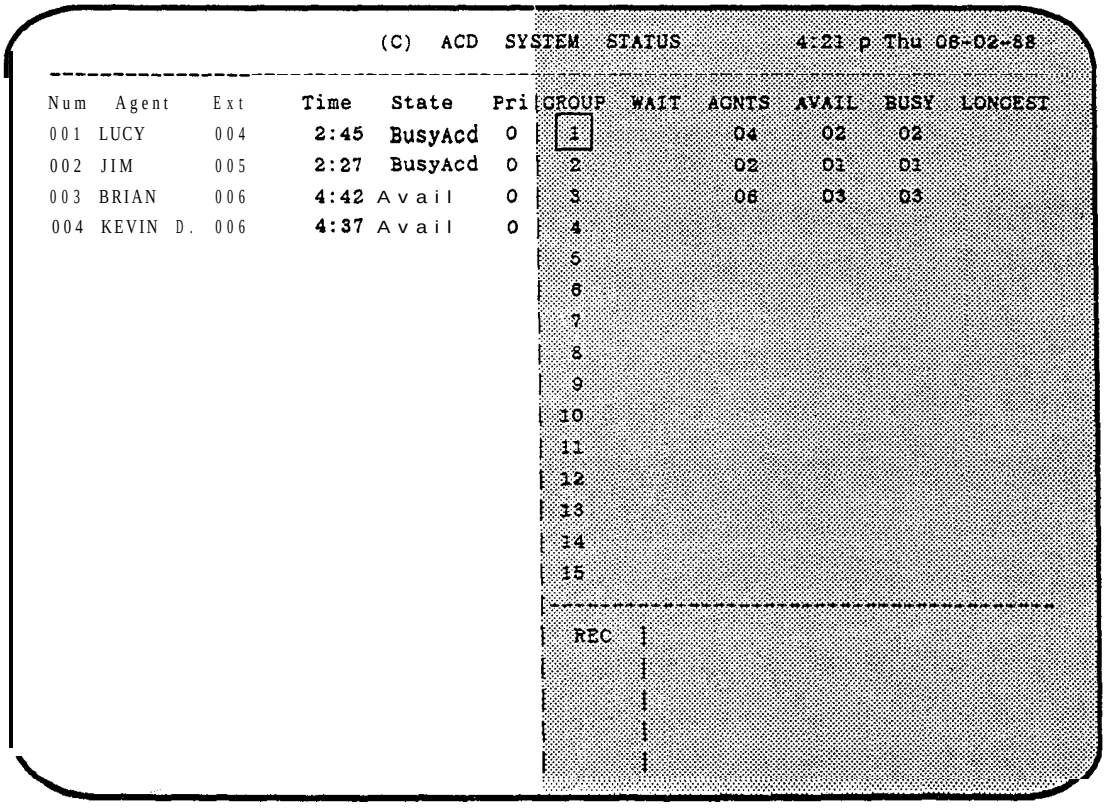


Figure 6-2 ACD System Status

STATE	The current activity of the ACD agent's phone is listed in this column. The activity can be any one of the following:
Avail	The agent's phone is idle, and the agent is ready to receive a call.
ACDRng	An ACD call is ringing the agent's extension.
BusyACD	The agent is currently talking on an ACD call.
WrapUp	The agent has completed a call, and is now in the programmed wrap up time. This time is usually set aside for the agent to complete any work pertaining to the previous call.
FrcWrap	The agent has completed a call, and is now in the programmed wrap up time. The system is waiting for the agent to enter a QUALIFICATION code. The system keeps the agent in this state until a QUALIFICATION code is entered. No ACD calls are routed to the agent in this state.
Unavail	The UNAVAILABLE key on an agent's telephone has been pressed. The system does not attempt to route ACD calls to this agent.
BusyOut	The system attempted to route a call to this agent, but the agent did not answer the call within the prescribed time *(ACD Group* Setup). The agent position remains in this state for the time specified in the *ACD Group Setup,* or until the agent presses the UNAVAILABLE key.
ACDDND	The Do Not Disturb feature has been activated at this agent position. This position cannot receive any incoming calls.
CORng	An incoming non-ACD call is ringing the agent's telephone.
BusyCO	The agent is talking on an outside line call. The call could be either incoming or outgoing.
ICMRng	An internal caller is ringing the agent's phone.
BusyICM	The agent is talking to someone on an intercom call.
Split	The agent is performing a task in an ACD Group other than the one displayed. Split is followed by a number indicating the ACD Group the agent is active in. The display must be switched to this Group in order to determine the exact state of the agent.

6.3 LOG OFF AN AGENT

Both the *ACD System Status* and *ACD Group Status* screens can be used to log an agent off the system from the terminal.

1. Access either of the two screens.
2. Press the CONTROL and P keys simultaneously. A cursor lights in the Priority (Pri) column.
3. Use the UP and DOWN arrow keys to move the cursor to the desired agent.
4. Press the CONTROL and C keys simultaneously. The agent is logged off.
5. Continue from step 3 for any other agents. Press the CONTROL and P keys simultaneously when finished to return the screen to the normal viewing mode.

6.4 ACD GROUP NIGHT MODE

Either the ACD *System,* or *ACD Group* Status screen can be used to place an ACD Group into the NIGHT mode from the programming terminal.

ACD SYSTEM STATUS SCREEN

1. Using the UP and DOWN arrow keys, select the group to be placed in the NIGHT mode.
2. Press the CONTROL and N keys simultaneously. The letter N appears next to the group in the night mode.
3. To place the group in DAY mode, select the group, and press the CONTROL and N keys simultaneously.

ACD GROUP STATUS SCREEN

1. Using the I and D keys, select the group to be placed in the NIGHT mode.
2. Press the CONTROL and N keys simultaneously. The GROUP number at the top left of the screen appears in a solid block.
3. To place the group in DAY mode, select the group, and press the CONTROL and N keys simultaneously .

6.5 ACD GROUP STATUS

6.5.1 HOW TO ACCESS THE ACD GROUP STATUS

The current activity of agents in any one of the ACD Groups can be seen using this status screen. The screen is divided into a top line, and two status areas.

Action: From the *ACD Main Menu,* press the D key. The ESCAPE key can be used at any time to return to the *ACD Main Menu.*

Commands: The I and D keys are used to scroll through the 15 groups.

The CONTROL P and CONTROL C keys are used to log off individual agents.

The CONTROL N keys can be used to place the ACD Group in the night mode.

The C key can be used to reach the *ACD Group Status* without returning to the *ACD Main Menu.*

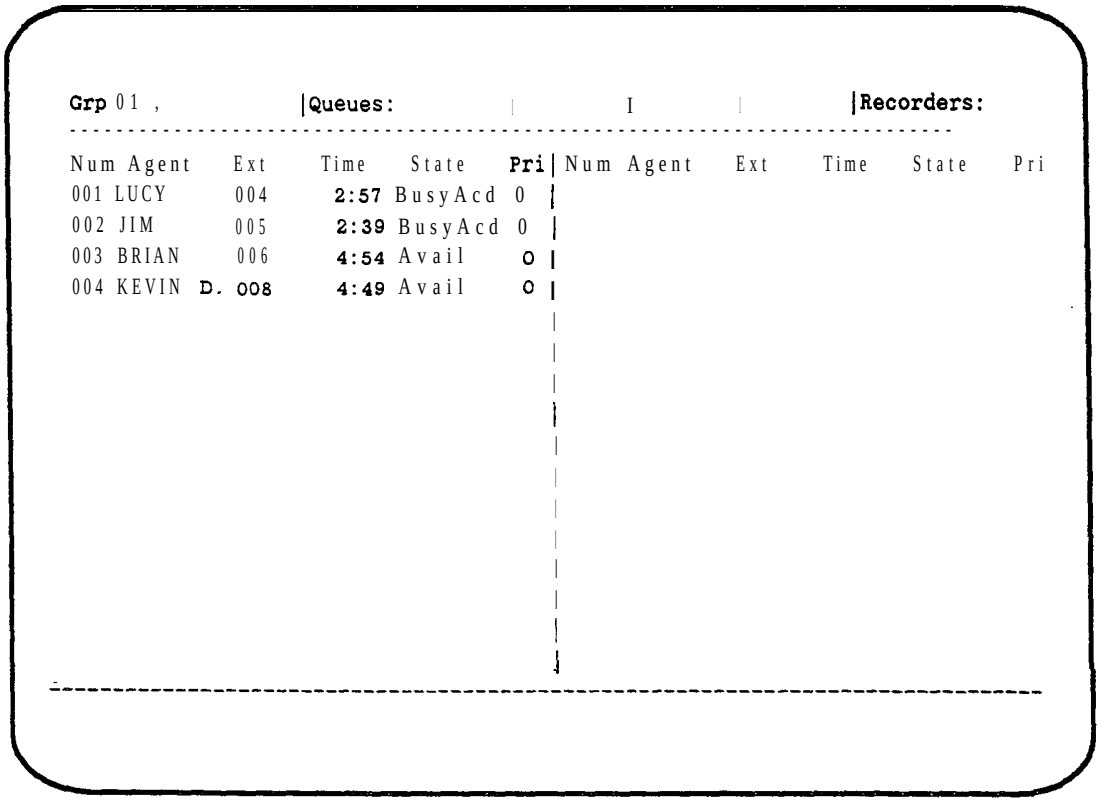


Figure 6-3 ACD Group Status

6.5.2 DEFINITIONS

The top line of the *ACD* Group Status screen shows the GROUP NUMBER (Grp), the name given the group in the *ACD* Group *Setup* screen, how many calls are waiting to be answered, and how long the oldest call has been waiting (Queues). If the group'number is highlighted in a box, then the ACD Group is in the night mode.

Each of the two status areas consists of:

NUM	The AGENT NUMBER. The information on each line corresponds to the agent number listed in this column. The agents are listed sequentially by agent number beginning with the lowest number.
AGENT	The name of the agent assigned to each of the AGENT NUMBERS is listed in this column. This name is the one that is entered on *the ACD Agent Setup* screen.
EXT	The extension number of the telephone the agent is currently logged in from. Only the last 3 digits of the extension number are displayed.
TIME	This column works in conjunction with the STATE column. It indicates the amount of time an agent has been in the STATE listed.
PRI	The assigned priority (00-02) of the agent. A priority of 03 indicates the GROUP displayed is the agent's secondary SPLIT.
STATE	The current activity of the ACD agent's phone is listed in this column. The activity can be any one of the following:
Avail	The agent's phone is idle, and the agent is ready to receive a call.
ACDRng	An ACD call is ringing the agent's extension.
BusyACD	The agent is currently talking on an ACD call.
Wrapup	The agent has completed a call, and is now in the programmed wrap up time. This time is usually set aside for the agent to complete any work pertaining to the previous call.
FrcWrap	The agent has completed a call, and is now in the programmed wrap up time. The system is waiting for the agent to enter a QUALIFICATION code. The system keeps the agent in this state until a QUALIFICATION code is entered. No ACD calls are routed to the agent in this state.
Unavaii	The UNAVAILABLE key on an agent's telephone has been pressed. The system does not attempt to route ACD calls to this agent.
BusyOut	The system attempted to route a call to this agent, but the agent did not answer the call within the prescribed time *(ACD Group Setup).* The agent position remains in this state for the time specified in the *ACD Group Setup,* or until the agent presses the UNAVAILABLE key.
ACDDND	The Do Not Disturb feature has been activated at this agent position. This position cannot receive any incoming calls.
CORng	An incoming non-ACD call is ringing the agent's telephone.
BusyCO	The agent is talking on an outside line call. The call could be either incoming or outgoing.

ICMRng An internal caller is ringing the agent's phone.

BusyICM The agent is talking to someone on an intercom call.

Split The agent is performing a task in an ACD GROUP other than the one displayed. Split is followed by a number indicating the ACD GROUP the agent is active in. The display must be switched to this GROUP in order to determine the exact state of the agent.

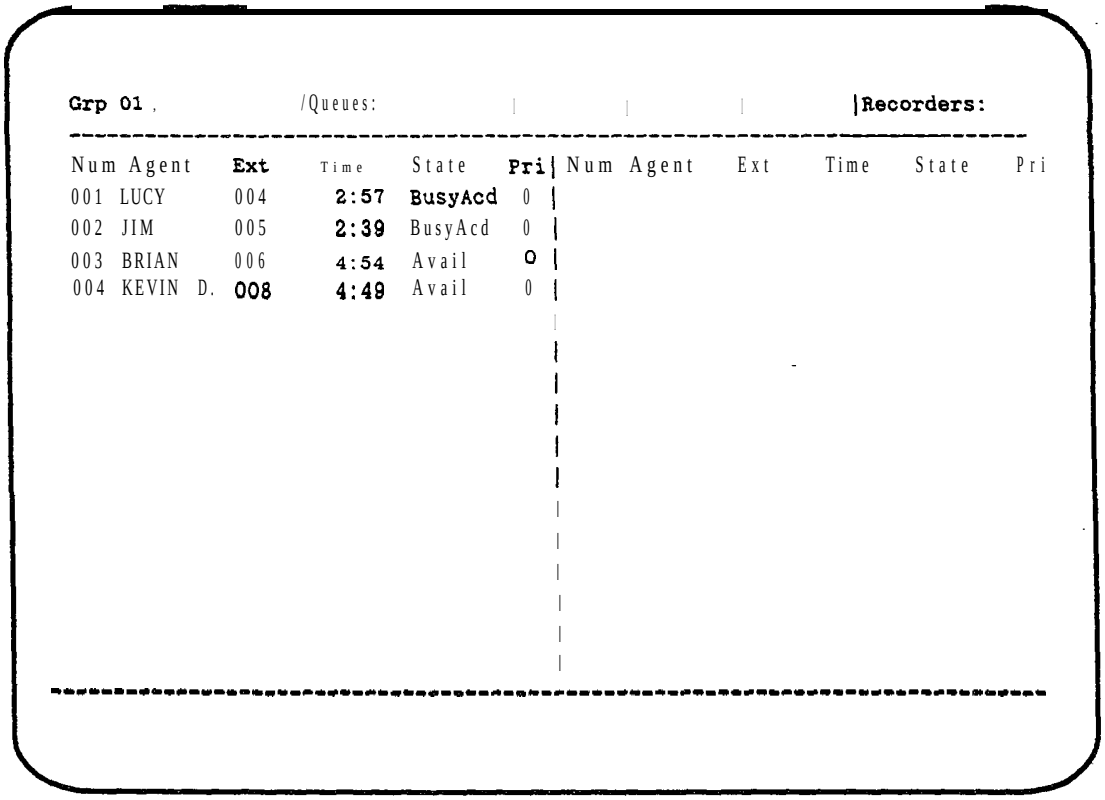


Figure 6-4 ACD Group Status

6.6 ACD HELP

When an ACD agent presses the HELP key on the telephone, a visual indication is given to the ACD supervisor for that group via the programming terminal. The name of the ACD Agent requesting help is highlighted, and blinks, on both the *ACD System Status* and *ACD Group Status* displays. If the termlnal screen is displaying the group (that the agent requesting help is in), the terminal will also beep once when the agent presses the HELP key.

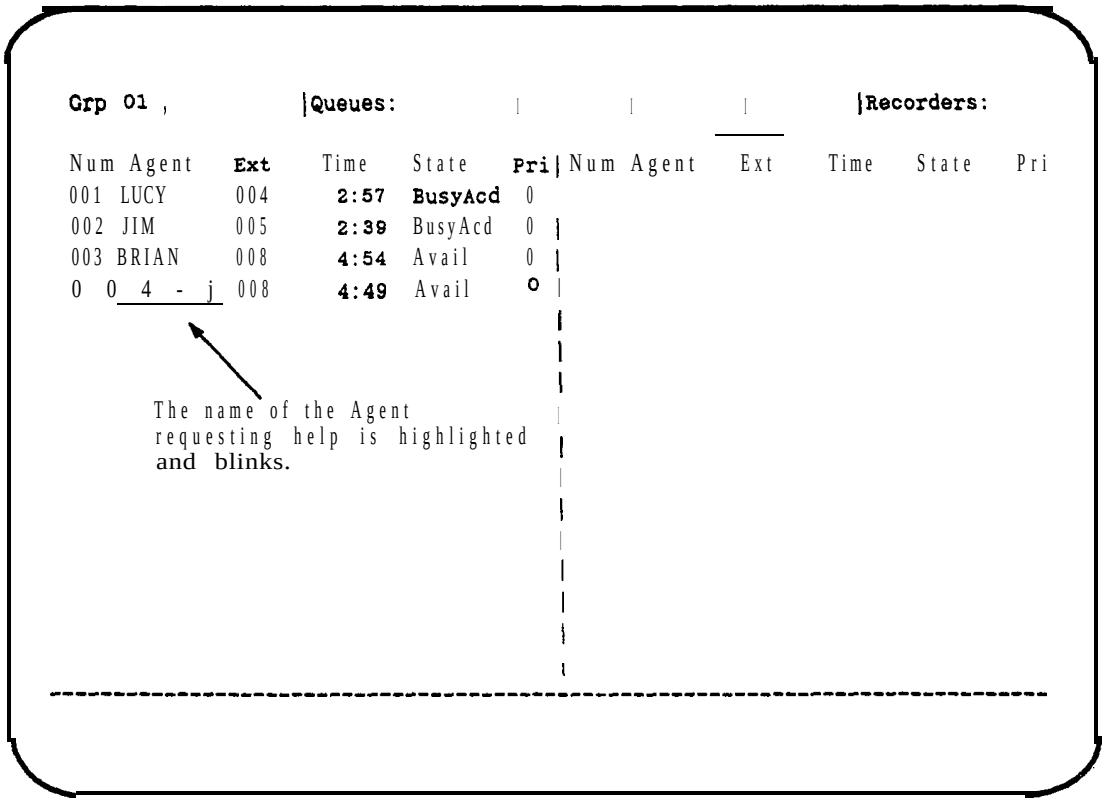


Figure 6-5 ACD Group Status

Section 7
Advanced ACD - Reports Package

7.1 INTRODUCTION

Automatic Call Distribution is available with two different report packages: Advanced and Custom. The Advanced Report package contains pre-defined reports which may be viewed using the system programming terminal. These reports can also be printed on the optional system printer. The reports may be printed manually at any time, or printed automatically at regular intervals using the *Report Print Scheduler.*

The Custom package provides all the report capabilities of the Advanced package plus additional reports which can be defined to suit your individual business needs.

The information contained in this section describes the Advanced Reports package. Instructions on how to access the reports, a detailed description of each of the reports, and a discussion on how to use the information contained in them is provided.

7.1 .1 DESCRIPTION

The ACD Advanced Reports package divides statistical reports into 7 major topics. These topics are Agent Activity, ACD Group Activity, System Activity (by Group), System Activity, Call Qualification, ACD Group Summary, and System Summary. Each of the reports is available on a daily basis, and a cumulative basis. The statistics for the daily reports are cleared every day. The statistics for the cumulative reports are cleared at programmable intervals. The cumulative reports can be cleared daily, weekly, or monthly, on the day and time of your choice using the *Report Print Scheduler.*

The following is a brief description of each of these major topics. For a more complete description refer to each individual report.

AGENT ACTIVITY

The Agent Activity topic provides 4 reports concerning how agents in the ACD system utilized their time. Each-of the 4 reports is available on a daily and cumulative basis for a total of 8 reports. The first report details how many ACD calls an agent answered, the amount of time an agent was logged into the system, how much time an agent spent handling ACD calls, and how much time was spent completing work after the call.

The second report details the number of ACD calls answered by each agent, the number of calls sent to the agent which the agent did not answer, and the number of outgoing calls made by the agent.

The third and fourth reports summarize the information of the first two reports by percentage.

GROUP ACTIVITY

A report on each of the 15 ACD groups is available on both a daily and cumulative basis. Each report provides an hourly counter of the number of ACD calls sent to the group, the number of calls answered by the group, and the number of calls sent to the group that were first handled by the system (a recorded announcement was provided to the caller). The reports can also be used to break down the information into 30 minute, and 15 minute periods.

SYSTEM ACTIVITY BY GROUP

These reports give a summary of the call activity for each ACD group in the system. There is a cumulative System Activity Report and a daily System Activity Report.

SYSTEM ACTIVITY

This report is an hourly summary of the activity of all groups within the ACD system. A cumulative and a daily report are available. This report can also provide a summary for 30 minute and 15 minute periods.

CALL QUALIFICATION

As each agent finishes with an ACD call, the type of call (purpose, area of the country the call was from, etc.) can be described with a three digit number. This number is entered by the agent after the call is completed and is called a QUALIFICATION. A summary of the number of each qualification entered is found on this report.

ACD GROUP SUMMARY

These reports provide a summary of the activity of each ACD group. Each report lists items such as the number of calls abandoned before they reached an announcing device, the number of calls abandoned before they reached an agent, the total amount of talk time, and call wait time. A more detailed list of the items summarized is contained in the individual report description. Each report is available on a cumulative and daily basis.

SYSTEM SUMMARY

This report provides a one page summary of all activity performed by the ACD system. There are two reports available, a cumulative and a daily report.

Each of the available reports is accessed using the programming terminal, or the remote programming feature. A printed copy of each report can also be obtained if your system is equipped with a printer.

```
Welcome to the System  228 (C) 1986 ISOETEC Communications Inc.
                                    Options: DCY3 LCR Mod CA1  ACD2 Att
 Version:  V5.26    03/23/89          System is IDLE Sat 05-06-89   8:21 pm
                                      Access Level = 08   Port = 02
  Select one of the following:        <Esc> . . . Display this menu

  A . . Station Programming     | J . . PBX Key Progr.       | s . . LCR Tester
  B . . System Programming      | K . . Change Password      | T . . Data Menu
  C . . System Status Monitor   | L . . LCR Programming      | u . . Data Status
  D . . BACKUP Program Memory   | M . . System Options       | V . . Call Accounting
  E . . Exit Main Menu          | N . . Trunk Group Progr.   | W . . Toll Restriction
  F . . System Configuration    | O . . Directory            | x . . Access Levels
  G . . Forwarding, VMS Plans   | P . . Account Codes        | Y . . Digit Translation
  H . .                         | Q . . ACD Programming      | z . . Auto Attendant
  I . . Line Maintenance        | R . . Reports              |

  USE THE FOLLOWING SELECTIONS WITH CARE!:
  Control-A . . . Select Terminal Type |
  Control-C . . . Diagnostics          |

  Control-F . . . Default & RESET
  Control-G . . . RESET

        Enter Letter or Control character >
```

Figure 7-l The Main Programming Menu

7.1.2 USING YOUR PROGRAMMING TERMINAL

The programming terminal is wired to one of the input/output ports. System programming (including accessing ACD reports) can be accomplished from any one of the input/output ports. Programming is accomplished by means of programming screens which are menu selected. Commands are entered by pressing one, or more, keys on the keyboard of your programming terminal. Access to system programming is protected by up to 8 levels of passwords. Each level allows progressively more access to the system. Refer to the *Programming Information* section for more information on passwords.

Accessing System Programming

To access system programming, and later the ACD reports:

1. Press the ESCAPE key on the keyboard of your terminal.
2. The system prompts you for your password.
3. Enter your password, and press the RETURN key.
4. The system main programming menu appears.

You may return to the main menu from any of the programming screens by pressing the ESCAPE key.

Accessing The ACD Main Menu

The Advanced ACD main menu is accessed by pressing Q on the keyboard while in the system main menu. The ACD main menu appears.

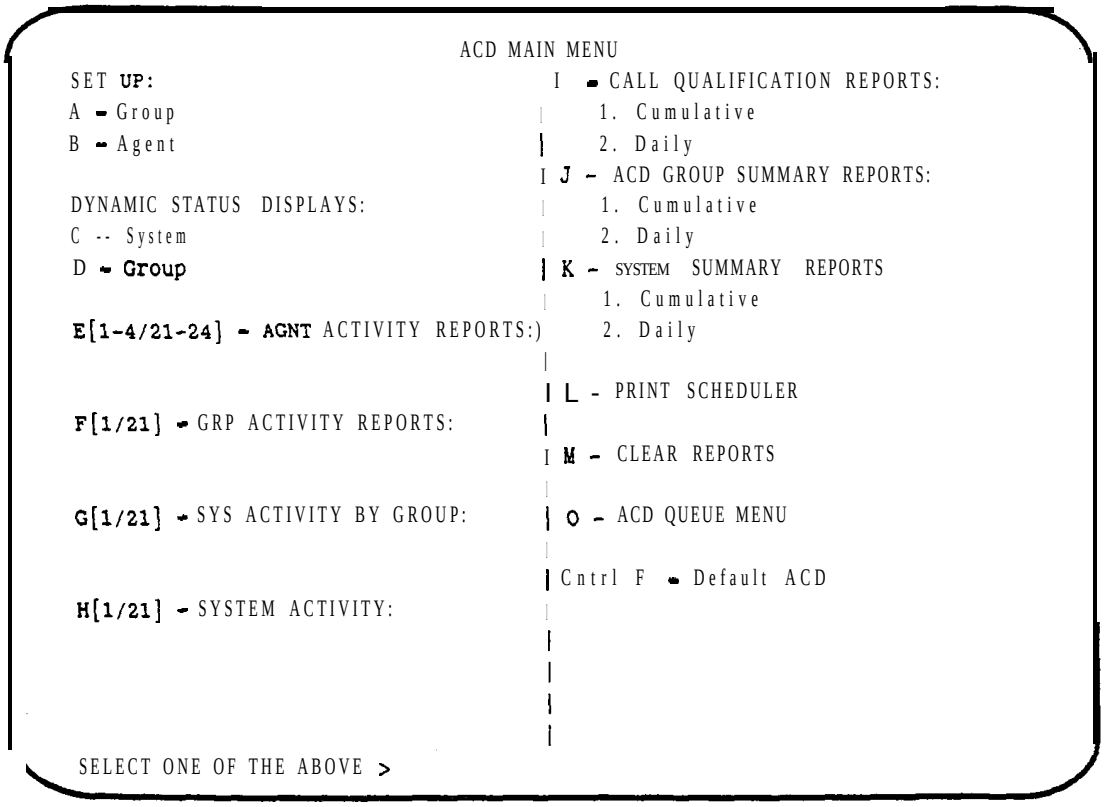


Figure 7-2 ACD Main Menu

7.2 AGENT ACTIVITY REPORTS

There are 8 Agent Activity Reports, 4 cumulative (E 1 through E4), and 4 daily reports (E2 1 through E24).

7.2.1 AGENT TIME ACTIVITY'REPORTS - El AND E21

How much time did the ACD agents spend talking on calls? This report provides the answer to this question. The report details the amount of time each agent spent logged into the system, completing wrap up work after the call, waiting for calls, and not available to receive calls. The report also provides information concerning the average ring time (how long before a call is answered) for each agent. The cumulative report is labeled E1, and the daily report is labeled E21.

HOW TO ACCESS AGENT TIME ACTIVITY REPORTS

Action: From the ACD main menu press E then 1 (or 21 for the daily report) on the keyboard. Then press the RETURN key.

Commands: The screen displays 12 agents at a time. To scroll the screen to view the remaining agents, the UP and DOWN arrow keys may be used. Only agents that were active during the period covered are displayed.

Press the ESCAPE key to return to the ACD main menu.

```
                    (E 1)CUMULATIVE AGENT TIME ACTIVITY
                    -----------------------------------

 Period Covered: Yon 08-17-87 09:03  Through   Tue 08-18-87 12:04
                       HH:MM  HH:MM  HH:MM  HH:MM  HH:MM  MM:SS  MM:SS  MM:SS
Agt| Agent     |Calls (Total |Total [Total  Total| Not  |Avg.  (Avg.  |Avg.
Num|  Name     |Ansrd |Login |BsyACD|WrapUp| Avail.1 Avail|BsyACD|WrapUp|Ring
---+-----------+------+------+------+------+------+------+------+------+------
002|ARNOLD     |   52| 4:07| 2:52|   :02|   :30|   :32| 3:18|   :03|   :02
003|BORDEAUX   |   56| 6:09| 3:50|                                        :07
004|CROMWELL   |  731 7:37| 5:36| 1:31|   :57|   :07| 44:36| 1:26|   :03
006|DECKER     |  141 2:23| 1:20|  :28|   :09|   :15| 5:44| 2:03|   :03
008|EISENHOWER |   31| 3:55| 2:25|  :35|   :21|   :30| 4:40| 1:08|   :04
009|FRANKLIN   |   48| 4:00| 2:11|  :16|   :29|   :42| 2:44|  :20|   :07
010|GRIER      |   41| 4:02| 2:41|  :31|   :25|   :07| 3:56|  :46|   :03
011|HOFFMAN    |   57 | 7:10| 3:44|  :11|   :42| 1:19| 3:56|  :12|   :02
012|ISAIAH     |   23) 2:09| 1:27|  :03|   :22|      | 3:49|  :08|   :08
013|JACKSON    |   51| 3:59| 2:23|  :05|   :31|   :20| 2:49|  :06|   :03
015|KENNY      |   47 | 3:56| 2:25|  :24|   :30|   :24| 3:05|  :30|   :08
016|LINCOLN    |   49| 3:59| 2:54|  :12|   :26|   :14| 3:34|  :15|   :05

Totals -       1064|109:32| 69:28| 8:52| 12:44| 10:17| 3:55|   :30|   :05

Print Now _   Main Menu _
```

SCREEN DEFINITIONS

Period Covered — Indicates the date and time the report was last cleared, and the time the report was printed or viewed.

Agt Num — Each ACD agent is assigned a number (001-200). This number is used to track and report each agent's activity while logged onto the system. An agent uses this number to log on the system.

Agent Name — The name of the agent (up to 10 characters) which has been assigned the agent number.

Calls Ansrcl — The number of ACD calls answered by the corresponding agent (including ACD calls that were transferred).

Total Login — The entries in this column indicate the total time that each agent spent logged on the system.

Total BsyACD — The total time that the agent spent on ACD calls (actual talking time).

Total WrapUp — The total time that each agent spent completing wrap up work after each call.

Total Avail — The total time each agent was idle (not on any type of calls).

Not Avail — Indicates the total time the agent was not available to answer ACD calls as result of the UNAVAILABLE key being pressed.

Avg. Busy ACD — Average time spent on ACD calls.

$$= \frac{\textit{Total Busy ACD}}{\textit{Calls Answered}}$$

Avg. Wrapup — The average time the agent takes to wrap up a call. This average is derived from the following equation:

$$= \frac{\textit{Total WrapUp Time}}{\textit{Number ACD Calls Ansrd}}$$

Avg. Ring — The average time the agent's phone rang before the call was answered (ACD and non-ACD). This average is derived from the following equation:

$$= \frac{\textit{(ACD + Icm + CO) ring time}}{\textit{Incoming ACD + CO + Icm}}$$

Totals Line — This line indicates the total for each column that contains a quantity or total time. The totals at the bottom of an AVERAGE TIME COLUMN represent the average of the times listed, not the total of the times listed.

For example, the line at the bottom of the Avg. WrapUp Column, lists the average wrap up time for all calls received by all agents.

7.2.2 AGENT CALL ACTIVITY REPORTS - E2 AND E22

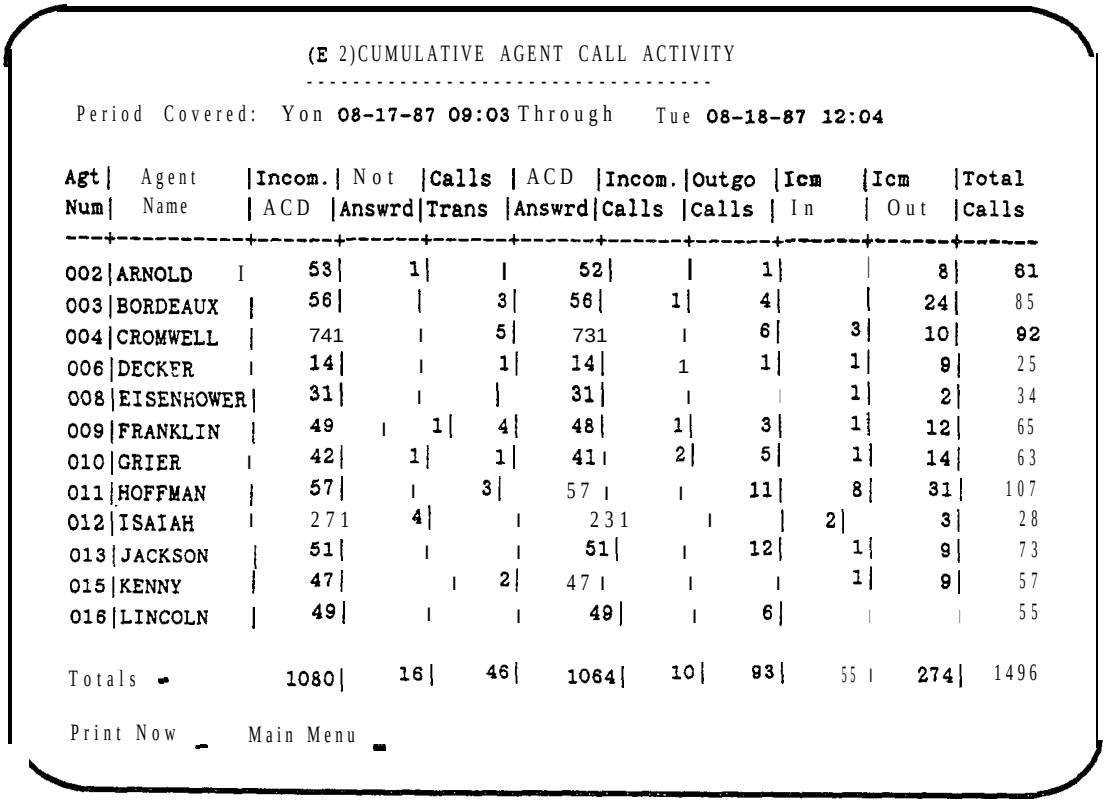
This report provides details of how many calls an agent received or placed. This includes ACD calls, outside line calls made by the agent, and intercom calls. The AGENT CALL ACTIVITY reports provide information on a per agent basis. The cumulative report is labeled E2, and the daily report is labeled E22.

HOW TO ACCESS AGENT CALL ACTIVITY REPORTS

Action: From the ACD main menu, press E then 2 (or 22 for the daily report) on the keyboard. Then press the RETURN key.

Commands: The screen displays 12 agents at a time. To scroll the screen to view the remaining agents, the UP and DOWN arrow keys may be used. Only agents that were active during the period covered are displayed.

Press the ESCAPE key to return to the ACD main menu.



(E 2)CUMULATIVE AGENT CALL ACTIVITY

Period Covered: Yon 08-17-87 09:03 Through Tue 08-18-87 12:04

Agt Num	Agent Name	Incom. ACD	Not Answrd	Calls Trans	ACD Answrd	Incom. Calls	Outgo Calls	Icm In	Icm Out	Total Calls
002	ARNOLD	53	1		52		1		8	61
003	BORDEAUX	56		3	56	1	4		24	85
004	CROMWELL	741		5	731		6	3	10	92
006	DECKER	14		1	14	1	1	1	9	25
008	EISENHOWER	31			31			1	2	34
009	FRANKLIN	49	1	4	48	1	3	1	12	65
010	GRIER	42	1	1	41	2	5	1	14	63
011	HOFFMAN	57		3	57		11	8	31	107
012	ISAIAH	271	4		231			2	3	28
013	JACKSON	51			51		12	1	9	73
015	KENNY	47		2	47			1	9	57
016	LINCOLN	49			49		6			55
Totals -		1080	16	46	1064	10	93	55	274	1496

Print Now - Main Menu -

SCREEN DEFINITIONS

Period Covered	Indicates the date and time the report was last cleared, and the time the report was printed or viewed.
Agt Num	Each ACD agent is assigned a number (00 l-200). This number is used to track and report each agent's activity while logged onto the system. An agent uses this number to log on the system.
Agent Name	The name of the agent (up to 10 characters) which has been assigned the agent number.
Incom. ACD	The total number of ACD calls routed to the agent's extension (includes direct and transferred ACD calls).
Not Answrd	Indicates ACD calls that were routed to the agent's extension and were not answered by the agent. This includes calls where the outside party hung up before the agent had a chance to answer.
Calls Trans	The number of ACD calls that were transferred from the agent's extension.
ACD Answrd	The number of ACD calls that each agent answered (including transferred calls).
Incom. Calls	The number of non-ACD outside line calls that were answered.
Outgo Calls	The number of outgoing outside line calls placed by each agent.
Icm In	The number of times an agent was called internally.
Icm Out	The number of intercom calls placed by the agent.
Total Calls	The total of all types of calls handled. This number is the sum of ACD Answrd, Incom calls, Outgo Calls, Icm In and Icm Out.
Totals Line	This line indicates the total for each column.

7.2.3 AGENT TIME ACTIVITY - PERCENT - E3 AND E23

This report uses the information found on the AGENT TIME ACTIVITY report and presents it as the percent of the agents time which was spent busy on ACD calls. This report details the amount of time spent on each task as a percentage of the agent's total logged in time. The cumulative report is labeled E3, and the daily report is labeled E23.

HOW TO ACCESS AGENT TIME ACTIVITY - PERCENT REPORTS

Action : From the ACD main menu, press **E** then 3 (or 23 for the daily report) on the keyboard. Then press the RETURN key.

Commands: The screen displays 12 agents at a time. To scroll the screen to view the remaining agents, the UP and DOWN arrow keys may be used. Only agents that were active during the period covered are displayed.

Press the ESCAPE key to return to the ACD main menu.

(E 3)CUMULATIVE AGENT TIME ACTIVITY

Period Covered: Mon 08-17-87 09:03 Through Tue 08-18-87 12:05

Agt Num	Agent Name	HH:MM Total Hold	% Percnt BsyACD	% Percnt WrapUp	% Percnt Avail	% Percnt Unaval	% Percnt Hold	HH:MM	HH:MM	HH:MM
002	ARNOLD	:01	69%	1%	12%	13%	%			
003	BORDEAUX	:22	62%	23%	8%	1%	6%			
004	CROMWELL	:01	73%	6%	12%	1%	%			
006	DECKER	:35	56%	20%	6%	10%	24%			
008	EISENHOWER	:03	81%	15%	9%	12%	1%			
009	FRANKLIN	:11	54%	6%	12%	17%	4%			
010	GRIER	:11	66%	12%	11%	2%	4%			
011	HOFFMAN	:18	51%	2%	9%	18%	4%			
012	ISAIAH	:03	67%	2%	17%	%	2%			
013	JACKSON	:02	60%	2%	13%	8%	1%			
015	KENNY	:05	61%)	10%	12%	10%	2%			
016	LINCOLN	:04	73%	5%	10%	6%	1%			
Totals -		5:25	63%	8%	11%	9%	4%			

Print Now - Main Menu -

SCREEN DEFINITIONS

Period Covered — Indicates the date and time the report was last cleared, and the time the report was printed or viewed.

Agt Num — Each ACD agent is assigned a number (00 l-200). This number is used to track and report each agent's activity while logged onto the system. An agent uses this number to log on the system.

Agent Name — The name of the agent (up to 10 characters) which has been assigned the agent number.

Total Hold — Indicates the total time that each agent had placed calls on hold.

Percnt BsyACD — The percentage of total log time that the agent spent talking on ACD calls.

$$= \frac{\textit{Busy ACD time}}{\textit{Total Log time}} \times 100\%$$

Percnt WrapUp — Indicates the percentage of total log time that the agent spent in wrap up.

$$= \frac{\textit{Wrap Up time}}{\textit{Total Log time}} \times 100\%$$

Percnt Avail — Indicates the percentage of total time that the agent was idle (not on any type of call).

$$= \frac{\textit{Time available}}{\textit{Total Log time}} \times 100\%$$

Percnt Unaval — Indicates the percentage of total time that the agent was unavailable (as a result of the unavailable key being pressed).

$$= \frac{\textit{Time NOT available}}{\textit{Total Log time}} \times 100\%$$

Percnt Hold — Indicates the percentage of total time that the agent has placed a call on hold.

$$= \frac{\textit{Time with call on hold}}{\textit{Total Log time}} \times 100\%$$

Totals Lines — This line indicates the total percentage of time for each activity of all agents.

7.2.4 AGENT CALL ACTIVITY - PERCENT - E4 AND E24

This report uses the information from the AGENT CALL ACTIVITY report, and details each type of call as a percentage of the total calls logged by each agent. The cumulative report is labeled E4, and the daily report is labeled E24.

HOW TO ACCESS AGENT CALL ACTIVITY - PERCENT REPORTS

Action: From the ACD main menu, press E then 4 (or 24 for the daily report) on the keyboard. Then press the RETURN key.

Commands: The screen displays 12 agents at a time. To scroll the screen to view the remaining agents, the UP and DOWN arrow keys may be used. Only agents that were active during the period covered are displayed.

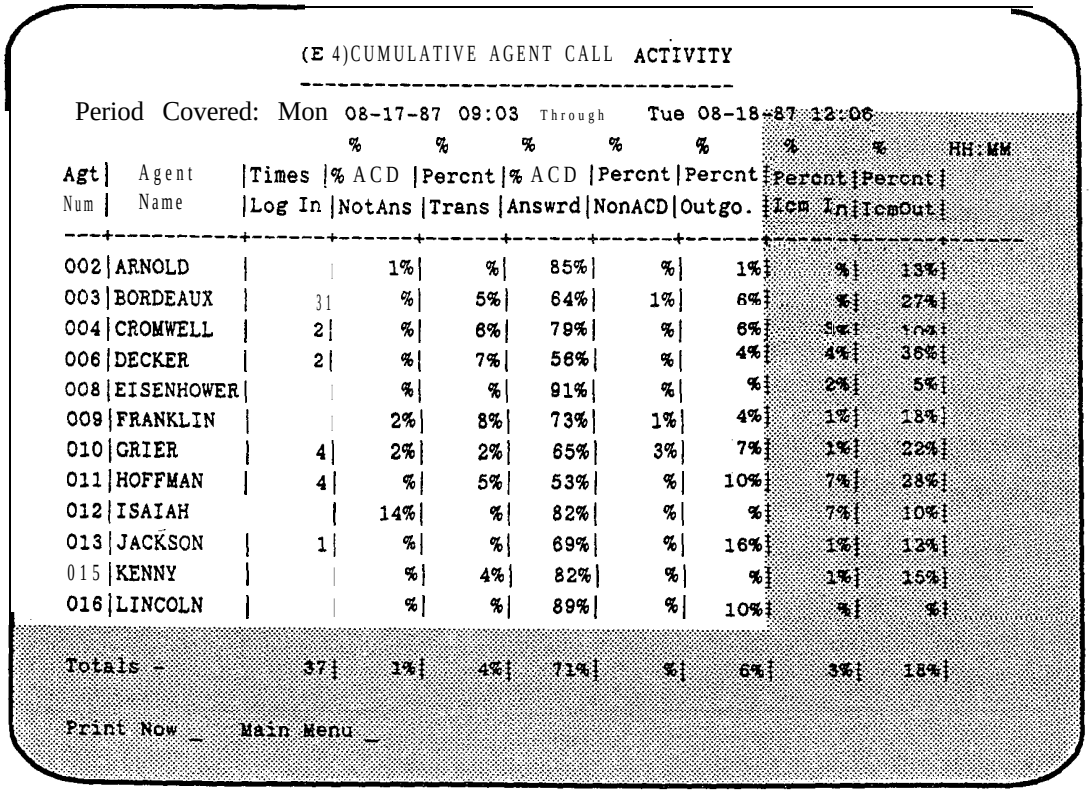
Press the ESCAPE key to return to the ACD main menu.

SCREEN DEFINITIONS

Period Covered Indicates the date and time the report was last cleared and the time the report was printed or viewed.

Agt Num Each ACD agent is assigned a number (001-200). This number is used to track and report each agent's activity while logged onto the system. An agent uses this number to log on the system.

Agent Name The name of the agent (up to 10 characters) which has been assigned the agent number



(E 4)CUMULATIVE AGENT CALL ACTIVITY

Period Covered: Mon 08-17-87 09:03 Through Tue 08-18-87 12:06

Agt Num	Agent Name	Times Log In	% ACD NotAns	Percnt Trans	% ACD Answrd	Percnt NonACD	Percnt Outgo.	% Percnt Icm In	% Percnt IcmOut	HH:MM
002	ARNOLD		1%	%	85%	%	1%	%	13%	
003	BORDEAUX	31	%	5%	64%	1%	6%	%	27%	
004	CROMWELL	2	%	6%	79%	%	6%	3%	10%	
006	DECKER	2	%	7%	56%	%	4%	4%	36%	
008	EISENHOWER		%	%	91%	%	%	2%	5%	
009	FRANKLIN		2%	8%	73%	1%	4%	1%	18%	
010	GRIER	4	2%	2%	65%	3%	7%	1%	22%	
011	HOFFMAN	4	%	5%	53%	%	10%	7%	28%	
012	ISAIAH		14%	%	82%	%	%	7%	10%	
013	JACKSON	1	%	%	69%	%	16%	1%	13%	
015	KENNY		%	4%	82%	%	%	1%	15%	
016	LINCOLN		%	%	89%	%	10%	%	%	
Totals -		37	1%	4%	71%	%	6%	3%	18%	

Print Now _ Main Menu _

Times Log In The number of times which the agent has logged in since the beginning of the coverage date.

% ACD NotAns The number of ACD calls that were routed to the agent's extension and were not answered by the agent is expressed as a percentage of all the agent's calls. Unanswered calls include ones where the outside party hung up before the agent had a chance to answer.

$$= \frac{\textit{Number of unanswered calls}}{\textit{Incoming ACD calls}} \times 100\%$$

Percnt Trans Of all calls handled by the agent, this represents the percentage of ACD calls that were transferred by the agent.

$$= \frac{\textit{Number of transferred calls}}{\textit{Total ACD answered calls}} \times 100\%$$

% ACD Answrd Of all calls handled by the agent, this represents the percentage of ACD calls that were answered.

$$= \frac{\textit{Number of answered ACD calls}}{\textit{Total ALL calls}} \times 100\%$$

Percnt NonACD Of all calls handled by the agent, this represents the percentage of calls that were non ACD.

$$= \frac{\textit{Number of non ACD calls}}{\textit{Total ALL calls}} \times 100\%$$

Percnt Outgo: Of all calls handled by the agent, this represents the percentage of outgoing calls placed by the agent.

$$= \frac{\textit{Number of outgoing outside calls}}{\textit{Total ALL calls}} \times 100\%$$

Percnt Icm In Of all calls handled by the agent, this represents the percentage of intercom calls that were answered.

$$= \frac{\textit{Number of intercom in calls}}{\textit{Total ALL calls}} \times 100\%$$

Percnt Icm Out Of all calls handled by the agent, this represents the percentage of intercom calls that were placed by the agent.

$$= \frac{\textit{Number of intercom out calls}}{\textit{Total ALL calls}} \times 100\%$$

Totals Line This line indicates the total percentage of calls for each activity of all agents.

7.3 GROUP ACTIVITY REPORTS - F1 AND F21

There are 2 Group Activity Reports, a cumulative report which is labeled Fl and a daily report which is labeled F2 1. The GROUP ACTIVITY REPORTS provide an hourly total of the number of ACD calls answered by the ACD group. The report lists:

The number of calls not answered.

The number of outside callers which hung up before being answered by an agent.

The number of calls that were connected to the announcement recorder before being answered by an agent.

The reports also provide:

An average talk time.

An average of the amount of time an outside caller waited before speaking to an agent.

An average of the amount of time a caller waited for an agent before hanging up.

And an average of the amount of time agents within the group spent completing wrap up work.

The information provided in these reports can also be displayed (and printed) in 30 minute totals, and 15 minute totals, rather than hourly totals.

Both reports are available for each of the 15 ACD groups.

HOW TO ACCESS THE GROUP ACTIVITY REPORTS

Action: From the ACD main menu, press F then 1 (or 21 for the daily report) on the keyboard. Then press the RETURN key.

Commands: Press CTRL and A to view the report in hourly increments.

Press CTRL and B to view the report in 30 minute increments.

Press CTRL and C to view the report in 15 minute increments.

Press the I key to increment to the next ACD group.

Press the D key to decrement to the previous ACD group.

The screen displays 12 lines of information at a time. To scroll to the remaining lines, press the UP or DOWN arrow keys.

SCREEN DEFINITIONS

Period Covered Indicates the date and time the report was last cleared, and the time the report was printed or viewed.

Grp Represents the ACD group (01-15) being viewed. To increment or decrement the group number one at a time, press I or D.

From Time The beginning of the time frame for which the statistics are recorded. To view the statistics before or after the time frames shown, press the UP or DOWN arrow keys.

To Time The end of the time frame for which the statistics are recorded. To view the statistics before or after the time frames shown, press the UP or DOWN arrow keys.

Total In The total number of incoming calls during the time shown.

Calls Answrd The number of ACD calls answered during the time shown.

Calls Abndnd	The number of calls that were abandoned. A call is said to be abandoned when the caller hangs up before an agent answers it.
Delyed Calls	Indicates the number of calls that were in queue.
# of Record	The total number of calls connected to a recording.
Avg. Delay	The average time that a call is in queue during the time frame shown (going through the call SEQUENCE).
Avg. Talk	The average time the agent spent talking on an ACD call during the time frame shown.
Avg. Aban	Indicates the average time the callers were in queue before the call was abandoned (a call is said to be abandoned if the caller hangs up before it is answered by an agent) during the time frame shown.
Avg. Wrap	The average time the agents spent wrapping up an ACD call during the time frame shown.
Totals Line	This line indicates the total average of calls for each activity of all agents.

```
Grp  01,MARKETING    (F 1)CUMULATIVE HOURLY GRP ACTIVITY
                     ----------------------------------

 Period Covered: Mon 08-17-87 09:03  Through  Tue 08-18-87 12:14
                                                MM:SS  MM:SS  MM:SS  MM:SS
From  | To   |Total |Calls |Calls |Delyed| # of [Avg.  |Avg.  |Avg.  |Avg.
Time |Time  | In    |Answrd|Abndnd|Calls |Record|Delay |Talk  |Aban  |Wrap
-----+------+------+------+------+------+------+------+------+------+------
08:00|07:00|      |      |      |      |      |      |      |      |
07:00|08:00|      |      |      |      |      |      |      |      |
08:00|09:00|      |      |      |      |      |      |      |      |
09:00|10:00|      |      |      |      |      |      |      |      |
10:00|11:00|      |      |      |      |      |      |      |      |
11:00|12:00|   35 |   32 |    2 |    6 |      |  :15 | 2:16 |  :51 |  :11
12:00|13:00|   86 |   86 |    1 |   26 |    1 |  :13 | 3:23 |  :43 |  :25
13:00|14:00|  106 |   97 |    8 |   34 |    1 |  :17 | 3:38 |  :48 |  :24
14:00|15:00|  103 |  104 |    2 |   39 |    2 |  :15 | 3:28 |  :21 |  :23
15:00|16:00|  118 |   97 |  171 |   80 |  361 |  :47 | 3:05 |  :52 |  :25
16:00|17:00|  102 |  101 |    5 |   45 |   19 |  :27 | 3:28 |  :42 |  :20
17:00|18:00|   99 |   94 |    5 |   31 |    7 |  :16 | 3:11 |  :41 |  :28

Totals  -    1171 | 1072 |  100 |  573 |  240 |  :29 | 3:28 |  :55 |  :27

Print Now _   Main Menu _
```

7.4 SYSTEM ACTIVITY BY GROUP REPORTS - G1 AND G21

There are 2 SYSTEM ACTIVITY REPORTS, a cumulative report which is labeled G1 and a daily report which is labeled G2 1. The SYSTEM ACTIVITY BY GROUP REPORTS summarize the information contained in the GROUP ACTIVITY REPORTS for each of the 15 ACD groups. This summary includes:

The number of calls received by the ACD group which were answered.

The number of calls not answered.

The number of outside callers that hung up before being answered by an agent.

The number of calls that were connected to the announcement recorder before being answered by an agent.

The reports also provide:

An average talk time.

An average of the amount of time an outside caller waited before speaking to an agent.

An average of the amount of time a caller waited for an agent before hanging up.

An average of the amount of time agents within a group spent completing wrap up work.

These two reports are a single page summary of the individual GROUP ACTIVITY REPORTS.

HOW TO ACCESS THE SYSTEM ACTIVITY BY GROUP REPORTS

Action: From the ACD main menu, press G then 1 (or 21 for the daily report) on the keyboard. Then press the RETURN key.

Commands: The screen displays 12 lines of information at a time. To scroll to the remaining lines, press the UP or DOWN arrow keys.

```
                    (G 1)  CUMULATIVE SYSTEM ACTIVITY

 Period Covered:  Mon 08-17-87 09:03 Through   Tue 08-18-87 12:22

                                                      MM:SS  MM:SS  MM:SS  MM:SS
ACD|ACD Group  |Total |Calls |Calls |Delyed| # of |Avg.  |Avg.  |Avg.  |Avg.
Grp| Name      | In   |Answrd|Abndnd|Calls |Record|Delay |Talk  |Aban  |Wrap
---+----------+------+------+------+------+------+------+------+------+------
 01|MARKETING |  1181| 1081|  100|   573)   240|  :29| 3:28|  :55|   :27
 02|          |      |      |     |      |      |     |      |     |
 03|          |      |      |     |      |      |     |      |     |
 04|          |      |      |     |      |      |     |      |     |
 05|          |      |      |     1      |      |     |      |     |
 06|          |      |      |     |      |      |     |      |     |
 07|          |      |      |     |      |      |     |      |     |
 08|          |      |      |     |      |      |     |      |     |
 09|          |      |      |     |      |      |     |      |     |
 10|          |      |      |     |      |      |     |      |     |
 11|          |      |      |     |      |      |     |      |     |
 12|          |      |      |     |      |      |     |      |     |

 Totals -     |  1181| 1081|  100|   573|   240|  :29| 3:28|  :55|   :27

 Print Now _   Main Menu _
```

SCREEN DEFINITIONS

Period Covered	Indicates the date and time the report was last cleared, and the time the report was printed or viewed.
ACD Grp	Represents the ACD group (01-15). To view the remaining groups press the DOWN arrow key.
ACD Group Name	The name of the department corresponding to the ACD group.
Total In	The total number of incoming calls per group.
Calls Answrd	The number of ACD calls answered per group.
Calls Abndnd	The number of calls that were abandoned per group. A call is said to be abandoned when the caller hangs up before an agent answers it.
Delyed Calls	Indicates the number of calls that were in queue per group.
# of Record	The total number of calls connected to the recording per group.
Avg. Delay	The average time which a call was in queue per group (going through the call SEQUENCE).
Avg. Talk	Indicates the average time agents spent talking on ACD calls on a per group basis.
Avg. Aban	The average time callers were in queue before the call was abandoned. This is reported on a per group basis (a call is said to be abandoned if the caller hangs up before it is answered by an agent).
Avg. Wrap	The average time agents spent wrapping up an ACD call. This is reported on a per group basis.
Totals Line	This line indicates the total average of calls for each activity of all agents.

7.5 SYSTEM ACTIVITY REPORTS – HI AND H21

There are 2 SYSTEM ACTIVITY REPORTS, a cumulative report which is labeled H1 and a daily report which is labeled H21. The SYSTEM ACTIVITY REPORTS provide an hourly total of the number calls received by the ACD system FOR ALL ACD GROUPS which were answered. The reports also provide:

The number of calls not answered.

The number of times the outside caller hung up before being answered by an agent.

The number of calls that were connected to the announcement recorder before being answered by an agent.

The reports also provide:

An average talk time.

An average of the amount of time an outside caller waited before speaking to an agent.

An average of the amount of time a caller waited for an agent before hanging up.

An average of the amount of time agents within the system spent completing wrap up work.

The information contained in both the cumulative and the daily SYSTEM ACTIVITY REPORT can be viewed (and printed) in hourly, 30 minute, or 15 minute increments.

```
                (H 1)CUMULATIVE HOURLY SYS ACTIVITY
                ----------------------------------

 Period Covered: Mon 08-17-87  09:03 Through   Tue 08-18-87  12:25

                                                  MM:SS  MM:SS  MM:SS  MM:SS
From | To (Total  |Calls |Calls |Delyed| # of (Avg.  |Avg.  |Avg. (Avg.
Time |Time | In   |Answrd|Abndnd|Calls |Record|Delay |Talk  |Aban  |Wrap
-----+-----+------+------+------+------+------+------+------+------+------
06:00|07:00|      |      |      |      |      |      |      |      |
07:00|08:00|      |      |      |      |      |      |      |      |
08:00|09:00|   35 |   32 |    2 |    6 |      |  :15 | 2:16 |  :51 |  :11
09:00|10:00|  192 |  183 |    7 |   60 |    2 |  :16 | 3:31 |  :47 |  :25
10:00|11:00|  221 |  201 |   19 |  119 |   38 |  :32 | 3:15 |  :49 |  :24
11:00|12:00|  20i |  195 |   10 |   76 |   26 |  :22 | 3:20 |  :41 |  :24
12:00|13:00|  151 |  141 |    9 |   86 |  131 |  :26 | 3:24 |  :46 |  :39
13:00|14:00|  103 |   87 |   16 |   81 |   91 | 1:03 | 3:12 | 1:30 |  :16
14:00|15:00|   88 |  831 |    7 |   49 |   18 |  :28 | 4:15 |  :48 |  :32
15:00|16:00|   97 |   82 |   15 |   66 |   40 |  :41 | 3:49 |  :43 |  :35
16:00|17:00|   70 |   68 |    2 |   13 |    2 |  :10 | 4:22 |  :59 |  :43
17:00|18:00|   23 |   10 |  131 |   17 |   10 |  :49 | 2:58 | 1:00 |  :06

Totals -      1181)  1082 |  100 |  573)  240)  :29 | 3:28 |  :55 |  :27

Print Now _   Main Menu _
```

HOW TO ACCESS THE SYSTEM ACTIVITY REPORTS

Action:	From the ACD main menu, press H then 1 (or 21 for the daily report) on the keyboard. Then press the RETURN key.
Commands:	Press CTRL and A to view the report in hourly increments.
	Press CTRL and B to view the report in 30 minute increments.
	Press CTRL and C to view the report in 15 minute increments.
	The screen displays 12 lines of information at a time. To scroll to the remaining lines, press the UP or DOWN arrow keys.

SCREEN DEFINITIONS

Period Covered	Indicates the date and time the report was last cleared, and the time the report was printed or viewed.
From Time	The beginning of the time frame for which the statistics are recorded. To view the statistics before or after the time frames shown, press the UP or DOWN arrow keys.
To Time	The end of the time frame for which the statistics are recorded. To view the statistics before or after the time frames shown, press the UP or DOWN arrow keys.
Total In	Indicates the total number of incomimg calls during the time frames shown.
Calls Answrd	The number of ACD calls answered during the time frame shown (including ACD calls that were transferred).
Calls Abndnd	The number of calls that were abandoned. A call is said to be abandoned when the caller hangs up before an agent answers it.
Delyed Calls	Indicates the number of calls that were in queue.
# of Record	The total number of calls connected to a recording.
Avg. Delay	The average time which a call is in queue (going through the call sequence).
Avg. Talk	Indicates the average time the agents spent talking on an ACD call between the time frame shown.
Avg. Aban	The average time the callers were in queue before the call was abandoned (a call is said to be abandoned if the caller hangs up before it is answered by an agent).
Avg. Wrap	The average time the agents spent wrapping up an ACD call between the time frame shown.
Totals Line	This line indicates the total average of calls for each activity of all agents.

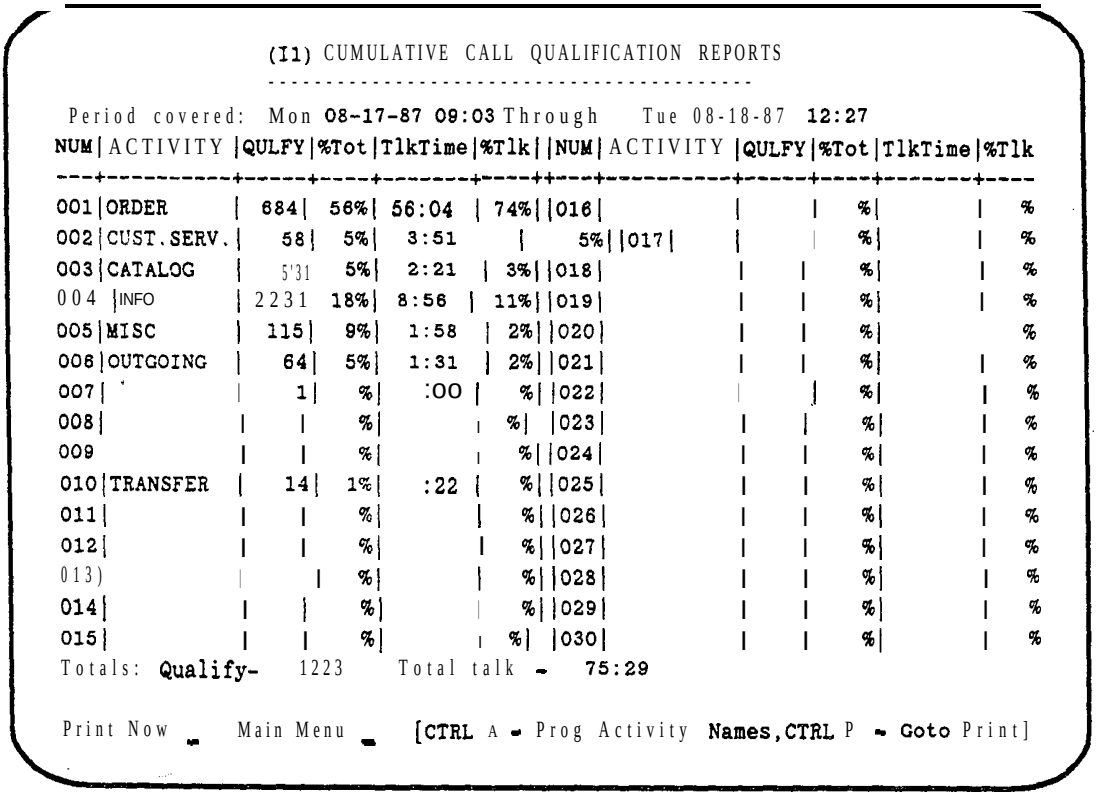
7.6 CALL QUALIFICATION REPORTS - I1 AND I2

Each ACD agent can enter a number into system memory at the end of each ACD call. This number is used to describe the nature of the phone call, and can be used to mean anything the manager desires. This number is called a QUALIFICATION code or number. For example, all ACD calls regarding sales information of a particular product can be given the number 001, a second product can be given the number 002, etc. There are 200 numbers which can be defined.

The CALL QUALIFICATION REPORTS give a summary of the number of times each different QUALIFICATION code was entered by an agent. The report lists the percentage (of all calls that received QUALIFICATION codes) represented by an individual QUALIFICATION number. The total time spent on all calls receiving a particular QUALIFICATION number, and the percentage of this time is also provided.

A 10 character description of what each QUALIFICATION number means can be entered into the report. This description is retained by the system until it is changed. The description remains even if the report is cleared.

There are 2 CALL QUALIFICATION REPORTS, a cumulative report which is labeled I1 and a daily report which is labeled 12.



(I1) CUMULATIVE CALL QUALIFICATION REPORTS

Period covered: Mon 08-17-87 09:03 Through Tue 08-18-87 12:27

NUM	ACTIVITY	QULFY	%Tot	TlkTime	%Tlk	NUM	ACTIVITY	QULFY	%Tot	TlkTime	%Tlk
001	ORDER	684	56%	56:04	74%	016			%		%
002	CUST.SERV.	58	5%	3:51	5%	017			%		%
003	CATALOG	5'31	5%	2:21	3%	018			%		%
004	INFO	2231	18%	8:56	11%	019			%		%
005	MISC	115	9%	1:58	2%	020			%		%
006	OUTGOING	64	5%	1:31	2%	021			%		%
007		1	%	:OO	%	022			%		%
008			%		%	023			%		%
009			%		%	024			%		%
010	TRANSFER	14	1%	:22	%	025			%		%
011			%		%	026			%		%
012			%		%	027			%		%
013			%		%	028			%		%
014			%		%	029			%		%
015			%		%	030			%		%

Totals: Qualify- 1223 Total talk - 75:29

Print Now - Main Menu - [CTRL A - Prog Activity Names, CTRL P - Goto Print]

HOW TO ACCESS THE CALL QUALIFICATION REPORTS

Action: From the ACD main menu, press I then 1 (or 2 for the daily report) on the keyboard. Then press the RETURN key.

Commands: The screen displays 30 qualification codes at a time. To scroll to the remaining codes, press the UP or DOWN arrow keys.

Each QUALIFICATION code can be assigned 10 characters to indicate the use of the code. To switch the screen to enter characters, press CTRL and A. Enter the characters desired and press the RETURN key. Press CTRL P when finished to return the cursor to *the Print Now* prompt.

SCREEN DEFINITIONS

Period Covered Indicates the date and time the report was last cleared, and the time the report was printed or viewed.

NUM Represents the call qualification code (001-200).

ACTIVITY Each Qualification code can be assigned up to 10 characters to indicate the meaning of the code.

QULFY Indicates the number of qualified calls corresponding to the ACTIVITY type.

% Tot Of all calls that were qualified by the agents, this indicates the percentage of each Qualification code. For example, 18% of all the calls were qualified as INFO related (shown in the screen above).

Tlk Time The total talking time spent on the corresponding Qualification code. When a call is multi-qualified, the total talk time will be divided by the number of qualifications that were entered for that call.

% Tlk The percentage of the total talk time spent on the corresponding ACTIVITY type.

$$= \frac{\textit{total qualification time}}{\textit{total talk time}} \times 100\%$$

Totals Qualify The total number of calls that were qualified (includes all groups).

Total talk The total time spent on qualified calls by all agents (includes all groups).

7.7 ACD GROUP SUMMARY REPORTS – J1 AND J2

This report provides a one page summary of the activity of each ACD group. One page is provided for each group. Each page is a summary of the information found on the GROUP ACTIVITY REPORT. This report also provides the following additional information:

The number of callers who hung up before answered.
The number of callers who listened to a recorded announcement, and then hung up.
The number of calls transferred TO the ACD group.
The number of calls transferred FROM the ACD group.
The number of calls which ACD programming directed to the group from another ACD group.
The number of calls which ACD programming directed from the group to another ACD group.

At the bottom of the report is the CALL WAIT TIME. This contains a count and a percentage of calls that are answered by agents within a given series of time periods. These periods can be adjusted within the report.

Both reports are available for each of the 15 ACD groups.

There are TWO ACD GROUP SUMMARY REPORTS, a cumulative report which is labeled **J1**, and a daily report which is labeled **J2**.

```
Grp 01,MARKETING   (J1) ACD GROUP SUMMARY REPORT
                        --------------------------

 Period Covered: Mon 08-17-87 09:03 Through   Tue 08-18-87 12:28

ACD Incoming -   1188 ACD Talk Time - 68:45 Avg. ACD Talk - 3:47
Answered     -   1089 Delay Time    -  9:31 Avg. Delay    -  :59
Aban Bef Rcrd -    76 Abandnd Time  -  1:32 Avg. AbanTime -  :55
Aban Aft Rcrd -    24 Non ACD Time  -  6:42 Avg. NACD Tlk -  3:35
Recordings   -   240  Wrap Time    -  9:08 Avg. Wrp Time -  :30
Delayed Calls -  573
Non ACD Calls -  112
Transfrd In  -    10
Transfrd Out -    44
Overflow In  -
Overflow Out -


 Call wait time:
  5 Sec | 10 Sec | 20 Sec | 30 Sec | 45 Sec | 60 Sec | 90 Sec | Over
    340 |   561 |   723 |   806 |   889 |   940 |  1018 |  1090
% 31.19 |% 51.46 |% 66.33 |% 73.94 |% 81.55 |% 86.23 |% 93.39 |% 100.00

 Print Now -   Main Menu -   [Ctrl W - Program Answer Time,Ctrl P - Goto Print]
```

HOW TO ACCESS THE ACD GROUP SUMMARY REPORTS

Action: From the ACD main menu, press J then 1 (or 2 for the daily report) on the keyboard. Then press the RETURN key.

Commands: Press the I key to increment to the next ACD group.

Press the D key to decrement to the previous ACD group.

To switch the screen to enter different *call wait rimes* press CTRL and W. Enter the different *call wait times* desired, and press the RETURN key. Use the RETURN key to step to each call wait time. Press CTRL P when finished to return the cursor to the *Print Now* prompt.

SCREEN DEFINITIONS

Grp The ACD group being viewed. To increment or decrement the group number one at a time, press I or D.

Period Covered The date and time the report was last cleared, and the time the report was printed or viewed.

ACD Incomimg Indicates the number of incomimg ACD calls to the group being viewed (includes answered and unanswered).

Answered The number of ACD calls answered by the group being viewed.

Aban Bef Rcrd The number of times a caller hung up before a recorded message was played.

Aban Aft Rcrd The number of times a caller hung up after a recorded message was played.

Recordings Indicates the total number of calls connected to the recording.

Delayed Calls The number of calls that were in queue.

Non ACD Calls The total number of CO calls answered by the group that is being viewed.

Transfrd In The number calls that were transferred into the group being viewed.

Transfrd Out The number calls that were transferred out of the group that is being viewed; which may or may not have been transferred into another group.

Overflow In The number of ACD calls that overflowed out of one group and into the group that is being viewed.

Overflow Out The number of ACD calls that overflowed out of the group that is being viewed and into another group. An ACD call will overflow out of a group when a call reaches one of the forwarding commands in the call SEQUENCE *(ACD GROUP Programming* - A):

FWD TO ACD 000,BX 000	FORWARD SPD #000	RELEASE LINE
FORWARD EXT 000	FORWARD HUNT 005	

ACD Talk Time The total time, expressed in hours and minutes, that was spent talking on ACD calls by the group being viewed.

Delay Time The total time, expressed in hours and minutes, which calls were in queue (includes calls that were answered and abandoned).

Abandnd Time The total time, expressed in hours and minutes, the callers waited before they hung up.

Non ACD Time — The total time, expressed in hours and minutes, spent on incomimg and outgoing CO calls by the group that is being viewed.

Wrap Time — Indicates the total wrap up time, expressed in hours and minutes, spent by the group that is being viewed.

Avg. ACD Talk — The average time, expressed in minutes and seconds, spent on an ACD call by the group that is being viewed.

Avg. Delay — The average time, expressed in minutes and seconds, a caller waited in queue before the call was answered by an agent.

Avg. NACD Tlk — The average time, expressed in minutes and seconds, spent on incoming/outgoing CO calls (non ACD) by the group that is being viewed.

Avg. Wrp Time — Indicates the average wrap up time, expressed in minutes and seconds, spent per call by the group that is being viewed.

Call wait time — The number and percentage of calls answered by an agent within 5, 10, 20, 30, 45, 60, 90 and over 90 second delay periods (waiting in queue). The example below indicates 806 calls were answered within 30 seconds; where 806 is 73.94 percent of the total calls answered by all agents within the group.

The time periods indicated can be changed to suit your individual requirements. However, any change made effects both the ACD Group Summary (J) and the System Summary Reports (K).

```
Grp  01,MARKETING   (J1) ACD GROUP SUMMARY REPORT

 Period Covered: Mon  08-17-87  09:03 Through   Tue 08-18-87 12:28

ACD Incoming  =   1188  ACD Talk Time  =  68:45  Avg. ACD Talk  =  3:47
Answered      =   1089  Delay Time     =   9:31  Avg. Delay     =   :59
Aban Bef Rcrd         76  Abandnd Time  =   I:32  Avg. AbanTime  =   :55
Aban Aft Rcrd         24  Non ACD Time  =   6:42  Avg. NACD Tlk  =  3:35
Recordings           240  Wrap Time     =   9:08  Avg. Wrp Time  =   :30
Delayed Calls        573
Non ACD Calls        112
Transfrd In           10
Transfrd out          44
Overflow In
Overflow Out


 call wait time:
  5 Sec  | 10 Sec  | 20 Sec  | 30 Sec  | 45 Sec  | 60 Sec  | 00 Sec  | Over
     340 |     561 |     723 |     806 |     889 |     040 |    1018 |    1000
%  31.19 | % 51.46 | % 66.33 | % 73.04 | % al.55 | % 86.23 | % 93.30 | % 100.00

Print Now _  Main Menu _  [Ctrl W = Program Answer Time,Ctrl P = Coto Print]
```

7.8 SYSTEM SUMMARY REPORTS - K1 AND K2

This report provides a one page summary of the activity of all ACD groups. The page is a summary of the information found on the SYSTEM ACTIVITY REPORT. This report also provides the following additional information:

The number of callers who hung up before being answered.

The number of callers who listened to the recorded announcement and then hung up.

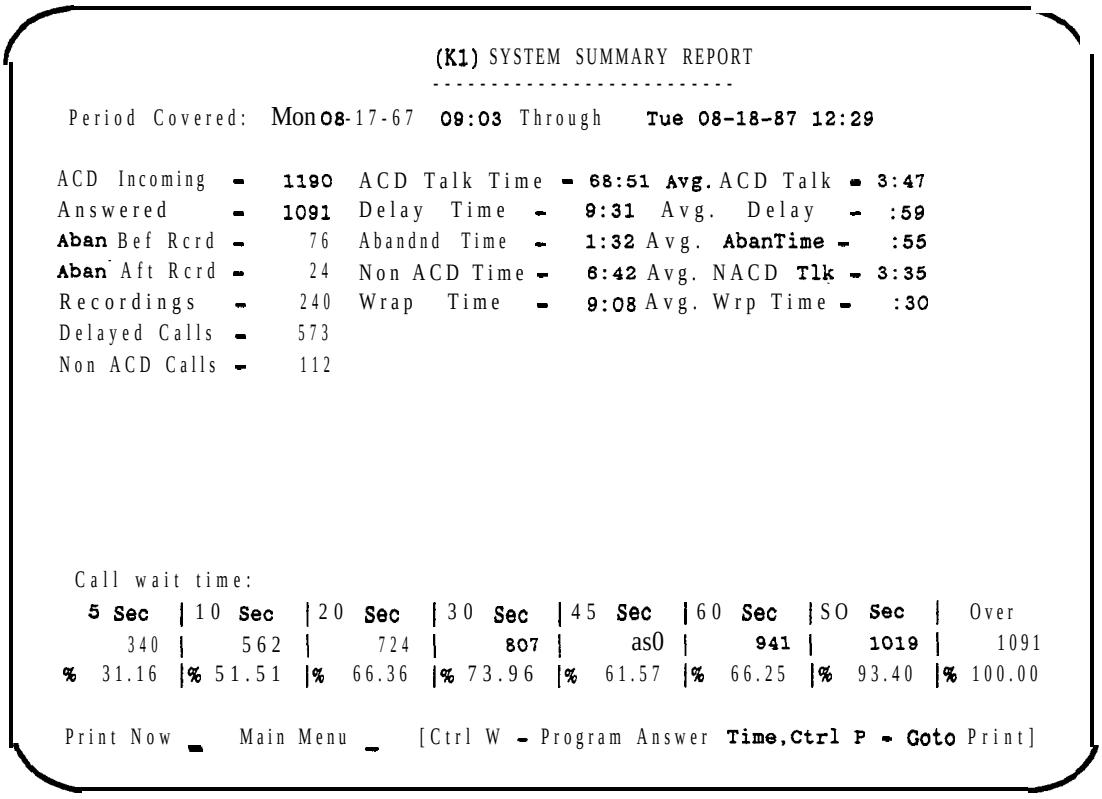
At the bottom of the report is the CALL WAIT TIME. This contains a count and a percentage of calls that are answered by agents within a given series of time periods. These periods can be adjusted within the report.

There are TWO SYSTEM SUMMARY REPORTS, a cumulative report which is labeled **K1,** and a daily report which is labeled K2.

HOW TO ACCESS THE ACD SYSTEM SUMMARY REPORTS

Action: From the ACD main menu, press K then 1 (or 2 for the daily report) on the keyboard. Then press the RETURN key.

Commands: To switch the screen to enter different *call waif times* press CTRL and W. Enter the different *call wait* times desired, and press the RETURN key. Use the RETURN key to step to each call wait time. Press CTRL P when finished to return the cursor to the *Print* Now prompt.



(K1) SYSTEM SUMMARY REPORT

Period Covered: Mon 08-17-67 09:03 Through Tue 08-18-87 12:29

ACD Incoming	1190	ACD Talk Time	68:51	Avg. ACD Talk	3:47
Answered	1091	Delay Time	9:31	Avg. Delay	:59
Aban Bef Rcrd	76	Abandnd Time	1:32	Avg. AbanTime	:55
Aban Aft Rcrd	24	Non ACD Time	6:42	Avg. NACD Tlk	3:35
Recordings	240	Wrap Time	9:08	Avg. Wrp Time	:30
Delayed Calls	573				
Non ACD Calls	112				

Call wait time:

5 Sec	10 Sec	20 Sec	30 Sec	45 Sec	60 Sec	SO Sec	Over
340	562	724	807	as0	941	1019	1091
% 31.16	% 51.51	% 66.36	% 73.96	% 61.57	% 66.25	% 93.40	% 100.00

Print Now _ Main Menu _ [Ctrl W - Program Answer Time, Ctrl P - Goto Print]

SCREEN DEFINITIONS

Period Covered	Indicates the date and time the report was last cleared and the time the report was printed or viewed.
ACD Incomimg	The number of incomimg ACD calls (includes answered and unanswered).
Answered	The number of ACD calls answered.
Aban Bef Rcrd	The number of times a caller hung up before a recorded message was played.
Aban Aft Rcrd	The number of times a caller hung up after a recorded message was played.
Recordings	The total number of calls connected to a recorder.
Delayed Calls	Indicates the number of calls that were in queue.
Non ACD Calls	The total number of CO calls answered.
ACD Talk Time	The total time, expressed in hours and minutes, that was spent talking on ACD calls.
Delay Time	The total time, expressed in hours and minutes, which calls were in queue (includes calls that were answered and abandoned).
Abandnd Time	Indicates the total time, expressed in hours and minutes, the callers waited before they hung up.

```
                        (K1) SYSTEM SUMMARY REPORT
                        --------------------------

 Period Covered:  Mon 08-17-87 09:03 Through   Tue 08-18-87 12:29

ACD Incoming =  1190  ACD Talk Time =  68:51 Avg. ACD Talk =  3:47
Answered     =  1091  Delay Time    =   9:31  Avg. Delay    =   :59
Aban Bef Rcrd =   76  Abandnd Time  =   1:32 Avg. AbanTime =   :55
Aban Aft Rcrd =   24  Non ACD Time  =   6:42 Avg. NACD Tlk =  3:35
Recordings   =  240  Wrap Time     =   9:08 Avg. Wrp Time =   :30
Delayed Calls =  573
Non ACD Calls =  112

 Call wait time:
  5 Sec  | 10 Sec  | 20 Sec  | 30 Sec  | 45 Sec  | 60 Sec  | 90 Sec  |  Over
    340  |   562   |   724   |   807   |   890   |   941   |  1019   |  1091
%  31.16 | % 51.51 | % 66.36 | % 73.96 | % 61.57 | % 66.25 | % 93.40 | % 100.00

 Print Now _   Main Menu _   [Ctrl W = Program Answer Time,Ctrl P = Coto Print]
```

Non ACD Time — The total time, expressed in hours and minutes, spent on incoming and outgoing CO calls.

Wrap Time — Indicates the total wrap up time, expressed in hours and minutes.

Avg. ACD Talk — The average time, expressed in minutes and seconds, spent on an ACD call.

Avg. Delay — The average time, expressed in minutes and seconds, a caller waited in queue before the call was answered by an agent.

Avg. NACD Tlk — The average time, expressed in minutes and seconds, spent on incoming/outgoing CO calls (non ACD).

Avg. Wrp Time — Indicates the average wrap up time spent per call, expressed in minutes and seconds.

Call wait time — Indicates the number and percentages of calls answered by an agent within 5, 10, 20, 30, 45, 60, 90 and over 90 second delay periods (waiting in queue). The example below indicates 941 calls were answered within 60 seconds; where 941 is 86.25 percent of the total calls answered by all agents within the system.

```
Call wait time:
 5 Sec  | 10 Sec  | 20 Sec  | SO Sec  | 45 Sec  | 60 Sec  | 90 Sec  | Over
   340  |   582   |   724   |   607   |   890   |   041   |  1019   |  1091
%  31.16 |% 51.51  |% 66.36  |% 79.96  |% 81.57  |% 66.25  |% 93.40  |% 100.00
```

The time periods indicated can be changed to suit your own individual requirements. However, any changes made effect both the ACD Group Summary (J) and the System Summary (K) Reports.

7.9 PRINTING REPORTS MANUALLY

When a report is selected and appears on the terminal, the cursor is located adjacent to "Print Now." To print the report, press the Y key on the keyboard of the terminal. The report then prints on the printer designated in the *Print Scheduler* programming screen. If no printer is designated, the report prints on the system SMDR printer. The SMDR printer is assigned on *the System Programming* (B) screen.

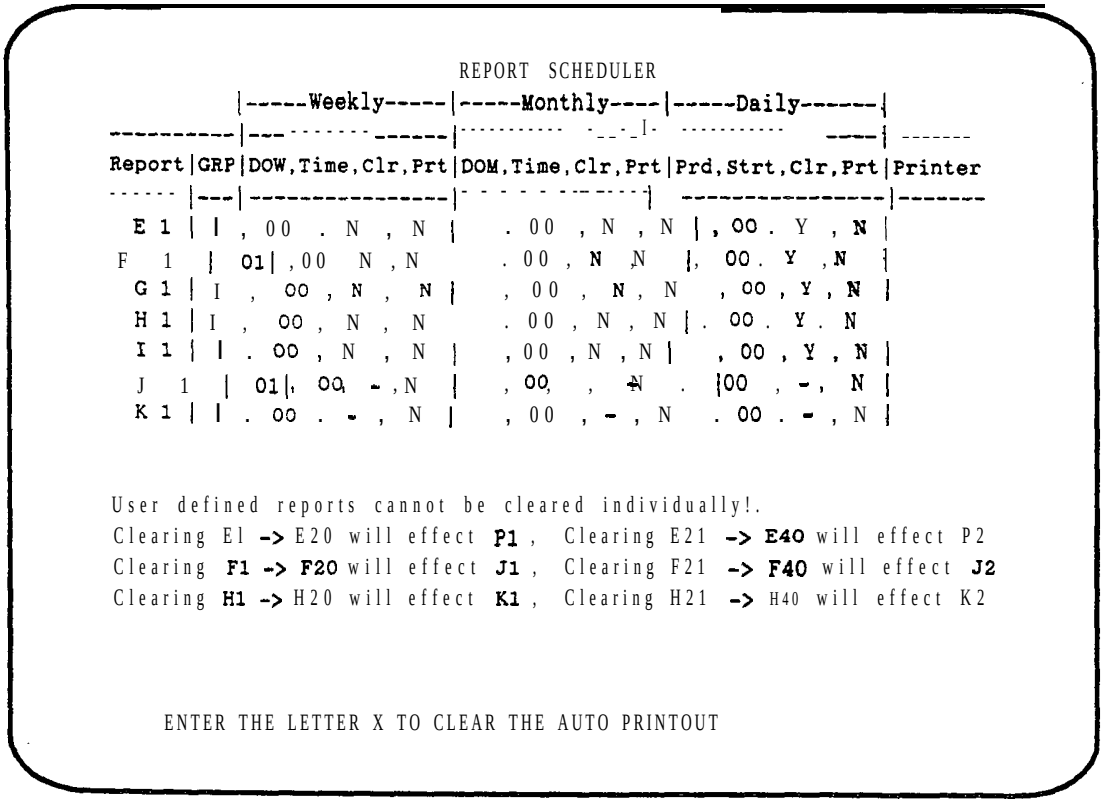
When a report is printed, it is printed in its entirety, not just the portion that appears on the programming screen.

Certain reports display information in hourly, 30 minute, or 15 minute increments. These reports are printed using the increment last shown on the terminal. For example, if the **F1** report is displayed on the terminal and is shown in 30 minute increments, the report is printed using 30 minute increments.

7.10 PRINTING REPORTS AUTOMATICALLY

The Print ***Scheduler*** programming screen is used to print any or all of the ACD reports at a day and time of your choice. The time is in whole hours only. Each report can be individually programmed. For example, you can program the *Agent Activity* reports to print every day at 8:00 pm, and *the Group Activity* reports to print on the first of every month at 6:00 am.

The *Print Scheduler* also allows you to choose which printer (if your system is equipped with more than one) each report prints on. This selection also effects where the report prints when selected manually.



REPORT SCHEDULER

	Weekly		Monthly		Daily		
Report	GRP	DOW, Time, Clr, Prt	DOM, Time, Clr, Prt		Prd, Strt, Clr, Prt		Printer
E 1		, 00 . N , N	. 00 , N , N		, 00 . Y , N		
F 1	01	, 00 N , N	. 00 , N , N		, 00 . Y , N		
G 1	I	, 00 , N , N	, 00 , N , N		, 00 , Y , N		
H 1	I	, 00 , N , N	. 00 , N , N		. 00 . Y . N		
I 1		. 00 , N , N	, 00 , N , N		, 00 , Y , N		
J 1	01	, 00 , - , N	, 00 , - , N		00 , - , N		
K 1		. 00 . - , N	, 00 , - , N		. 00 . - , N		

User defined reports cannot be cleared individually!.
Clearing E1 -> E20 will effect P1 , Clearing E21 -> E40 will effect P2
Clearing F1 -> F20 will effect J1 , Clearing F21 -> F40 will effect J2
Clearing H1 -> H20 will effect K1 , Clearing H21 -> H40 will effect K2

ENTER THE LETTER X TO CLEAR THE AUTO PRINTOUT

The *Print Scheduler* can also be used to automatically clear reports. Most of the reports can be automatically cleared at a day and time of your choice. The *Print Scheduler* can NOT be used to automatically clear the *ACD Group Summary* report (J report), nor the *System Summary* report (K report).

> CAUTION: Care MUST be taken when using the Print Scheduler to clear reports as the statistics for some reports are common for a number of reports. Clearing one report clears all the reports using the common data.

If a report is programmed to print and clear, the report does not clear until it is printed.

7.10.1 WHAT TO PROGRAM

7.10.2 NOTES ON THE PRINT SCHEDULER

Review each of the reports and their use, and decide which reports you wish to print on a regular basis. For each report, decide when you would like the report to print. After deciding which reports to print and when, decide when these reports are to be cleared and restarted.

When the system is turned on for the first time, a basic program configuration exists that allows the system to operate before any programming is done. The basic configuration is called the "default program" or just the "default". *The Print Scheduler's* default program is to clear all reports daily at midnight. No reports are printed. This includes the reports designated as CUMULATIVE. They are cleared every day until programmed otherwise with the *Print Scheduler.*

In order to accumulate statistics in a report for a week, change the "clr" (clear) in the daily column, and monthly column, for that report to N (no), and the "clr" (clear) in the weekly column to Y (yes).

In order to accumulate statistics in a report for a month, change the "clr" (clear) in the daily column, and weekly column, for that report to N (no), and the "clr" (clear) in the monthly column to Y (yes).

Reports F and J each contain 15 reports, one for each of the 15 ACD groups in the system. Each one of the reports can be programmed to print/clear individually. Thus you can print a *Group Activity Report* for group 1 daily without printing the remaining ACD groups. Remember NOT to clear the report until all the information desired for ALL the ACD groups on reports F and J has been obtained.

When programming a report to print monthly, do not choose days 29-31. The system prints the report on the specified day. If the month never reaches that day, the report will not print.

All reports default to the printer programmed as the SMDR printer.

> CAUTION: The same type of reports (e.g. El-E4 or **F21-F24)** share common data. As a result, if one report is cleared all the reports of the same type will also be cleared. For example, if report E2 is cleared, El, E3 and E4 will also be cleared regardless of the setting N or Y. Reports **E21-E24** are not affected. To schedule reports to print sequentially then clear them all, the highest report number (e.g. **E4)** must be set to Y while all reports below (e.g. El, E2, **E3)** are set to N. If set to N (no), the report will not clear after it is printed (if it is printed). When this entry (N) is made, it is automatically copied to all reports of the same type (e.g. copies N to reports El, E2, E3 and E4).

7.10.3 REPORT PRINT SCHEDULER SCREEN

The Print *Scheduler* programming screen is divided into five major areas:

REPORT AND GROUP These columns define the report being programmed. The Group column refers to the ACD group for the report.

WEEKLY The columns in this area define the schedule for printing and/or clearing a report on a weekly basis.

- **DOW** The day of the week on which you wish to print and/or clear a report. The range is from Sun. to Sat.
- **Time** The hour at which you wish to print and/or clear a report. Enter the time in a 24-hour clock, for example enter 13 for 1 p.m.
- **Clr** Enter Y (yes) if you want to clear a report, or N (no) if you do not want to clear a report on a desired day and time.
- **Prt** Enter Y (yes) if you want to print a report, or N (no) if you do not want to print a report.

MONTHLY The columns in this area define the schedule for printing and/or clearing a report on a monthly basis.

- **DOM** The day of the month on which you wish to print and/or clear a report. The range is from 1 to 31.
- **Time** The hour at which you wish to print and/or clear a report. Enter the time in a 24-hour clock, for example enter 13 for 1 p.m.
- **Clr** Enter Y (yes) if you want to clear a report, or N (no) if you do not want to clear a report.
- **Prt** Enter Y (yes) if you want to print a report, or N (no) if you do not want to print a report.

DAILY The columns in this area define the schedule for printing and/or clearing a report on a daily basis.

- **Prd** The hourly period for which you wish to print and/or clear a report, in hourly increments from 0 1 through 23.
- **Strt** The hour at which you wish the report to print and/or clear. The report begins at this time and continues to print after every interval period (the time entered in the Prd column).
- **Clr** Enter Y (yes) if you want to clear a report, or N (no) if you do not want to clear a report after this interval.
- **Prt** Enter Y (yes) if you want to print a report, or N (no) if you do not want to print a report.

PRINTER This column defines which printer port (l-4) the report is sent to. The printer number is assigned on the *System Programming* screen. If there is no printer listed, or the printer is listed as 0, the report is sent to the port designated for the SMDR printer.

7.10.4 HOW TO PROGRAM THE PRINT SCHEDULER

From the *Reports menu,* press N. *Print Scheduler* appears. To exit the *Print Scheduler* and return to the *Reports Menu,* press ESCAPE on keyboard. The following keys are used to move around the *Print Scheduler* programming screen:

RETURN KEY	Moves the cursor down the screen.
TAB KEY	Moves the cursor across the screen.
UP ARROW KEY	Increments the DOW (Day Of Week) and DOM (Day Of Month).
DOWN ARROW KEY	Decrements the DOW (Day Of Week) and DOM (Day Of Month).
I and D KEY	Increments and decrements the group numbers while in any column.

REPORT SCHEDULER

		Weekly			Monthly			Daily			
Report	GRP	DOW	Time	Clr	Prt	DOM	Time	Clr	Prt	Prd,Strt	Clr	Prt	Printer
E 1			00	N	N		00	N	N	00	Y	N	
F 1	01		00	N	N		00	N	N	00	Y	N	
G 1			00	N	N		00	N	N	00	Y	N	
H 1			00	N	N		00	N	N	00	Y	N	
I 1			00	N	N		00	N	N	00	Y	N	
J 1	01		00	-	N		00	-	N	00	-	N	
K 1			00	-	N		00	-	N	00	-	N	

User defined reports cannot be cleared individually!.
Clearing E1 -> E20 will effect P1, Clearing E21 -> E40 will effect P2
Clearing F1 -> F20 will effect J1, Clearing F21 -> F40 will effect J2
Clearing H1 -> H20 will effect K1, Clearing H21 -> H40 will effect K2

ENTER THE LETTER X TO CLEAR THE AUTO PRINTOUT

7.10.5 EXAMPLE

Use the screen shown in Figure 7-3 for reference while looking at Print *Scheduler* on your programming terminal.

In the example, you will be entering information to print and clear the CUMULATIVE GROUP ACTIVITY Report for ACD group 5. This is report **F1**. In the example, the report is to be printed on a weekly, monthly, and daily basis, and cleared monthly.

When the scheduler screen is first displayed, the cursor is located in the Report column of Report El.

Press the RETURN key until the cursor reaches the **F1** report.

Press the TAB key once to move to the GRP column.

Use the I key (increment) to reach 05.

Weekly:

Use the TAB key to move the cursor right to the DOW column.

Use the UP or DOWN arrow key to increment or decrement to Tue, which is the day used in the example that you would like to print report **F1** on a weekly basis.

Use the TAB key to move the cursor to the Time column. Enter the time (24 hour clock) at which you want the report to print on a weekly basis, e.g. 8 pm.

Use the TAB key to move the cursor to the **Clr** column. Type in **Y** (yes) or N (no) if you want all the CUMULATIVE ACD GROUP reports to clear at the specified time on a weekly basis.

Use the TAB key to move the cursor to the Prt column. Type Y (yes) or N (no) if you want the report to Print at the specified time on a weekly basis.

Monthly:

Use the TAB key to move the cursor right to the DOM column.

Use the UP or DOWN arrow key to increment or decrement to 0 1, which is the day used in the example that you would like to print and/or clear the report on a monthly basis.

Use the TAB key to move the cursor to the Time column. Enter the time of day at which you want the report to print and/or clear on a monthly basis, e.g. 6 am.

Use the TAB key to move the cursor to the **Clr** column. Type in Y (yes) or N (no) if you want all the CUMULATIVE **J** reports to Clear at the specified time on a monthly basis.

Use the TAB key to move the cursor to the Prt column. Type Y (yes) or N (no) if you want the screen to Print at the specified time on a monthly basis.

Daily:

Use the TAB key to move the cursor to the Prd column. This is the time period, in hours, at which time you want to print and/or clear the report. Type in the desired interval 01 thru 23 hours.

Use the TAB key to move the cursor to the Strt column, and enter the hour at which time you want the report to begin to print and/or to clear.

Use the TAB key to move the cursor to the Clr column. Type in Y (yes) or N (no) if you want the report to Clear at the specified time on a daily basis.

Use the TAB key to move the cursor to the Prt column. Type Y (yes) or N (no) if you want the report to Print at the specified time on a daily basis.

Printer:

Use the TAB key to move the cursor to the Printer column. Enter the number of the printer, 1 thru 4 to which you want the report sent to be printed. This printer number must be assigned through *System Programming,* which is accessed by pressing B from the *System Main Menu.*

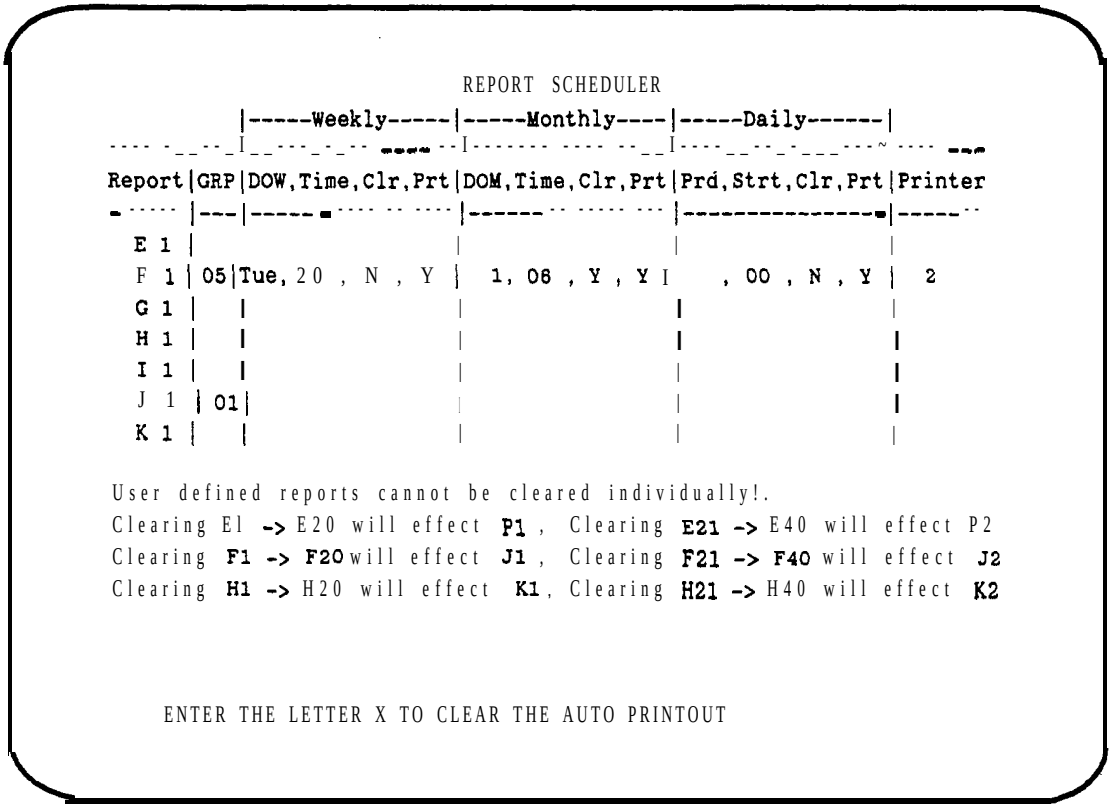


Figure 7-3 Report Scheduler

7.11 CLEARING REPORTS MANUALLY

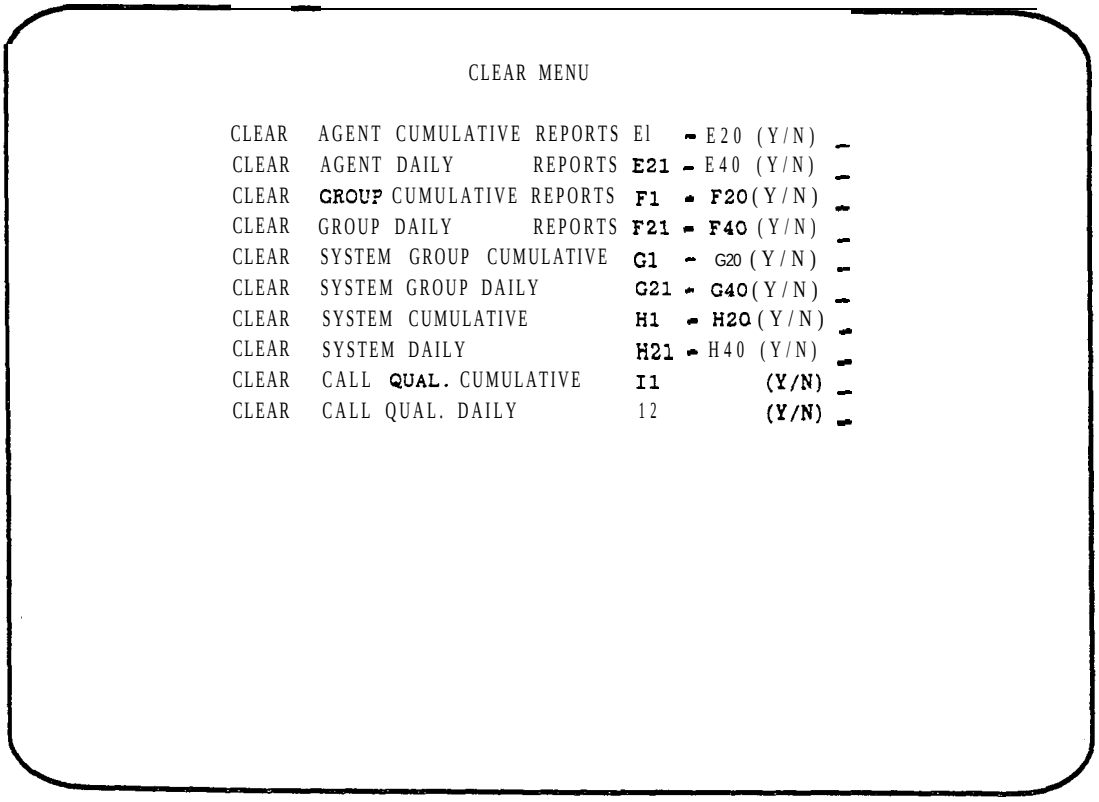
The reports provided by this ACD package can be cleared at any time manually, and they can be programmed to clear automatically. Each of the reports can be programmed to clear automatically at daily, weekly, or monthly intervals on the day and time of your choice. This is accomplished through the use of the *Print Scheduler* programming screen (choice L on the ACD main menu). When a report is cleared all data for that report is lost, and statistics begin accumulating again. Some of the ACD reports share information held in system memory. Clearing any one of these reports clears the information for the remainder of the reports. In the ACD Advanced feature package only the Agent Activity reports (El through E4 and **E21** through E24) are effected.

Do NOT clear any of the reports (manually or automatically) in these two groups until all of the desired information contained in each of the reports has been examined (or printed). This is especially important when programming the **PRINT** SCHEDULER. The system processes the requests to print and clear a report in the order in which they appear on the PRINT SCHEDULER. Therefore, to print report E4, reports El through E3 must not be cleared by the PRINT SCHEDULER. To print report E24, reports **E21** through E23 must not be cleared by the PRINT SCHEDULER. When the E24 report is cleared, reports E2 1 through E23 are also cleared.

Reports are cleared manually through the use of the CLEAR REPORT programming screen (choice M on the ACD main menu). The groups of reports listed on each line of the CLEAR menu are cleared together.

If not already on the CLEAR menu, from the ACD main menu, press the M key. The CLEAR menu appears.

1. Press the RETURN key to move the cursor to the report to be cleared.
2. Press the Y key. The selected report is then cleared.



Section 8
Custom ACD

8.1 INTRODUCTION

Custom *Automatic Call* Distribution was created for the ACD Manager who wants to define, name, and develop his or her own reports. The primary purpose of Custom ACD is to allow reports to be tailored to meet any unique statistical need a customer may have. Custom ACD contains pre-defined reports which may be viewed by any programming terminal. These reports can also be printed on the optional system printer. The reports may be printed manually, or printed automatically at regular intervals using the *Report Print Scheduler.*

The Custom package provides all the report capabilities of the Advanced Package plus additional reports which can be defined to suit the Manager's personal business applications.

The information in this section describes the Custom Report Package. Instructions on how to access the reports, a detailed description of each of the predefined reports, and a discussion on how to use the information contained in them is provided.

8.1.1 LIST OF USER DEFINABLE REPORTS

Provided is a list of the user definable reports that are available with Custom ACD. This is not a list of all the reports provided with the Custom ACD package, this is only a list of reports that are USER DEFINABLE:

Agent Activity Reports (E)
Group Activity Reports (F)
System Activity by Group Reports (G)
System Activity Reports (H)

8.1.2 LIST OF PRE-DEFINED REPORTS

Custom ACD also provides the Manager with PRE-DEFINED statistical reports. These reports provide pre-defined Agent, Group, and System statistics. Below is a list of the pre-defined reports that are available in Custom ACD:

Call Qualification Reports (I)
ACD Group Summary Reports (J)
System Summary Reports (K)
Agent Summary Reports (P)

Some of the user defined reports Reports are also pre-defined, but can be changed as desired.

8.1.3 SYSTEM PERFORMANCE DEFINABLE SCREEN/ REPORT

Custom ACD provides a dynamic (real time) definable report called the *System Performance Screen* (N screen); The "N" screen/report allows the Manager to set ranges for different defined ACD statistics. When a range is exceeded or gone below, the system alerts the supervisor by highlighting the item on the screen. The system can also be programmed to sound a tone on the supervisor's terminal when it highlights the item.

In addition to being able to view this screen, you are also able to print the information as a report. This can be done on demand, or at programmed intervals.

8.2 DESCRIPTION

Custom ACD divides statistical reports into 9 major topics. These topics are Agent Activity, Group Activity, System Activity (by Group), System Activity, Call Qualification, ACD Group Summary, System Summary, System Performance, and Agent Summary. Each of the reports are available on a daily basis, and a cumulative basis. The statistics for the daily reports are cleared every day. The statistics for the cumulative reports are cleared at programmable intervals. The cumulative reports can be cleared daily, weekly, or monthly, on the day and time of your choice.

8.3 PREDEFINED REPORTS

AGENT ACTIVITY (E Report)

The Agent Activity provides 4 predefined reports concerning how each agent in the ACD system utilized their time. Each of the 4 reports is available on a daily and cumulative basis for a total of 8 reports. The first report details how many ACD calls an agent answered, the amount of time an agent was logged into the system, how much time an agent spent handling ACD calls, how much time was spent completing work after the call, and how much time was spent waiting for a call (idle time).

The second report details the number of ACD calls answered by each agent, the number of calls sent to the agent which the agent did not answer, and the number of outgoing calls made by the agent.

The third and fourth reports summarize the information of the first two reports by percentage.

GROUP ACTIVITY (F Report)

A report on each of the 15 ACD groups is available on both a cumulative and daily basis. Each report provides an hourly 30 minute, and 15 minute counter of the number of ACD calls sent to the group, the number of calls answered by the group, and the number of calls sent to the group that were first handled by the system (i.e. a recorded announcement was provided to a caller).

SYSTEM ACTIVITY BY GROUP (G Report)

These reports give a summary of the call activity for each ACD group in the system. There is a cumulative System Activity Report, and a daily System Activity Report.

SYSTEM ACTIVITY (H Report)

This report is an hourly summary of the activity of all groups within the ACD system. Cumulative and daily reports are available. This report provides an hourly, 30 minute, and 15 minute summary.

CALL QUALIFICATION (I Report)

As each agent finishes with an ACD call, the type of call (purpose, area of the country the call was from, etc.) can be identified with a three digit number. This number is entered by the agent after the call is completed, and is called a QUALIFICATION. A summary of the qualifications entered can be found in this report.

ACD GROUP SUMMARY (J Report)

These reports provide a summary of each ACD group. Each report lists items such as the number of calls abandoned before they reached an announcing device, the number of calls abandoned before they reached an agent, the total amount of talk time, and call wait time. Each report is available on a cumulative and daily basis.

SYSTEM SUMMARY (K Report)

This report provides a one page summary of all activity performed by the ACD system. There are two reports available, a cumulative and a daily report.

SYSTEM PERFORMANCE (N Report)

This report provides the user with a Dynamic (or real time) definable report. The N screen/report allows the Manager to set ranges for different defined ACD statistics. When a range is exceeded or gone below, the Dynamic report will indicate it by highlighting the range on the supervisor's CRT and emitting an audible tone if programmed.

AGENT SUMMARY (P Report)

These reports provide a summary of the activity of each Agent. Each report lists items such as the total amount of talk time, and call wait time. Each report is available on a cumulative and daily basis.

Each of the available reports is accessed using the programming terminal, or the remote programming feature. A printed copy of each report can also be obtained if your system is equipped with a printer.

8.4 ACCESSING THE ACD MAIN MENU

The Custom ACD Main Menu is accessed by pressing Q on the keyboard while in the system Main Menu. The ACD Main Menu appears.

```
                              ACD MAIN MENU

SET UP:                          I - CALL QUALIFICATION REPORTS:
A - Group                            1. Cumulative
B - Agent                            2. Daily
                                 J - ACD GROUP SUMMARY REPORTS:
DYNAMIC STATUS DISPLAYS:             1. Cumulative
C - System                           2. Daily
D - Group                         K - SYSTEM SUMMARY REPORTS
                                     1. Cumulative
E [1-40] - AGENT ACTIVITY REPORTS:   2. Daily

                                 L - PRINT SCHEDULER
F [1-40] - GROUP ACTIVITY REPORTS:

                                 M - CLEAR REPORTS

G [1-40] - SYSTEM ACTIVITY BY GROUP: N - SYSTEM PERFORMANCE

                                 O - ACD QUEUE MENU
H [1-40] - SYSTEM ACTIVITY:

                                 P - AGENT SUMMARY REPORT
                                     1. Cumulative
                                     2. Daily
SELECT ONE OF THE ABOVE >        Cntrl F - Default ACD
```

Figure 8-l Custom ACD Main Menu

8.5 CUSTOM ACD SCREENS

Custom ACD incorporates all features of the Advanced ACD, plus the following screens and their accompanying features. The screens listed below will be examined in detail in this section:

E SCREEN	(1 to 20 and 21 to 40)
F SCREEN	(1 to 20 and 21 to 40)
G SCREEN	(1 to 20 and 21 to 40)
H SCREEN	(1 to 20 and 21 to 40)
I SCREEN	(1,2)
J SCREEN	(1,2)
K SCREEN	(1,2)
L SCREEN	Print Scheduler
M SCREEN	Clear Reports
N SCREEN	System Performance
P SCREEN	Agent Summary Reports (1,2)

The reports of the E screens (Agent Activity Reports), F screens (Group Activity Reports), G screens (System Activity by Group), and H screens (System Activity), are user defined. The E report (1 to 4 and 21 to 24), F report (1 and 21), G (1 and 21) and, H (1 and 21) reports default to the same set up as the corresponding report in the Advanced Reports Package. However, all of these reports, including those that are set up in default can be user defined.

Each report can be comprised of up to nine user defined columns. The user can program each column with any one of the *Time Elements* or *Number of Calls* designations. These two letter designations can be added, subtracted, multiplied, or divided to form a unique statistical report.

8.6 DETERMINE THE NUMBER OF MANAGEMENT REPORTS TO USE

Before designing the Custom reports, the Manager must decide how many reports will suit his business needs and what type of information to utilize for each report. The Manager must also decide what items and in what order, these items should be placed in each report. A title should be chosen for each report to reflect the Manager's use of the report. Titles should be chosen before programming the Custom reports.

8.6.1 TWO LETTER DESIGNATIONS

Before the Manager programs the Custom reports, he must decide what information will be needed. A definition of the available items which can be used to create a report is found in the list of *Time Elements,* and *Number of Calls,* in the discussion of each definable report.

The *Time Elements* and the *Number of Calls* are listed by two letter designations and their definitions. Listed at the left are the two letter designations. To the right of the same list are the definitions of those specific designations. For example:

Designation	Definition
TA =	Logged Time
TB =	Busy ACD
TC =	Wrap Up

8.6.2 TYPE OF DESIGNATIONS: TIME ELEMENT/NUMBER OF CALLS

The Time Elements (TE) are time-related, and represent the amount of time in a specific parameter. The Time Elements designations can be added, subtracted, multiplied, or divided to form a unique statistical report.

The Number of Calls (NC) are concerned with the quantity of a specific parameter. The Number of Call designations can be added, subtracted, multiplied, or divided to form a unique statistical report.

The Manager should read the *Printing Reports* and Clearing *Reports* sections of this Guide before defining any reports.

8.7 DEFINING THE AGENT ACTIVITY (E) REPORT

The *E Report* definition screen is used to define the 40 Agent Activity reports. Each report is made up of the *Agent Name* and *Number* plus 9 user defined columns. Each column heading and report title can also be programmed. The first 20 reports are *cumulative* reports, and the remaining 20 are the *daily* reports.

The first 4 cumulative and the first 4 daily reports have already been defined, but may be changed as desired. The remaining reports are blank, and can be set up to satisfy your own particular statistical needs.

To begin, select from the following list those items (Time Elements and Number of Calls) needed for each report. It is a good idea to use the definition sheets found at the end of this section when planning each report.

```
                    (E) AGENTS USER DEFINED REPORTS          Page 1 of 3

        Time Elements                                Num of Calls
 TA. Log Time        TI. Busy Icm Out    CA. Agnt ACD In     CI. Logged In
 TB. Busy ACD        TJ. DND             CB. Outgoing        CJ. Qualifications
 TC. Wrap Up         TK. ACD Ring        CC. Icm In          CK. Total Calls
 TD. Available       TL. Co ring         CD. Answered        CL. Busy out
 TE. Unavailable     TM. Icm Ring        CE. Unanswered      CM. ICM calls
 TF. Busy Incoming TN. Busy Out          CF. Transf In       CN. Incoming
 TG. Busy Outgoing TO. Avg bsy ACD       CG. Icm Out         CO. Trans Out
 TH. Busy Icm In     TP. Avg bsy NACD    CH. Non ACD In      CP. P ACD Incoming
------------------------------------------------------------------------------
MENU ID = 01          <--- [Shift @]

   1       2       3       4       5       6       7       a       9
                                                                  ----,
|Calls |Total |Total |Total | Total] Not |Avg. |Avg. |Avg.  |  <-- [Ctrl A]
|Ansrd |Login |BsyACD|WrapUp| Avail] Avail|BsyACD|WrapUp|Ring |
`-------------------------------------------------------------------'
 ENTER EQUATION:                                  <-- [Right Arrow]

MENU HEADER = CUMULATIVE AGENT TIME ACTIVITY      <-- [Ctrl B]
```

Figure 8-2 Agent Reports Definition Screen

8.7.1 TIME ELEMENTS

TA = Log Time	The amount of time the agent was logged in ACD.
TB = Busy ACD	Indicates the time the agent spent on ACD calls.
TC = Wrap Up	Indicates the time the agent was in wrap up to complete any detail work after each ACD or non- ACD calls. During this time, the wrap up light is on and No ACD calls can be processed to the agent.
TD = Available	Indicates the time the agent spent in the available for ACD calls.
TE = Unavailable	Indicates the total time the agent spent in the unavailable state.
TF = Busy incoming	Time spent on incoming CO non-ACD calls.
TG = Busy Outgoing	Time spent on outgoing CO calls.
TH = Busy ICM In	Time spent on incoming intercom calls.
TI = Busy ICM Out	Time spent on outgoing intercom calls.
TJ = DND	Indicates the time the agent spent working in a Do Not Disturb state.
TK = ACD Ring	Indicates the total time ACD calls rang at agent's extension.
TL = CO Ring	Indicates the time non-ACD calls rang at agent's extension.
TM = ICM Ring	Indicates the time intercom calls rang at an agent's extension.
TN = Busy Out	If an agent has not picked up his call after the programmed amount of time, the system will busy out his extension for 60 seconds (programmable) , making that extension unavailable.
TO = Avg Busy ACD	Average time spent on ACD calls. $\frac{\textit{Total Time Spent Busy on ACD Calls}}{\textit{Total ACD Calls Answered}}$
TP = Avg Busy NACD	Average time spent on non ACD calls. $\frac{\textit{Total Time Busy CO In}}{\textit{Total Number of CO In Calls}}$
TQ = Avg. Busy	Indicates the average time the agent was busy on calls. $\frac{\textit{Time ACD \& CO In}}{\textit{Total Number of ACD \& CO In Calls}}$

TR = Avg. Wrap — Indicates the average time the agents spent wrapping up calls.

$$\frac{\textit{Total Wrap Up Time}}{\textit{Number of ACD Calls Answered}}$$

Avg. ICM In — Indicates the average time spent on incoming intercom calls.

$$\frac{\textit{Total Time ICM In}}{\textit{ICM In (Calls)}}$$

TT = Avg. ICM Out — Indicates the average time spent on outgoing intercom calls.

$$\frac{\textit{Total Time ICM Out}}{\textit{ICM Out (Calls)}}$$

TU = Avg. ICM — Indicates the average time spent on intercom calls.

$$\frac{\textit{Total Intercom In/Out Time}}{\textit{Total Intercom In/Out Calls}}$$

TV = Avg. ACD Ring — Average time spent in ACD ring.

$$\frac{\textit{ACD Ring Time}}{\textit{Total Calls Incoming ACD}}$$

TW = Avg. CO Ring — Average time a non-ACD call rang on agent's phone.

$$\frac{\textit{CO Ring Time}}{\textit{CO In (\#)}}$$

TX = Avg. ICM Ring — Average time ICM calls rang on agent's phone.

$$\frac{\textit{ICM Ring Time}}{\textit{ICM In (\#)}}$$

TY = Avg. Ring — Average time the agent's phone was ringing (all calls.)

$$\frac{\textit{ACD Ring} + \textit{ICM Ring} + \textit{CO Ring}}{\textit{ACD Total In} + \textit{ICM In} + \textit{CO In (\#)}.}$$

TZ = Bsy Prm ACD — Time spent busy on primary ACD group calls.

UA = Bsy Scd ACD — Time spent busy on secondary ACD group calls.

UB = Wrp Prm ACD — Time spent on wrap up on primary ACD calls.

UC = Wrp Scd ACD — Time spent in wrap up on Secondary ACD calls.

UD = Prm ACD Ring — Total ring time for primary ACD group calls.

UE = Scd ACD Ring — Total secondary ACD group ring time calls.

UF = % Busy ACD — Percentage of total log time spent on ACD calls.

$$\frac{\textit{Total Busy on ACD}}{\textit{Total Log Time}} \times 100\ \%$$

UG = % Wrap Time — Percentage of total log time the agent spent available.

$$\frac{\textit{Total Wrap Time}}{\textit{Total Login Time}} \times 100\ \%$$

UH = % Available Time — Percentage of total log time the agent spent available.

$$\frac{\text{Total } \textit{Available Time}}{\textit{Total Login Time}} \times 100\ \%$$

UI = % Not Available — Percentage of total log time the agent spent not available.

$$\frac{\textit{Total Not Available Time'}}{\textit{Total Login Time}} \times 100\ \%$$

UJ = Hold Time — Amount of time the agent placed calls on hold.

UK = % Hold Time — Percentage of time the agent placed calls on hold.

$$\frac{\textit{Total Hold Time}}{\textit{Total Login Time}} \times 100\ \%$$

8.7.2 NUMBER OF CALLS

CA = Agnt ACD In	The number of ACD calls that rang an agent's phone.
CB = Outgoing	The number of outgoing calls the agent placed.
CC = ICM In Answered	The number of all incoming intercom calls answered by the agent.
CD = Answered	Number of ACD calls that were answered by the agent.
CE = Unanswered	The number of unanswered ACD calls for the agent.
CF = Transfer In	The number of calls transferred to an agent.
CG = ICM Out	The number of ICM calls an agent placed.
CH = Non ACD In	The number of non-ACD calls the agent received.
CI = Logged In	The number of times the agent logged in.
CJ = Qualifications	Number of Qualifications the agent made.
CK = Total Calls	Indicates the total of all types of calls handled. This number is the sum of ACD Answrd, Incom calls, Outgo calls, ICM IN, and ICM out.
CL = Busy Out	The number of times the agent was busied out by the system.
CM = ICM Calls	The total number of intercom calls (incoming/outgoing) handled by an agent.
CN = Incoming	Indicates the amount of incoming ACD calls.
CO = Trans Out	Number of calls the agent transferred out.
CP = P ACD Incoming	ACD calls incoming to the primary group.
CQ = S ACD Incoming	Number of ACD calls into ACD secondary.
CR = P ACD Answered	Number of primary ACD calls answered.
CS = S ACD Answered	Number of secondary ACD calls answered;
CT = P ACD Unanswered	Number of primary ACD calls not answered.
CU = S ACD Unanswered	Number of secondary ACD calls not answered.
CV = % ACD Not Answered	The number of ACD calls that were routed to the agent's extension and were not answered by the agent is expressed as a percentage of all the agent's calls. Unanswered calls include ones where the outside party hung up before the agent had a chance to answer.

$$\frac{\text{Number of Unanswered ACD Calls}}{\text{Incoming ACD Calls}} \times 100\ \%$$

CW = % ACD Trans	Percentage of ACD calls that were transferred by the agent.

$$\frac{\text{Number of ACD Calls Transferred}}{\text{Total ACD Answered Calls}} \times 100\ \%$$

CX = % ACD Answered	Percentage of ACD calls answered by the agent.

CY = % Non ACD

CZ = % Outgoing

DA = % ICM In

DB = % ICM Out

8.7.3 PROGRAMMING THE E REPORT

1. From the ACD Main Menu, press the E key.
2. Press the RETURN key. The AGENT ACTIVITY REPORTS definition screen appears. The cursor appears at MENU ID. There are 40 reports which can be defined. Eight of these reports 1-4, and 21-24 have already been defined (as their corresponding reports in the Advanced ACD feature package), but may be changed.
3. Enter the number of the report to be defined (l-40). and press the RETURN key. The report is now ready to be defined.
4. Press the CONTROL and B keys simultaneously.
5. Enter the title of the report (up to 30 characters) and press the RETURN key.
6. Press the CONTROL and A keys simultaneously. The cursor moves into the COLUMN HEADER definition area. The column header is 2 lines of 6 characters each.
7. Enter the first line of the header, and press the RETURN key.
8. Press the RETURN key. The cursor moves to the second line.
9. Enter the second line of the header, and press the RETURN key.
10. Press the RETURN key. The cursor moves to the top of the line next column.
11. Continue from step 7 until all column headers are defined.

```
                    (E) AGENTS USER DEFINED REPORTS          Page 1 of 3

        Time Elements                                  Num of Calls
TA. Log Time        TI. Busy Icm Out    CA. Agnt ACD In     CI. Logged In
TB. Busy ACD        TJ. DND             CB. Outgoing        CJ. Qualifications
TC. Wrap Up         TK. ACD Ring        CC. Icm In          CK. Total Calls
TD. Available       TL. Co ring         CD. Answered        CL. Busy Out
TE. Unavailable TM. Icm Ring            CE. Unanswered      CM. ICM calls
TF. Busy Incoming TN. Busy Out          CF. Transf In       CN. Incoming
TC. Busy Outgoing- TO. Avg bsy ACD      CG. Icm Out         CO. Trans Out
TH. Busy Icm In TP. Avgbsy NACD         CH. Non ACD In      CP. P ACD Incoming

MENU ID - 01          <--- [Shift @]

   1       2       3       4'      5       6       7       8       9
.-------------------------------------------------------------------,
|Calls |Total |Total |Total | Total] Not |Avg. |Avg.(Avg. | <-- [Ctrl A]
|Ansrd |Login |BsyACD|WrapUp| Avail] Avail|BsyACD|WrapUp|Ring |
`-------------------------------------------------------------------'
 ENTER EQUATION:                                  <-- [Right Arrow]

MENU HEADER - CUMULATIVE AGENT TIME ACTIVITY          c-- [Ctrl B]
```

Figure 8-3 Agent Reports Definition Screen

12. Press the RIGHT arrow key ▶. The cursor moves to the ENTER EQUATION line. At the top of the COLUMN HEADER definition boxes, the column being defined is highlighted.

13. Enter the TWO letter designation (or equation up to 14 characters) for the column, (in capital letters for the Cumulative report, lower case for the daily report) and press the RETURN key. The UP and DOWN arrow keys may be used to change the units the information is presented in. For example, a time element may be presented in either hours and minutes, or minutes and seconds.

14. Press the RIGHT arrow key ▶. The cursor moves to the next column.

15. Continue from step 13 until all desired columns are defined. Use the RIGHT arrow key ▶ to move between the column definitions.

16. When all desired parts of the report have been defined, press the SHIFT and @ keys simultaneously. The cursor moves back to the MENU ID.

17. Continue from step 3 to define the remaining AGENT ACTIVITY REPORTS.

18. Press the ESCAPE key to return to the ACD Main Menu.

8.7.4 COPYING FEATURE

The ACD Manager can copy the programming of a cumulative report to a daily report, or a daily report to a cumulative report.

By using the *copy* command, the ACD Manager can copy each of the three categories (MENU ID, ENTER EQUATION, and MENU HEADER) from a cumulative report to a daily report. Each category must be copied seperately. This copying command is only applicable to ACD reports E,F,G, and H.

8.7.5 USING THE COPY FEATURE

1. At the MENU II' the Manager can copy the report by pressing CONTROL and C.

2. At the ENTER EQUATION prompt the Manager can enter the desired equation, and then press CONTROL and C.

3. At the MENU HEADER prompt the Manager can enter the header. of his choice and then press CONTROL and C.

Because the EQUATION prompt and HEADER prompt are subject to change often, these two categories may be be copied without having *to* change the entire report.

8.8 ACCESSING AND USING THE-FINISHED E REPORT

From the ACD Main Menu, press E and then the number (l-40) of the desired report. Then press the RETURN key.

The screen displays 12 agents at a time. To scroll the screen to view, the remaining agents, the UP and DOWN arrow keys may be used. Only agents that were active during the period covered are displayed.

Press the ESCAPE key to return to the ACD Main Menu.

To exit a report and go to another, press the RETURN KEY. Enter the report number (e.g. El), then press the RETURN KEY again.

(E 2) CUMULATIVE AGENT CALL ACTIVITY

Period Covered: Mon 08-17-87 09:03 Through Tue 08-18-87 12:04

Agt Num	Agent Name	Incom. ACD	Not Answrd	Calls Trans	ACD Answrd	Incom. Calls	Outgo Calls	Icm In	Icm Out	Total Calls
002	ARNOLD	531	1		52		1		8	61
003	BORDEAUX	56		3	56	1	4		24	85
004	CROMWELL	74		5	73		6	3	10	92
006	DECKER	14		1	14		1	1	9	25
008	EISENHOWER	31			31			1	2	34
009	FRANKLIN	49	1	4	48	1	3	1	12	65
010	GRIER	42	1	1	41	2	5	1	14)	63
011	HOFFMAN	57		3	571		11	8	31	107
012	ISAIAH	27	4		23			2	3	28
013	JACKSON	51			51		12	1	9	73
015	KENNY	471		2	4.1			1	9	57
016	LINCOLN	491			491		6			55
Totals		1080	16	461	1064	10	93	551	274	1496

Print Now _ Main Menu _

Figure 8-4 Agent Call Activity Report

8.9 DEFINING THE GROUP ACTIVITY (F) REPORT

The F report definition screen is used to define an hourly total of the number of ACD calls answered by the ACD group. Each report is made up of 9 user-defined columns. Each column heading and report title can be programmed. The first 20 reports are cumulative, and the remaining 20 are the daily reports.

The first 4 cumulative and the first 4 daily reports have already been defined, but may be changed as desired. The remaining reports are blank, and can be set up to satisfy your own particular statistical needs.

To begin, select from the following list those items (Time Elements and Number of Calls) needed for each report. It is a good idea to use the definition found at the end of this section when planning each report.

```
                    (F) GRP/SYS USER DEFINED REPORTS          Page 1 of 2

        Time Elements                                  Num of Calls
TA. ACD Talk          TI. Avg. Bsy NACD  CA. Acd Incoming     Cl. Trans Out
TB. ACD Abandoned     TJ. Avg. Wrap      CB. ACD Answered     CJ. Ovflw In
TC. ACD Delay         TK. Hold Time      CC. Agent Count      CK. Ovflw Out
TD. Busy Non ACD      TL.                CD. Aban Bef Rcrd    CL. Non ACD
TE. Wrap Time         TM.                CE. Aban Aft Rcrd    CM. Abandoned
TF. Avg. ACD Talk     TN.                CF. Recordings       CN. Transferred
TG. Avg. Aban Time    TO.                CC. Delayed Calls    CO. Overflows
TH. Avg. Delay        TP.                CH. Trans In         CP. CO Calls
-------------------------------------------------------------------------------
MENU ID = 01          <--- [Shift @]

   1       2       3       4       5       6       7       a       9
.-----------------------------------------------------------------,
|Total  |Calls  |Calls  |Delyed|  # of  |Avg.  |Avg.  |Avg.  |Avg.  | <-- [Ctrl A]
| In    |Answrd|Abndnd|Calls  |Record|Delay  |Talk  |Aban  (Wrap   |
`-----------------------------------------------------------------'
 ENTER EQUATION:                                        <-- [Right Arrow]

MENU HEADER = CUMULATIVE HOURLY GRP ACTIVITY            <-- [Ctrl B]
```

Figure 8-5 Group Report Definition Screen

8.9.1 TIME ELEMENTS

TA = ACD Talk — Indicates the time the agents in the group spent talking on ACD calls.

TB = ACD Abandoned — Indicates how long a call was in queue before the caller hung up. A call is said to be abandoned when the caller hangs up before an agent answers it.

TC = ACD Delay — Indicates the total time that calls were in ACD queue between the time frame shown (going through the call sequence.)

TD = Busy Non-ACD — Time spent on non-ACD calls.

TE = Wrap Time — Indicates the time the agents spent wrapping up ACD calls between the time frame shown.

TF = Avg. ACD Talk — Indicates the average time agents spent talking on an ACD call between the time frame shown.

$$\frac{\textit{Total ACD Talk Time}}{\textit{ACD Calls Answered}}$$

TG = Avg. Aban. Time — Indicates the average time the callers were in queue before the call was abandoned (a call is said to be abandoned if the caller hangs up before it is answered by an agent) between the time frame shown.

$$\frac{\textit{Total Abandon Time}}{\textit{Total Abandon Calls}}$$

TH = Avg. Delay — Indicates the average time a call is in queue between the time frame shown (going through the call sequence).

$$\frac{\textit{Total Delayed Calls Time}}{\textit{Total Delayed Calls}}$$

TI = Avg. Busy NACD — Average time spent on non-ACD calls.

$$\frac{\textit{Total Time Busy Incoming CO Calls}}{\textit{Number of Incoming CO Calls}} \times 100\%$$

TJ = Avg Wrap Up — Indicates the average time the agent spent to wrap up a call.

$$\frac{\textit{Total Wrap Time}}{\textit{Number of ACD Calls Answered}} \times 100\ \%$$

TK = Hold Time — Amount of time accumulated for calls placed on hold.

8.9.2 NUMBER OF CALLS

CA = ACD Incoming	The number of incoming ACD calls.
CB = ACD Answered	The number of ACD calls answered.
CC = Agent Count	The total average count per group.
CD = Aban Bef Rcrd	Indicates the number of times a caller hung up before a recorded message was played.
CE = Aban Aft Rcrd	Indicates the number of times a caller hung up after a recorded message was played.
CF = Recordings	Indicates the total number of calls connected to a recording.
CG = Delayed Calls	Indicates the number of calls that were in queue.
CH = Trans In	Indicates the number of calls that were transferred into the group being viewed.
CI = Trans Out	Indicates the number of calls that were transferred out of the group that is being viewed: which may or may not have been transferred these calls into another group.
CJ = Ovrflw In	Indicates the number of ACD calls that overflowed out of one group and into the group that is being viewed.
CK = Ovrflw Out	Indicates the number of ACD calls that overflowed out of the group that is being viewed and into another group. An ACD call will overflow out of a group when a call reached one of the forwarding commands in the call SEQUENCE (ACD MENU A);

```
FWD TO ACD
000,BX 000

FORWARD
EXT 000

FOWARD
SPD #000

FORWARD
HUNT 005

RELEASE LINE
```

CL = Non ACD	Indicates the number of CO Calls incoming and outgoing.
CM = Abandoned	Indicates the number of calls that were abandoned. A call is said to be abandoned when the caller hangs up before an agent answers it.
CN = Transferred	The number of calls transferred (both in and out) by agents in the group.
CO = Overflows	Indicates the total overflow (both in and out) for the group.
CP = CO Calls	Indicates all CO calls handled by the group.

8.9.3 PROGRAMMING THE F REPORT

1. From the ACD Main Menu, press the F key.
2. Press the RETURN key. The GROUP ACTIVITY REPORTS definition screen appears. The cursor appears at MENU ID. There are 40 reports which can be defined. Two of these reports 1 and 21 have already been defined (as their corresponding reports in the Advanced ACD feature package), but may be changed.
3. Enter the number of the report to be defined (1-40), and press the RETURN key. The report is now ready to be defined.
4. Press the CONTROL and B keys simultaneously.
5. Enter the title of the report up to 30 characters, and press the RETURN key.
6. Press the CONTROL and A keys simultaneously. The cursor moves into the COLUMN HEADER definition area. The column header is 2 lines of 6 characters each.
7. Enter the first line of the header, and press the RETURN key.
8. Press the RETURN key. The cursor moves to the second line.
9. Enter the second line of the header, and press the RETURN key.
10. Press the RETURN key. The cursor moves to the top of the line next column.
11. Continue from step 7 until all column headers are defined.

```
                    (F) GRP/SYS USER DEFINED REPORTS        Page 1 of 2

        Time Elements                                Num of Calls
 TA. ACD Talk        TI. Avg. Bsy NACD  CA. Acd Incoming    CI. Trans Out
 TB. ACD Abandoned   TJ. Avg. Wrap      CB. ACD Answered    CJ. Ovflw In
 TC. ACD Delay       TK. Hold Time      CC. Agent Count     CK. Ovflw Out
 TD. Busy Non ACD    TL.                CD. Aban Bef Rcrd   CL. Non ACD
 TE. Wrap Time       TM.                CE. Aban Aft Rcrd   CM. Abandoned
 TF. Avg. ACD Talk   TN.                CF. Recordings      CN. Transferred
 TG. Avg. Aban Time  TO.                CG. Delayed calls   CO. Overflows
 TH. Avg. Delay      TP.                CH. Trans In        CP. CO Calls
--------------------------------------------------------------------------
MENU ID - 01          <--- [Shift @]

   1      2      3      4      5      6      7      8      0
 .-------------------------------------------------------------.
 |Total |Calls |Calls |Delyed| # of |Avg. (Avg. |Avg. |Avg. |  <-- [Ctrl A]
 | In   |Answrd|Abndnd|Calls |Record|Delay |Talk |Aban |Wrap 1
 `-------------------------------------------------------------'
 ENTER EQUATION:                                  <-- [Right Arrow]

MENU HEADER - CUMULATIVE HOURLY GRP ACTIVITY      <-- [Ctrl B]
```

Figure 8-6 Group Report Definition Screen

12. Press the RIGHT arrow key ⏵. The cursor moves to the ENTER EQUATION line. At the top of the COLUMN HEADER definition boxes, the column being defined is highlighted.

13. Enter the TWO letter designation (or equation up to 14 characters) for the column, in capital letters for the Cumulative report, lower case for the daily report, and press the RETURN key. The UP and DOWN arrow keys may be used to change the units the information is presented in. For example, a time element may be presented in either hours and minutes, or minutes and seconds.

14. Press the RIGHT arrow key ⏵. The cursor moves to the next column.

15. Continue from step 13 until all desired columns are defined. Use the RIGHT arrow key ⏵ to move between the column definitions.

16. When all desired parts of the report have been defined, press the SHIFT and @ keys simultaneously. The cursor moves back to the MENU ID.

17. Continue from step 3 to define the remaining GROUP ACTIVITY REPORTS.

18. Press the ESCAPE key to return to the ACD Main Menu.

8.9.4 COPYING FEATURE

The ACD Manager can copy the programming of a cumulative report to a daily report, or a daily report to a cumulative report.

By using the copy command, the ACD Manager can copy each of the three categories (MENU ID, ENTER EQUATION, and MENU HEADER) from a cumulative report to a daily report. Each category must be copied seperately. This copying command is only applicable to ACD reports E,F,G, and H.

8.9.5 USING THE COPY FEATURE

1. At the MENU ID the Manager can copy the report by pressing CONTROL and C.

2. At the ENTER EQUATION prompt, the Manager can enter the desired equation, and then press CONTROL and C.

3. At the MENU HEADER prompt the Manager can enter the header- of his choice, and then press CONTROL and C.

Because the EQUATION prompt, and HEADER prompt, are subject to change often, these two categories may be be copied without having to change the entire report.

8.10 ACCESSING AND USING THE FINISHED F REPORT

From the ACD Main Menu, press F then the number (l-40) of the desired report. Then press the RETURN key.

The screen displays 12 lines of information at a time. To scroll the screen, the UP and DOWN arrow keys may be used.

Press the ESCAPE key to return to the ACD Main Menu.

To exit a report and go to another, press the RETURN KEY. Enter the report number (e.g. El), then press the RETURN KEY again.

Grp 01,MARKETING (F 1) CUMULATIVE HOURLY GRP ACTIVITY

Period Covered: Mon 08-17-87 09:03 Through Tue 08-18-87 12:14

From Time	To Time	Total In	Calls Answrd	Calls Abndnd	Calls [Calls	Delyed Record	# of Delay	Avg. [Talk MM:SS	Avg. Aban MM:SS	Avg. Wrap MM:SS
06:00	07:00									
07:00	08:00									
08:00	09:00									
09:00	10:00									
10:00	11:00									
11:00	12:00	35	32	2	6		:15	2:16	:51	:11
12:00	13:00	86	86	1	26	1	:13	3:23	:43	:25
13:00	14:00	106	971	6	341	1	:17	3:38	:48	:24
14:00	15:00	103	104	2	391	2	:15	3:28	:21	:23
15:00	16:00	118	971	17	80	361	:47	3:05	:52	:25
16:00	17:00	102	101	5	451	19	:27	3:28	:42	:20
17:00	18:00	99	941	5	31	7	:16	3:11	:41	:28
Totals		11711	1072	100	573	240	:29	3:28	:55	:27

Print Now _ Main Menu _

Figure 8-7 Hourly Group Activity Report

8.11 DEFINING THE SYSTEM ACTIVITY BY GROUP (G) REPORTS

The G Report definition screen is used to define the 40 available System Activity by Group reports. The System Activity reports provide a summary of the information that is contained in the Group Activity Report for each ACD group. Each report is made up of 9 user-defined columns. Each column heading and report title can also be programmed. The first 20 reports should be used as the cumulative reports, and the remaining 20 as the daily reports.

The first cumulative, and the first daily reports have already been defined, but may be changed as desired. The remaining reports are blank, and can be set up to satisfy your own particular statistical needs.

To begin, select from the following list the items (TE & NC) needed for each report. It is a good idea to use the definition sheets found at the end of this section when planning each report.

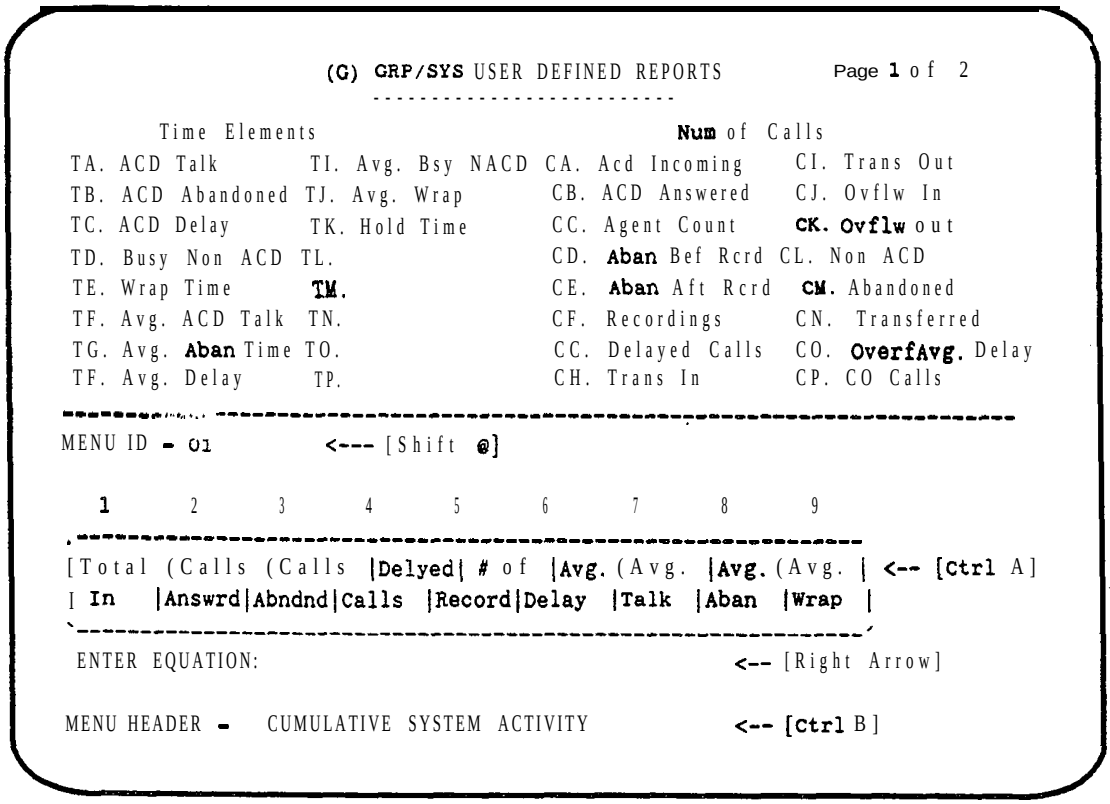


Figure 8-8 System Activity By Group Report Definition Screen

8.11 .1 TIME ELEMENTS

TA = ACD Talk — Indicates the time the agent spent talking on ACD calls.

TB = ACD Abandoned — Indicates how long a call was in queue before the caller hung up. A call is said to be abandoned when the caller hangs up before an agent answers it.

TC = ACD Delay — Indicates the time that a call is in ACD queue between the time frame shown (going through the call sequence).

TD = Busy Non-ACD — Time spent on non-ACD calls.

TE = Wrap Time — Indicates the time the agents spent wrapping up and ACD call between the time frame shown.

TF = Avg. ACD Talk — Indicates the average time the agent spent talking on an ACD call between the time frame shown.

$$\frac{\textit{Total ACD Talk Time}}{\textit{ACD Calls Answered}}$$

TG = Avg. Aban. Time — Indicates the average time the callers were in queue before the call was abandoned (a call is said to be abandoned if the caller hangs up before it is answered by an agent) between the time frame shown.

$$\frac{\textit{Total Abandon Time}}{\textit{Total Abandon Calls}}$$

TH = Avg. Delay — Indicates the average time a call is in queue between the time frame shown (going through the call sequence.)

$$\frac{\textit{Total Delayed Calls Time}}{\textit{Total Delayed Calls}}$$

TI = Avg. Busy NACD — Average time spent on non-ACD calls.

$$\frac{\textit{Total Time Busy Incoming CO Calls}}{\textit{Number of Incoming CO Calls}} \times 100\%$$

TJ = Avg Wrap Up — Indicates the average time the agent takes to wrap up a call.

$$\frac{\textit{Total Wrap Up Time}}{\textit{Number of ACD Calls Answered}} \times 100\ \%$$

TK = Hold Time — Amount of time the agent placed calls on hold.

8.11.2 NUMBER OF CALLS

CA = ACD Incoming — The number of incoming ACD calls.

CB = ACD Answered — The number of ACD calls answered.

CC = Agent Count — , Total average agent count per group.

CD = Aban Bef Rcrd — Indicates the number of times a caller hung up before a recorded message was played.

CE = Aban Aft Rcrd — Indicates the number of times a caller hung up after a recorded message was played.

CF = Recordings — Indicates the total number of calls connected to the recording.

CG = Delayed Calls — Indicates the number of calls that were in queue.

CH = Trans In — Indicates the number of calls that were transferred into the group being viewed.

CI = Trans Out — Indicates the number of calls that were transferred out of the group that is being viewed; which may or may not have been transferred into another group.

CJ = Ovrflw In — Indicates the number of ACD calls that overflowed out of one group and into the group that is being viewed.

CK = Ovrflw Out — Indicates the number of ACD calls that overflowed out of the group that is being viewed and into another group. An ACD call will overflow out of a group when a call reached one of the forwarding commands in the call sequence (ACD MENU A:)

```
FWD TO ACD
000,BX 000

FORWARD
EXT 000

FOWARD
SPD #000

FORWARD
HUNT 005

RELEASE LINE
```

CL = Non ACD — CO calls incoming and outgoing.

CM = Abandoned — Indicates the number of calls that were abandoned. A call is said to be abandoned when the caller hangs up before an agent answers it.

CN = Transferred — The number of calls transferred.

CO = Overflows — Total overflows for the group; overflow in, overflow out.

CP = CO Calls — Indicates all CO calls handled by the agent.

8.11.3 PROGRAMMING THE G REPORT

1. From the ACD Main Menu, press the G key.
2. Press the RETURN key. The SYSTEM ACTIVITY REPORTS definition screen appears. The cursor appears at MENU ID. There are 40 reports which can be defined. Two of these reports 1 and 21 have already been defined (as their corresponding reports in the Advanced ACD feature package), but may be changed.
3. Enter the number of the report to be defined (1-40), and press the RETURN key. The report is now ready to be defined.
4. Press the CONTROL and B keys simultaneously.
5. Enter the title of the report up to 30 characters, and press the RETURN key.
6. Press the CONTROL and A keys simultaneously. The cursor moves into the COLUMN HEADER definition area. The column header is 2 lines of 6 characters each.
7. Enter the first line of the header, and press the RETURN key.
8. Press the RETURN key. The cursor moves to the second line.
9. Enter the second line of the header, and press the RETURN key.
10. Press the RETURN key. The cursor moves to the top of the line next column.

```
                    (G) GRP/SYS USER DEFINED REPORTS          Page 1 of 2
                        ---------------------------
        Time Elements                                  Num of Calls
TA. ACD Talk        TI. Avg.Bsy NACD CA. Acd Incoming    CI. Trans Out
TB. ACD Abandoned   TJ. Avg. Wrap     CB. ACD Answered    CJ. Ovflw In
TC. ACD Delay       TK. Hold Time     CC. Agent Count     CK. Ovflw Out
TD. Busy Non ACD    TL.               CD. Aban Bef Rcrd   CL. Non ACD
TE. Wrap Time       TM.               CE. Aban Aft Rcrd   CM. Abandoned
TF. Avg. ACD Talk   TN.               CF. Recordings      CN. Transferred
TG. Avg. Aban Time  TO.               CC. Delayed Calls   CO. OverfAvg. Delay
TH. Avg. Delay      TP.               CH. Trans In        CP. CO Calls
-----------------------------------------------------------------------
MENU ID - 01            <--- [Shift @]

   1      2      3      4      5      6      7      8      9
.------------------------------------------------------------.
|Total |Calls |Calls |Delyed| # of |Avg. |Avg. |Avg. |Avg. | <-- [Ctrl A]
| In   |Answrd|Abndnd|Calls |Record|Delay (Talk |Aban |Wrap |
`------------------------------------------------------------'
 ENTER EQUATION:                                  <-- [Right Arrow]

MENU HEADER -   CUMULATIVE SYSTEM ACTIVITY        <-- [Ctrl B]
```

Figure 8-9 System Activity By Group Report Definition Screen

11. Continue from step 7 until all colunm headers are defined.

12. Press the RIGHT arrow key ⧫. The cursor moves to the ENTER EQUATION line. At the top of the COLUMN HEADER definition boxes, the column being defined is highlighted.

13. Enter the TWO letter designation (or equation up to 14 characters) for the column, in capital letters, and press the RETURN key. The UP and DOWN arrow keys may be used to change the units the information is presented in. For example, a time element may be presented in either hours and minutes, or minutes and seconds.

14. Press the RIGHT arrow key ⧫. The cursor moves to the next column.

15. Continue from step 13 until all desired columns are defined. Use the RIGHT arrow key ⧫ to move between the column definitions.

16. When all desired parts of the report have been defined, press the SHIFT and @ keys simultaneously. The cursor moves back to the MENU ID.

17. Continue from step 3 to define the remaining SYSTEM ACTIVITY BY GROUP REPORTS.

18. Press the ESCAPE key to return to the ACD Main Menu.

8.11.4 COPYING FEATURE

The ACD Manager can copy the programming of a cumulative report to a daily report, or a daily report to a cumulative report.

By using the copy command, the ACD Manager can copy each of the three categories (MENU ID, ENTER EQUATION, and MENU HEADER) from a cumulative report to a daily report. Each category must be copied seperately. This copying command is only applicable to ACD reports E,F,G, and H.

8.11.5 USING THE COPY FEATURE

1. At the MENU ID the Manager can copy the report by pressing CONTROL and C.

2. At the ENTER EQUATION prompt the Manager can enter the desired equation and then press CONTROL and C.

3. At the MENU HEADER prompt the Manager can enter the header of his choice and then press CONTROL and C.

Because the EQUATION prompt and HEADER prompt are subject to change often, these two categories may be copied without having to change the entire report.

8.12 ACCESSING AND USING THE FINISHED G REPORT

From the ACD Main Menu, press G then the number (1–40) of the desired report. Then press the RETURN key.

The screen displays 12 lines of information at a time. To scroll the screen, the UP and DOWN arrow keys may be used.

Press the **ESCAPE** key to return to the ACD Main Menu.

To exit a report and go to another, press the **RETURN KEY**. Enter the report number (e.g. E1), then press the **RETURN KEY** again.

```
                (G 1)  CUMULATIVE SYSTEM ACTIVITY
                -----------------------------------

 Period Covered: Mon 08-17-87 09:03  Through   Tue 08-18-87 12:22

                                                    MM:SS  MM:SS  MM:SS  MM:SS
ACD|ACD Group |Total |Calls |Calls |Delyed| # of |Avg.  |Avg.  |Avg.  |Avg.
Grp|  Name    | In   |Answrd|Abndnd|Calls |Record|Delay |Talk  |Aban  |Wrap
---+----------+------+------+------+------+------+------+------+------+------
 01|MARKETING |  1181|  1081|   100|   573|   240|   :29|  3:28|   :55|   :27
 02|          |      |      |      |      |      |      |      |      |
 03|          |      |      |      |      |      |      |      |      |
 04|          |      |      |      |      |      |      |      |      |
 05|          |      |      |      |      |      |      |      |      |
 06|          |      |      |      |      |      |      |      |      |
 07|          |      |      |      |      |      |      |      |      |
 08|          |      |      |      |      |      |      |      |      |
 09|          |      |      |      |      |      |      |      |      |
 10|          |      |      |      |      |      |      |      |      |
 11|          |      |      |      |      |      |      |      |      |
 12|          |      |      |      |      |      |      |      |      |

Totals -     |  1181|  1081|   100|   573|   240|   :29|  3:28|   :55|   :27

Print Now _   Main Menu _
```

Figure 8–10 Cumulative System Activity By Group Report

8.13 DEFINING THE SYSTEM ACTIVITY (H) REPORTS

The H Report definition screen is used to define the 40 available System Activity Reports. The System Activity Reports provide an hourly total of the number of calls received by the ACD system for ALL ACD groups which were answered. Each report is made up of 9 user- defined columns. Each column heading and report title can also be programmed. The first 20 reports should be used as the cumulative reports, and the remaining 20 as the daily reports.

The first cumulative and the first daily, reports have already been defined, but can be changed as desired. The remaining reports are blank, and can be set up to satisfy your own particular statistical needs.

To begin, select from the following list the items (TE & NC) needed for each report. It is a good idea to use the definition sheets found at the end of this section when planning each report.

```
                    (H) GRP/SYS USER DEFINED REPORTS        Page 1 of 2
                        -------------------------
        Time Elements                                 Num of Calls
 TA. ACD Talk        TI. Avg. Bsy NACD  CA. Acd Incoming   CI. Trans Out
 TB. ACD Abandoned   TJ. Avg. Wrap      CB. ACD Answered   CJ. Ovflw In
 TC. ACD Delay       TK. Hold Time      CC. Agent Count    CK. Ovflw Out
 TD. Busy Non ACD    TL.                CD. Aban Bef Rcrd  CL. Non Wrap Time
 TE. Wrap Time       TM.                CE. Aban Aft Rcrd  CM. Abandoned
 TF. Avg. ACD Talk   TN.                CF. Recordings     CN. Transferred
 TG. Avg. Aban Time  TO.                CG. Delayed Calls  CO. Overflows
 TH. Avg. Delay      TP.                CH. Trans In       CP. CO Calls
-------------------------------------------------------------------------------
MENU ID - 01          <--- [Shift @]

   1      2      3      4      5      6      7      8      9
.-------------------------------------------------------------.
|Total |Calls |Calls |Delyed| # of |Avg.  |Avg.  |Avg.  |Avg.  |  <-- [Ctrl A]
| In   |Answrd|Abndnd|Calls |Record|Delay |Talk  |Aban  |Wrap  |
`-------------------------------------------------------------'
 ENTER EQUATION:                                    <-- [Right Arrow]

MENU HEADER - CUMULATIVE HOURLY SYS ACTIVITY        <-- [Ctrl B]
```

Figure 8–11 System Activity Report Definition Screen

8.13.1 TIME ELEMENTS

TA = ACD Talk

Indicates the time the agent spent talking on ACD calls.

TB = ACD Abandoned

Indicates how long a call was in queue before the caller hung up. A call is said to be abandoned when the caller hangs up before an agent answers it.

TC = ACD Delay

Indicates the time that a call is in ACD queue between the time frame shown (going through the call sequence).

TD = Busy Non-ACD

Time spent on non-ACD calls.

TE = Wrap Time

Indicates the time the agents spent wrapping up an ACD call between the time frame shown.

TF = Avg. ACD Talk

Indicates the average time the agent spent talking on an ACD call between the time frame shown.

$$\frac{\textit{Total ACD Talk Time}}{\textit{ACD Calls Answered}}$$

TG = Avg. Aban. Time

Indicates the average time the callers were in queue before the call was abandoned (a call is said to be abandoned if the caller hangs up before it is answered by an agent) between the time frame shown.

$$\frac{\textit{Total Abandon Time}}{\textit{Total Abandon Calls}}$$

TH = Avg. Delay

Indicates the average time a call is in queue between the time frame shown (going through the call sequence).

$$\frac{\textit{Total Delayed Calls Time}}{\textit{Total Delayed Calls}}$$

TI = Avg. Busy NACD

Average time spent on non-ACD calls.

$$\frac{\textit{Total Time Busy Incoming CO Calls}}{\textit{Number of Incoming CO Calls}} \times 100\%$$

TJ = Avg Wrap Up

Indicates the average time the agent takes to wrap up a call.

$$\frac{\textit{Total Wrap Up Time}}{\textit{Number of ACD Calls Answered}}$$

TK = Hold Time

Amount of time the agent placed calls on hold.

8.13.2 NUMBER OF CALLS

CA = ACD Incoming — The number of incoming ACD calls.

CB = ACD Answered — The number of ACD calls answered.

CC = Agent Count — Total average agent count per group.

CD = Aban Bef Rcrd — Indicates the number of times a caller hung up before a recorded message was played.

CE = Aban Aft Rcrd — Indicates the number of times a caller hung up after a recorded message was played.

CF = Recordings — Indicates the total number of calls connected to the recording.

CG = Delayed Calls — Indicates the number of calls that were in queue.

CH = Trans In — Indicates the number of calls that were transferred into the group being viewed.

CI = Trans Out — Indicates the number of calls that were transferred out of the group that is being viewed; which may or may not have been transferred into another group.

CJ = Ovrflw In — Indicates the number of ACD calls that overflowed out of one group and into the group that is being viewed.

CK = Ovrflw Out — Indicates the number of ACD calls that overflowed out of the group that is being viewed and into another group. An ACD call will overflow out of a group when a call reached one of the forwarding commands in the call sequence (ACD MENU A:)

```
FWD TO ACD
000,BX 000

FORWARD
EXT 000

FOWARD
SPD #000

FORWARD
HUNT 005

RELEASE LINE
```

CL = Non ACD — CO calls incoming and outgoing.

CM = Abandoned — Indicates the number of calls that were abandoned. A call is said to be abandoned when the caller hangs up before an agent answers it.

CN = Transferred — The number of calls transferred.

CO = Overflows — Total overflow for the group; overflow in, overflow out.

CP = CO Calls — All CO calls handled by the agent.

8.13.3 PROGRAMMING THE H REPORT

1. From the ACD Main Menu, press the H key.
2. Press the RETURN key. The SYSTEM ACTIVITY REPORTS definition screen appears. The cursor appears at MENU ID. There are 40 reports which can be defined. Two of these reports 1 and 21 have already been defined (as their corresponding reports in the Advanced ACD feature package), but may be changed.
3. Enter the number of the report to be defined (1–40), and press the RETURN key. The report is now ready to be defined.
4. Press the CONTROL and B keys simultaneously.
5. Enter the title of the report up to 30 characters, and press the RETURN key.
6. Press the CONTROL and A keys simultaneously. The cursor moves into the COLUMN HEADER definition area. The column header is 2 lines of 6 characters each.
7. Enter the first line of the header, and press the RETURN key.
8. Press the RETURN key. The cursor moves to the second line.
9. Enter the second line of the header, and press the RETURN key.
10. Press the RETURN key. The cursor moves to the top of the line next column.
11. Continue from step 7 until all column headers are defined.

```
                    (H) GRP/SYS USER DEFINED REPORTS        Page 1 of 2
                       -------------------------
      Time Elements                                  Num of Calls
TA. ACD Talk        TI. Avg. Bsy NACD  CA. Acd Incoming   CI. Trans Out
TB. ACD Abandoned   TJ. Avg. Wrap      CB. ACD Answered   CJ. Ovflw In
TC. ACD Delay       TK. Hold Time      CC. Agent Count    CK. Ovflw Out
TD. Busy Non ACD    TL.                CD. Aban Bef Rcrd  CL. Non Wrap Time
TE. Wrap Time       TM.                CE. Aban Aft Rcrd  CM. Abandoned
TF. Avg. ACD Talk   TN.                CF. Recordings     CN. Transferred
TG. Avg. Aban Time  TO.                CG. Delayed Calls  CO. Overflows
TH. Avg. Delay      TP.                CH. Trans In       CP. CO Calls
---------------------------------------------------------------------------
MENU ID - 01          <--- [Shift @]

   1      2      3      4      5      6      7      8      9
.--------------------------------------------------------------.
|Total |Calls |Calls |Delyed| # of |Avg.  |Avg.  |Avg.  |Avg.  |  <-- [Ctrl A]
| In   |Answrd|Abndnd|Calls |Record|Delay |Talk  |Aban  |Wrap  |
`--------------------------------------------------------------'
ENTER EQUATION:                                   <-- [Right Arrow]

MENU HEADER - CUMULATIVE HOURLY SYS ACTIVITY      <-- [Ctrl B]
```

Figure 8–12 System Activity Report Definition Screen

12. Press the RIGHT arrow key ⏵. The cursor moves to the ENTER EQUATION line. At the top of the COLUMN HEADER definition boxes, the column being defined is highlighted.

13. Enter the TWO letter designation (or equation up to 14 characters) for the column, in capital letters, and press the RETURN key. The UP and DOWN arrow keys may be used to change the units the information is presented in. For example, a time element may be presented in either hours and minutes, or minutes and seconds.

14. Press the RIGHT arrow key ⏵. The cursor moves to the next column.

15. Continue from step 13 until all desired columns are defined. Use the RIGHT arrow key ⏵ to move between the column definitions.

16. When all desired parts of the report have been defined, press the SHIFT and @ keys simultaneously. The cursor moves back to the MENU ID.

17. Continue from step 3 to define the remaining SYSTEM ACTIVITY REPORTS.

18. Press the ESCAPE key to return to the ACD Main Menu.

8.13.4 COPYING FEATURE

The ACD Manager can copy the programming of a cumulative report to a daily report, or a daily report to a cumulative report.

By using the copy command, the ACD Manager can copy each of the three categories (MENU ID, ENTER EQUATION, and MENU HEADER) from a cumulative report to a daily report. Each category must be copied seperately. This copying command is only applicable to ACD reports E,F,G, and H.

8.13.5 USING THE COPY FEATURE

1. At the MENU ID, the Manager can copy the report by pressing CONTROL and C.

2. At the ENTER EQUATION prompt, the Manager can enter the desired equation, and then press CONTROL and C.

3. At the MENU HEADER prompt, the Manager can enter the header of his choice, and then press CONTROL and C.

Because the EQUATION prompt and HEADER prompt are subject to change often, these two categories may be copied without having to change the entire report.

8.14 ACCESSING AND USING THE FINISHED H REPORT

From the ACD Main Menu, press H then the number (1–40) of the desired report.

The screen displays 12 lines of infomation at a time. To scroll the screen, the UP and DOWN arrow keys may be used. Only agents that were active during the period covered, are displayed.

Press the **ESCAPE** key to return to the ACD Main Menu.

To exit a report and go to another, press the **RETURN KEY**. Enter the report number (e.g. E1), then press the **RETURN KEY** again.

(H 1)CUMULATIVE HOURLY SYS ACTIVITY

Period Covered: Mon 08-17-87 09:03 Through Tue 08-18-87 12:25

From Time	To Time	Total In	Calls Answrd	Calls Abndnd	Delyed Calls	# of Record	MM:SS Avg. Delay	MM:SS Avg. Talk	MM:SS Avg. Aban	MM:SS Avg. Wrap
06:00	07:00									
07:00	08:00									
08:00	09:00	35	32	2	6		:15	2:16	:51	:11
09:00	10:00	192	183	7	60	2	:16	3:31	:47	:25
10:00	11:00	221	201	19	119	38	:32	3:15	:49	:24
11:00	12:00	201	195	10	76	26	:22	3:20	:41	:24
12:00	13:00	151	141	9	86	13	:26	3:24	:46	:39
13:00	14:00	103	87	16	81	91	1:03	3:12	1:30	:16
14:00	15:00	88	83	7	49	18	:28	4:15	:48	:32
15:00	16:00	97	82	15	66	40	:41	3:49	:43	:35
16:00	17:00	70	68	2	13	2	:10	4:22	:59	:43
17:00	18:00	23	10	13	17	10	:49	2:58	1:00	:08
Totals -		1181	1082	100	573	240	:29	3:28	:55	:27

Print Now _ Main Menu _

Figure 8–13 Cumulative System Activity Report

8.15 CALL QUALIFICATION REPORTS

ACD provides the ability for each ACD agent to enter a number into system memory at the end of each ACD call. This number is used to describe the nature of the phone call, and can be used to mean anything the manager desires. This number is called a QUALIFICATION code or number. For example, all ACD calls regarding sales information of a particular product can be given the number 001, a second product can be given the number 002, etc. There are 200 numbers which can be defined.

The *Call Qualification Reports* give a summary of the number of times each different QUALIFICATION code was entered by an agent. The report lists the percentage (of all calls that received QUALIFICATION codes) represented by an individual QUALIFICATION number. The total time spent on all calls receiving a particular QUALIFICATION number, and the percentage of this time is also provided.

A 10 character description of what each QUALIFICATION number means can be entered into the report. This description is retained by the system until it is changed. The description remains even if the report is cleared.

There are 2 *Call Qualification Reports*, a cumulative report which is labeled I1 and a daily report which is labeled I2.

```
                (I1) CUMULATIVE CALL QUALIFICATION REPORTS
                -----------------------------------------
 Period Covered: Mon 08-17-87 09:03  Through   Tue 08-18-87 12:27
NUM| ACTIVITY |QULFY|%Tot|TlkTime|%Tlk||NUM| ACTIVITY |QULFY|%Tot|TlkTime|%Tlk
---+----------+-----+----+-------+----++---+----------+-----+----+-------+----
001|ORDER     |  684| 56%| 56:04 | 74%||016|          |     |  %|       |  %
002|CUST.SERV.|   58|  5%|  3:51 |  5%||017|          |     |  %|       |  %
003|CATALOG   |   56|  5%|  2:21 |  3%||018|          |     |  %|       |  %
004|INFO      |  223| 18%|  8:56 | 11%||019|          |     |  %|       |  %
005|MISC      |  115|  9%|  1:58 |  2%||020|          |     |  %|       |  %
006|OUTGOING  |   64|  5%|  1:31 |  2%||021|          |     |  %|       |  %
007|.         |    1|  %|   :00 |  %||022|          |     |  %|       |  %
008|          |     |  %|       |  %||023|          |     |  %|       |  %
009|          |     |  %|       |  %||024|          |     |  %|       |  %
010|TRANSFER  |   14|  1%|   :22 |  %||025|          |     |  %|       |  %
011|          |     |  %|       |  %||026|          |     |  %|       |  %
012|          |     |  %|       |  %||027|          |     |  %|       |  %
013|          |     |  %|       |  %||028|          |     |  %|       |  %
014|          |     |  %|       |  %||029|          |     |  %|       |  %
015|          |     |  %|       |  %||030|          |     |  %|       |  %
Totals: Qualify-   1223    Total talk -   75:29

Print Now _   Main Menu _   [CTRL A - Prog Activity Names,CTRL P - Goto Print]
```

Figure 8-14 Cumulative Call Qualification Report

8.15.1 HOW TO ACCESS THE CALL QUALIFICATION REPORTS

Action: From the ACD main menu, press **I** then **1** (or **2** for the daily report) on the keyboard. Then press the **RETURN** key.

Commands: The screen displays 30 qualification codes at a time. To scroll to the remaining codes, press the **UP** or **DOWN** arrow keys.

Each QUALIFICATION code can be assigned 10 characters to indicate the use of the code. To switch the screen to enter characters, press **CTRL** and **A**. Enter the characters desired and press the **RETURN** key. Press **CTRL P** when finished to return the cursor to the *Print Now* prompt.

8.15.2 SCREEN DEFINITIONS

Period Covered Indicates the date and time the report was last cleared, and the time the report was printed or viewed.

NUM Represents the call qualification code (001–200).

ACTIVITY Each Qualification code can be assigned up to 10 characters to indicate the meaning of the code.

QULFY Indicates the number of qualified calls corresponding to the ACTIVITY type.

% Tot Of all calls that were qualified by the agents, this indicates the percentage of each Qualification code. For example, 18% of all the calls were qualified as INFO related (shown in the screen above).

Tlk Time The total talking time spent on the corresponding Qualification code. When a call is multi-qualified, the total talk time will be divided by the number of qualifications that were entered for that call.

% Tlk The percentage of the total talk time spent on the corresponding ACTIVITY type.

$$\frac{\textit{Total qualification time}}{\textit{Total talk time}} \times 100\%$$

Totals Qualify The total number of calls that were qualified (includes all groups).

Total talk The total time spent on qualified calls by all agents (includes all groups).

8.16 ACD GROUP SUMMARY REPORTS - J1 AND J2

This report provides a one page summary of the activity of each ACD group. One page is provided for each group. Each page is a summary of the information found on the GROUP ACTIVITY REPORT. This report also provides the following additional information:

The number of callers who hung up before answered.
The number of callers who listened to a recorded announcement, and then hung up.
The number of calls transferred TO the ACD group.
The number of calls transferred FROM the ACD group.
The number of calls which ACD programming directed to the group from another ACD group.
The number of calls which ACD programming directed from the group to another ACD group.

At the bottom of the report is the CALL WAIT TIME. This contains a count and a percentage of calls that are answered by agents within a given series of time periods. These periods can be adjusted within the report.

Both reports are available for each of the 15 ACD groups.

There are TWO ACD GROUP SUMMARY REPORTS, a cumulative report which is labeled J1, and a daily report which is labeled J2.

```
Grp  01,MARKETING    (J1) ACD GROUP SUMMARY REPORT
                     ----------------------------
 Period Covered: Mon 08-17-87 09:03  Through   Tue 08-18-87 12:28

ACD Incoming  -   1188  ACD Talk Time -  68:45  Avg. ACD Talk -  3:47
Answered      -   1089  Delay Time    -   9:31  Avg. Delay    -   :59
Aban Bef Rcrd -     76  Abandnd Time  -   1:32  Avg. AbanTime -   :55
Aban Aft Rcrd -     24  Non ACD Time  -   6:42  Avg. NACD Tlk -  3:35
Recordings    -    240  Wrap Time     -   9:08  Avg. Wrp Time -   :30
Delayed Calls -    573
Non ACD Calls -    112
Transfrd  In  -     10
Transfrd  Out -     44
Overflow In   -
Overflow Out  -


 Call wait time:
  5 Sec   | 10 Sec  | 20 Sec  | 30 Sec  | 45 Sec  | 60 Sec  | 90 Sec  |  Over
     340  |     561 |     723 |     806 |     889 |     940 |    1018 |    1090
%  31.19 |%  51.46 |%  66.33 |%  73.94 |%  81.55 |%  86.23 |%  93.39 |% 100.00

Print Now _   Main Menu _   [Ctrl W - Program Answer Time,Ctrl P - Goto Print]
```

Figure 8-15 ACD Group Summary Report

8.16.1 HOW TO ACCESS THE ACD GROUP SUMMARY REPORTS

Action: From the ACD main menu, press J then 1 (or 2 for the daily report) on the keyboard. Then press the **RETURN** key.

Commands: Press the **I** key to increment to the next ACD group.

Press the **D** key to decrement to the previous ACD group.

To switch the screen to enter different *call wait times* press **CTRL** and **W**. Enter the different *call wait times* desired, and press the **RETURN** key. Use the **RETURN** key to step to each call wait time. Press **CTRL P** when finished to return the cursor to the *Print Now* prompt.

8.16.2 SCREEN DEFINITIONS

Grp The ACD group being viewed. To increment or decrement the group number one at a time, press I or D.

Period Covered The date and time the report was last cleared, and the time the report was printed or viewed.

ACD Incomimg Indicates the number of incomimg ACD calls to the group being viewed (includes answered and unanswered).

Answered The number of ACD calls answered by the group being viewed.

Aban Bef Rcrd The number of times a caller hung up before a recorded message was played.

Aban Aft Rcrd The number of times a caller hung up after a recorded message was played.

Recordings Indicates the total number of calls connected to the recording.

Delayed Calls The number of calls that were in queue.

Non ACD Calls The total number of CO calls answered by the group that is being viewed.

Transfrd In The number calls that were transferred into the group being viewed.

Transfrd Out The number calls that were transferred out of the group that is being viewed; which may or may not have been transferred into another group.

Overflow In The number of ACD calls that overflowed out of one group and into the group that is being viewed.

Overflow Out The number of ACD calls that overflowed out of the group that is being viewed and into another group. An ACD call will overflow out of a group when a call reaches one of the forwarding commands in the call SEQUENCE (*ACD GROUP Programming* – A):

FWD TO ACD 000,BX 000	FORWARD SPD #000	RELEASE LINE
FORWARD EXT 000	FORWARD HUNT 005	

ACD Talk Time The total time, expressed in hours and minutes, that was spent talking on ACD calls by the group being viewed.

Delay Time The total time, expressed in hours and minutes, which calls were in queue (includes calls that were answered and abandoned).

Abandnd Time The total time, expressed in hours and minutes, the callers waited before they hung up.

Non ACD Time — The total time, expressed in hours and minutes, spent on incomimg and outgoing CO calls by the group that is being viewed.

Wrap Time — Indicates the total wrap up time, expressed in hours and minutes, spent by the group that is being viewed.

Avg. ACD Talk — The average time, expressed in minutes and seconds, spent on an ACD call by the group that is being viewed.

Avg. Delay — The average time, expressed in minutes and seconds, a caller waited in queue before the call was answered by an agent.

Avg. NACD Tlk — The average time, expressed in minutes and seconds, spent on incoming/outgoing CO calls (non ACD) by the group that is being viewed.

Avg. Wrp Time — Indicates the average wrap up time, expressed in minutes and seconds, spent per call by the group that is being viewed.

Call wait time — The number and percentage of calls answered by an agent within 5, 10, 20, 30, 45, 60, 90 and over 90 second delay periods (waiting in queue). The example below indicates 806 calls were answered within 30 seconds; where 806 is 73.94 percent of the total calls answered by all agents within the group.

The time periods indicated can be changed to suit your individual requirements. However, any change made effects both the ACD Group Summary (J) and the System Summary Reports (K).

```
Grp  01.MARKETING    (J1) ACD GROUP SUMMARY REPORT
                     ----------------------------
 Period Covered: Mon 08-17-87 09:03  Through   Tue 08-18-87 12:28

ACD Incoming  -   1188  ACD Talk Time -  68:45  Avg. ACD Talk -  3:47
Answered      -   1089  Delay Time    -   9:31  Avg. Delay    -   :59
Aban Bef Rcrd -     76  Abandnd Time  -   1:32  Avg. AbanTime -   :55
Aban Aft Rcrd -     24  Non ACD Time  -   6:42  Avg. NACD Tlk -  3:35
Recordings    -    240  Wrap Time     -   9:08  Avg. Wrp Time -   :30
Delayed Calls -    573
Non ACD Calls -    112
Transfrd  In  -     10
Transfrd  Out -     44
Overflow In   -
Overflow Out  -


 Call wait time:
  5 Sec  | 10 Sec  | 20 Sec  | 30 Sec  | 45 Sec  | 60 Sec  | 90 Sec  |  Over
     340 |     561 |     723 |     806 |     889 |     940 |    1018 |    1090
%  31.19 |%  51.46 |%  66.33 |%  73.94 |%  81.55 |%  86.23 |%  93.39 |% 100.00

Print Now _   Main Menu _   [Ctrl W - Program Answer Time,Ctrl P - Goto Print]
```

Figure 8-16 ACD Group Summary Report

8.17 SYSTEM SUMMARY REPORTS – K1 AND K2

This report provides a one page summary of the activity of all ACD groups. The page is a summary of the information found on the SYSTEM ACTIVITY REPORT. This report also provides the following additional information:

The number of callers who hung up before being answered.

The number of callers who listened to the recorded announcement and then hung up.

At the bottom of the report is the CALL WAIT TIME. This contains a count and a percentage of calls that are answered by agents within a given series of time periods. These periods can be adjusted within the report.

There are TWO SYSTEM SUMMARY REPORTS, a cumulative report which is labeled K1, and a daily report which is labeled K2.

8.17.1 HOW TO ACCESS THE ACD SYSTEM SUMMARY REPORTS

Action: From the ACD main menu, press **K** then **1** (or **2** for the daily report) on the keyboard. Then press the **RETURN** key.

Commands: To switch the screen to enter different *call wait times* press **CTRL** and **W**. Enter the different *call wait times* desired, and press the **RETURN** key. Use the **RETURN** key to step to each call wait time. Press **CTRL P** when finished to return the cursor to the *Print Now* prompt.

```
                          (K1) SYSTEM SUMMARY REPORT
                          --------------------------
 Period Covered: Mon 08-17-87 09:03  Through   Tue 08-18-87 12:29

ACD Incoming  -   1190  ACD Talk Time -  68:51  Avg. ACD Talk -  3:47
Answered      -   1091  Delay Time     -   9:31  Avg. Delay    -   :59
Aban Bef Rcrd -     76  Abandnd Time  -   1:32  Avg. AbanTime -   :55
Aban Aft Rcrd -     24  Non ACD Time  -   6:42  Avg. NACD Tlk -  3:35
Recordings    -    240  Wrap Time     -   9:08  Avg. Wrp Time -   :30
Delayed Calls -    573
Non ACD Calls -    112




 Call wait time:
  5 Sec  | 10 Sec  | 20 Sec  | 30 Sec  | 45 Sec  | 60 Sec  | 90 Sec  |  Over
     340 |     562 |     724 |     807 |     890 |     941 |    1019 |    1091
%  31.16 |%  51.51 |%  66.36 |%  73.96 |%  81.57 |%  86.25 |%  93.40 |% 100.00

Print Now _   Main Menu _   [Ctrl W - Program Answer Time,Ctrl P - Goto Print]
```

Figure 8–17 System Summary Report

8.17.2 SCREEN DEFINITIONS

Period Covered Indicates the date and time the report was last cleared and the time the report was printed or viewed.

ACD Incomimg The number of incomimg ACD calls (includes answered and unanswered).

Answered The number of ACD calls answered.

Aban Bef Rcrd The number of times a caller hung up before a recorded message was played.

Aban Aft Rcrd The number of times a caller hung up after a recorded message was played.

Recordings The total number of calls connected to a recorder.

Delayed Calls Indicates the number of calls that were in queue.

Non ACD Calls The total number of CO calls answered.

ACD Talk Time The total time, expressed in hours and minutes, that was spent talking on ACD calls.

Delay Time The total time, expressed in hours and minutes, which calls were in queue (includes calls that were answered and abandoned).

Abandnd Time Indicates the total time, expressed in hours and minutes, the callers waited before they hung up.

```
                          (K1) SYSTEM SUMMARY REPORT
                          --------------------------
 Period Covered: Mon 08-17-87 09:03  Through   Tue 08-18-87 12:29

ACD Incoming  -   1190  ACD Talk Time -  68:51  Avg. ACD Talk -  3:47
Answered      -   1091  Delay Time    -   9:31  Avg. Delay    -   :59
Aban Bef Rcrd -     76  Abandnd Time  -   1:32  Avg. AbanTime -   :55
Aban Aft Rcrd -     24  Non ACD Time  -   6:42  Avg. NACD Tlk -  3:35
Recordings    -    240  Wrap Time     -   9:08  Avg. Wrp Time -   :30
Delayed Calls -    573
Non ACD Calls -    112




 Call wait time:
  5 Sec  | 10 Sec  | 20 Sec  | 30 Sec  | 45 Sec  | 60 Sec  | 90 Sec  |  Over
     340 |     562 |     724 |     807 |     890 |     941 |    1019 |    1091
%  31.16 |%  51.51 |%  66.36 |%  73.96 |%  81.57 |%  86.25 |%  93.40 |% 100.00

Print Now _   Main Menu _   [Ctrl W - Program Answer Time,Ctrl P - Goto Print]
```

Figure 8–18 System Summary Report

Non ACD Time The total time, expressed in hours and minutes, spent on incoming and outgoing CO calls.

Wrap Time Indicates the total wrap up time, expressed in hours and minutes.

Avg. ACD Talk The average time, expressed in minutes and seconds, spent on an ACD call.

Avg. Delay The average time, expressed in minutes and seconds, a caller waited in queue before the call was answered by an agent.

Avg. NACD Tlk The average time, expressed in minutes and seconds, spent on incomimg/outgoing CO calls (non ACD).

Avg. Wrp Time Indicates the average wrap up time, expressed in minutes and seconds, spent per call.

Call wait time Indicates the number and percentages of calls answered by an agent within 5, 10, 20, 30, 45, 60, 90 and over 90 second delay periods (waiting in queue). The example below indicates 941 calls were answered within 60 seconds; where 941 is 86.25 percent of the total calls answered by all agents within the system.

```
Call wait time:
 5 Sec  | 10 Sec  | 20 Sec  | 30 Sec  | 45 Sec  | 60 Sec  | 90 Sec  |  Over
   340 |     562 |     724 |     807 |     890 |     941 |    1019 |    1091
%  31.16 |%  51.51 |%  66.38 |%  73.96 |%  81.57 |%  86.25 |%  93.40 |% 100.00
```

The time periods indicated can be changed to suit your own individual requirements. However, any changes made effect both the ACD Group Summary (J) and the System Summary (K) Reports.

8.18 AGENT SUMMARY REPORT

The Agent Summary Report provides information on a per agent basis. This information includes time spent logged into the ACD system, time spent on ACD calls, time to complete work after the call, time to receive calls. This report provides a summary of what each agent did on a cumulative and daily basis.

8.18.1 ACCESSING THE AGENT SUMMARY REPORT

Action: From the ACD Main Menu, press the P key and 1 (or 2 for the daily report). Then press the RETURN key.

Command: I and D keys are used to increment and decrement to each ACD agent. The agent number appears in the upper left corner of the screen.

CONTROL and P can be used to move the cursor to the agent number in the upper left corner. Enter the agent number, and press the RETURN key. Press the RETURN key a second time to update the screen.

8.18.2 SCREEN DEFINITIONS

Agent Number The agent number for each report is displayed in the upper left corner.

ACD Incoming Indicates the number of incoming ACD calls to the agent being viewed (includes answered and unanswered.)

```
 15, LUCY                (P1) AGENT SUMMARY REPORT

Period Covered: Thu 06-16-88 10:51 Through Wed 06-22-88 11:21

ACD Incoming    - 3        LOG TIME       - :41     Avg Busy ACD      - :01
Answered        - 3        BUSY ACD TIME  - :00     Avg Busy I NACD   -
Not Answered    -          WRAP UP TIME   - :00     Avg Wrap Time     - :41
Outgoing        - 1        AVAIL TIME     - :35     Avg ICM In        -
ICM Incoming    -          UNAVAIL TIME   -         Avg ICM Out       - :11
ICM Outgoing    - 1        BUSY INCOMING  -         Avg ACD Ring      - :05
Transfrd In     -          BUSY OUTGOING  - :04     Avg CO Ring       -
Transfrd Out    -          BUSY ICM IN    -         Avg ICM Ring      -
NACD In Calls   -          BUSY ICM OUT   - :00
Times Logged    - 1        DND TIME       -
Qualifications  -          ACD RING TIME  - :00
Busy Out        -          CO RING TIME   -
                           ICM RING TIME  -
                           BUSY OUT TIME  -
                           HOLD TIME      -

Print Now_ Main Menu_
```

Figure 8–19 System Summary Report

Answered	Indicates the number of ACD calls answered by the agent being viewed.
Not Answered	Indicates the number of unanswered ACD calls for the agent.
Outgoing	The number of outgoing calls the agent placed.
ICM Incoming	The number of incoming calls an agent placed.
ICM Outgoing	The number of outgoing calls an agent placed.
Transfrd In	The number of calls transferred to an agent.
Transfrd Out	The number of calls the agent transferred out.
NACD In Calls	Indicates the time spent in incoming CO (non ACD).
Times Logged	Indicates the number of times which the agent has logged in since the beginning coverage date.
Qualifications	The number of qualifications the agent made.
Log Time	Specific time the agent was logged in on ACD.
Busy ACD Time	Indicates the time the agent was spent on ACD calls (actual talking time.)
Wrap Up Time	Indicates the total wrap up time spent by the agent that is being viewed.
Avail Time	Indicates the time each agent was idle (not on any type of calls).
Unavail Time	Indicates the time the agent was not available to answer ACD calls.
Busy Incoming	Time spent on incoming non-ACD calls.
Busy Outgoing	Time spent on outgoing calls.
Busy ICM In	The time spent on incoming intercom calls.
Busy ICM Out	Indicates the time spent on outgoing intercom calls.
DND Time	Indicates the time the agent is in the do not disturb mode.
ACD Ring Time	Indicates the total time ACD calls rang at an agent's extension.
CO Ring Time	Indicates the time non-ACD calls rang at an agent's extension.
Busy Out Time	Indicates the time the agent was busied out by the system.
Hold Time	Amount of time the agent placed calls on hold.
Avg Busy ACD	Indicates the average time an agent was busy on ACD calls.
Avg Busy I NACD	Indicates the average amount of incoming ACD calls made.
Avg Wrap Time	Indicates the average time the agents spent wrapping up on calls.
Avg ICM In	Indicates the average time spent on incoming intercom calls.
Avg ICM Out	Indicates the average time spent on outgoing intercom calls.
Avg ACD	Indicates the average of ACD calls made.
Avg CO Ring	Average time a non-ACD call rang an agent's phone.
Avg ICM Ring	Average time ICM calls rang on agents

8.19 SYSTEM PERFORMANCE SCREEN

The *System Perfomance* screen allows the ACD manager, or supervisor, to monitor the activity of all 15 ACD groups at the same time. This dynamic screen provides real time information in 10 categories for each of the 15 ACD groups. In addition, limits can be defined for each category. These limits are called **thresholds.**

The screen can be printed at any time to the printer programmed for SMDR, and can be cleared. The Auto Print feature allows the screen to be printed and cleared at fixed intervals. The manager can program this interval to any time desired between 1 and 999 minutes.

8.19.1 ACCESSING THE SYSTEM PERFORMANACE SCREEN

Directions on how to enter the *ACD System Performance* screen will begin from the *Main Menu*. If you do not know how to get to the *Main Menu*, refer to the *Programming Introduction* section of the Technical Manual.

1. Press the Q key from the system *Main Menu*.
2. The *ACD Main Menu* appears. The *ACD Main Menu* varies depending on the ACD package that is installed in your system. The *System Performance* screen is **ONLY** available with Custom ACD.
3. Press the N key from the *ACD Main Menu*. The *System Performance* screen will appear.

```
                    (N) SYSTEM PERFORMANCE SCREEN
Period Covered: Thu 10-15-87 17:54  Through   Thu 10-15-87 17:55

Grp|%  Ans|Avg.  |Longest|Calls  |Calls|Busy |Loggd|Avail|Incomng|# of
Num|IN 060|Wait  | In Que|Dropped|InQue|Agnts|Agnts|Agnts| Calls |Rcrdg
---|------|------|-------|-------|-----|-----|-----|-----|-------|-----
01 |  <---|------|-------|-------|GROUP|-----|-----|-----|-------|---->
02 |  ^   |      |       |       |     |     |     |     |       |
03 |  |   |      |       |       |     |     |     |     |       |
04 |  |   |      |       |       |     |     |     |     |       |
05 |  C   |      |       |       |     |     |     |     |       |
06 |  A   |      |       |       |     |     |     |     |       |
07 |  T   |      |       |       |     |     |     |     |       |
08 |  E   |      |       |       |     |     |     |     |       |
09 |  G   |      |       |       |     |     |     |     |       |
10 |  O   |      |       |       |     |     |     |     |       |
11 |  R   |      |       |       |     |     |     |     |       |
12 |  Y   |      |       |       |     |     |     |     |       |
13 |  |   |      |       |       |     |     |     |     |       |
14 |  |   |      |       |       |     |     |     |     |       |
15 |  v   |      |       |       |     |     |     |     |       |

<----------------------------------THRESHOLD---------------------------------->
[01 - 15]  099%|  223 |   111 |   222 | 333 | 444 | 555 | 666 |   777 | 888
     Print Now _   Clear Now _ Clr Every 001 Min  Sound[Y/N] Y Auto Print[y/n] N
```

Figure 8-20 System Performance Screen

8.19.2 SCREEN DEFINITIONS

Period Covered

The period covered is the amount of time, statistics in the *System Performance* screen, are provided for. This amount of time is indicated with beginning Day, Date, and Time, and an Ending Day, Date, and Time.

Grp Num (Group Number)

This column lists the group numbers that the statistics (going across the report horizontally) are for. The group numbers are from 01 to 15 and appear, vertically, on the left side of the System Performance Screen.

% Answered In

This category lists the percentage of ACD calls that were answered, by the group, in the amount of time entered in the % Answered In __ category. The time in seconds that can be entered in the % Answered Category is from 000 to 999. This time, when entered, is referenced for all 15 groups.

Avg. Wait

This category lists the average time, per group, for ACD calls waiting to be answered by an agent.

Longest In Que

The time of the call, for each group, that has been waiting in ACD queue the longest.

Calls Dropped

The amount of ACD calls that were dropped (released and abandoned) in each group.

Calls In Queue

The number of calls that each group has in queue.

Busy Agents

How many agents are busy on ACD calls in each group.

Loggd Agnts

The number of agents logged on in each ACD group.

Available Agents

The number of available agents in each ACD group.

Incoming Calls

The amount of incoming ACD calls to each group.

# of Rcrdg

The number of recordings, for each group, that have been listened to by calls waiting in queue.

Value [01]
Group Threshold

This horizontal line indicates the threshold for each group, that has been entered for each category. This means, a value has been set for every category of each group. Once this value has been violated (gone above or below), the screen will indicate this by showing the number that has violated the threshold in reverse video. Numbers from 000 to 999 can be entered, as a threshold, for each group.

Print Now

If it is desired to print the screen and its statistics, a Y can be entered in this section, and the Screen will print out on the SMDR printer port.

Clear Now

If it is desired to clear the screen of all present statistics, a Y can be entered, and all data will be accumulated from that moment on.

Clear Every ___ Min.

A number from 000 to 999 can be entered to represent the amount of time the data is complied before it is cleared. 000 means do not reference this timer. When the time to clear the screen has been reached, the screen is cleared.

Sound [Y/N]

This section allows the user to decide whether a tone should be issued when one of the parameters violates the threshold. If it is desirable to have a tone emitted when a threshold has been violated, a Y should be entered. If no tone is desired, a N should be entered.

Auto Print [Y/N]

This section allows the user to have the screen automatically printed before it is erased. This parameter works in conjunction with the Clear Every ___ Min. timer. The report is first printed and then cleared.

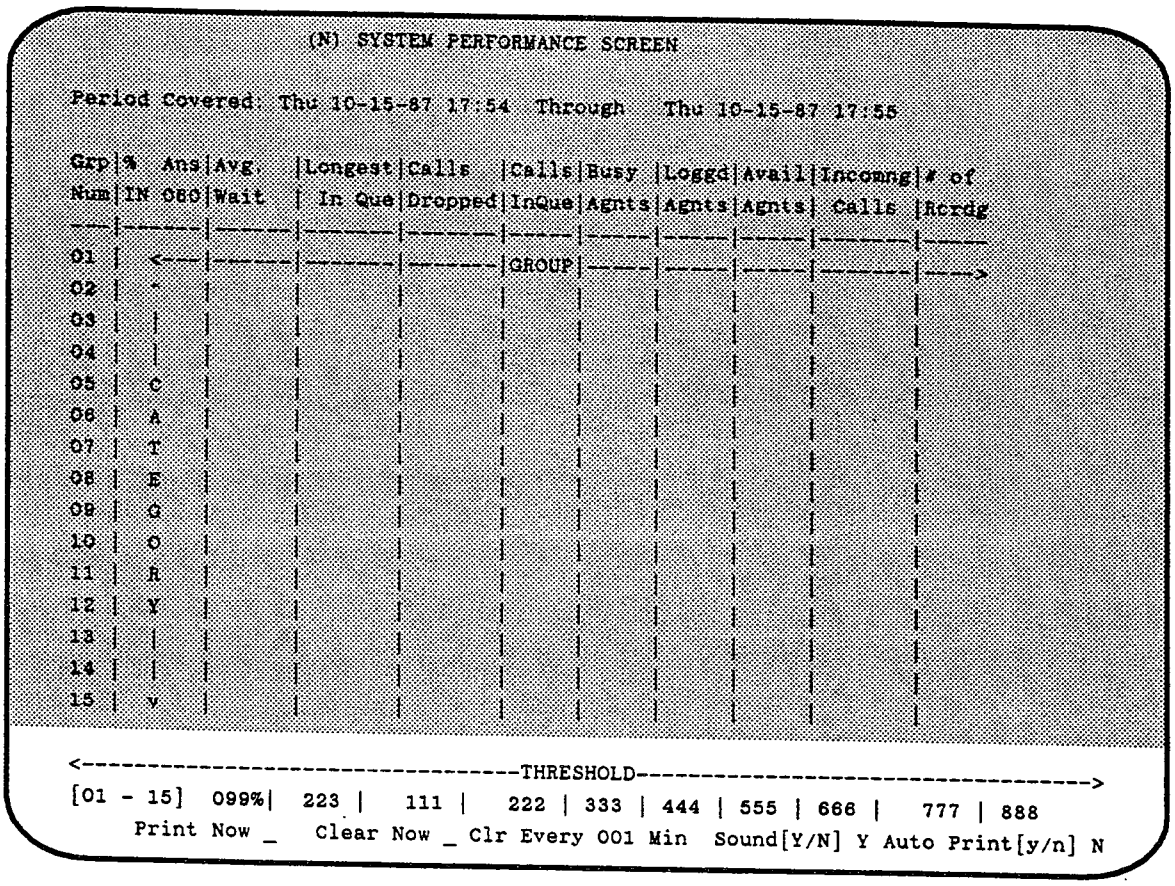


Figure 8-21 System Performance Screen

8.19.3 EXPLAINING THE THRESHOLDS OF EACH CATEGORY

Depending on the category, the value that is entered in the Threshold Section can be violated in different ways.

For example: If the threshold for Calls Dropped in group 1 is set to 5 and the Calls Dropped in group 1 reaches 5, then there is a violation of that threshold.

Similarily, if the threshold for Available agents of group 1 is set to 5 and it goes below, there will be a violation.

When any one of these limits is exceeded, that item appears in reverse video on the programming terminal. The screen can also be programmed to sound a beep on the terminal when a **threshold** is exceeded.

Below is a list of the categories, showing when the threshold is violated above or below the value entered.

Percentage Answered In	Violated when number goes **below** percentage value entered for each group.
Average Wait	Violated when the number goes **above** the wait time value entered for each group.
Longest In Queue	Violated when the number goes **above** the longest in Queue value entered for each group.
Calls Dropped	Violated when the number goes **above** the calls dropped value entered for each group.
Calls In Queue	Violated when the number goes **above** the calls in queue value entered for each group.
Busy Agents	Violated when the number goes **above** the busy agent number value entered for each group.
Logged Agents	Violated when the number goes **below** the logged agent number value entered for each group.
Available Agents	Violated when the number goes **below** the number of logged agents value entered for each group.
Incoming Calls	Violated when the number of incoming calls goes **above** the number of incoming calls value entered for each group.
Number of Recordings	Violated when the number goes **above** the number of recordings value entered for each group.

8.19.4 HOW TO PROGRAM THE SYSTEM PERFORMANCE SCREEN

The following is a list of keys that are used to program the *System Performance* screen:

A Key / Percent Answered In	When the A key is pressed, the cursor moves to the **Percent Answered In** category. Once in this category you can then enter a number from 000 to 999. This number is the amount of seconds you want the ACD calls to be answered in.
T Key / Threshold Setup	When the T key is pressed, the cursor moves to the Threshold setup portion of the System Performance Screen. Once you are within this section, numbers from 000 to 999 can be entered in each category. These numbers will represent the threshold for that category and group.
C Key / Copy Key	When you are on a category in the Threshold section and you want to copy the entry in that category. Press the C key. This will copy the threshold entry of that category to all other groups.
P Key / Print category	When the P key is pressed into the print category, the cursor moves to the PRINT NOW prompt. From this prompt, the cursor can be moved to the CLEAR NOW etc, until reaching the AUTO PRINT prompt.
Y Key / Yes Key	This key can be pressed to initiate a print, clear or sound alarm function on the *System Performance* screen.
N Key / No Key	This key can be pressed to insure that there will be no printing, and/or clearing, and/or sounding or alarms on the *System Performance* screen.
RETURN Key	When you are in the Print category or Group setup category, you can press the return key to advance to the next category.
I Key / Increment Key	When you are in the Group Setup category you can press this key to increment through the available 15 ACD groups.
D Key / Decrement Key	When you are in the Group Setup category, you can press the D key to decrement through the available 15 ACD groups.
Escape Key	When this key is pressed, you will exit back into the Main ACD Menu.

8.20 PRINTING REPORTS MANUALLY

When a report is selected and appears on the terminal, the cursor is located adjacent to "Print Now." To print the report, press the Y key on the keyboard of the terminal. The report then prints on the printer designated in the *Print Scheduler* programming screen. If no printer is designated, the report prints on the system SMDR printer. The SMDR printer is assigned on the *System Programming* (B) screen.

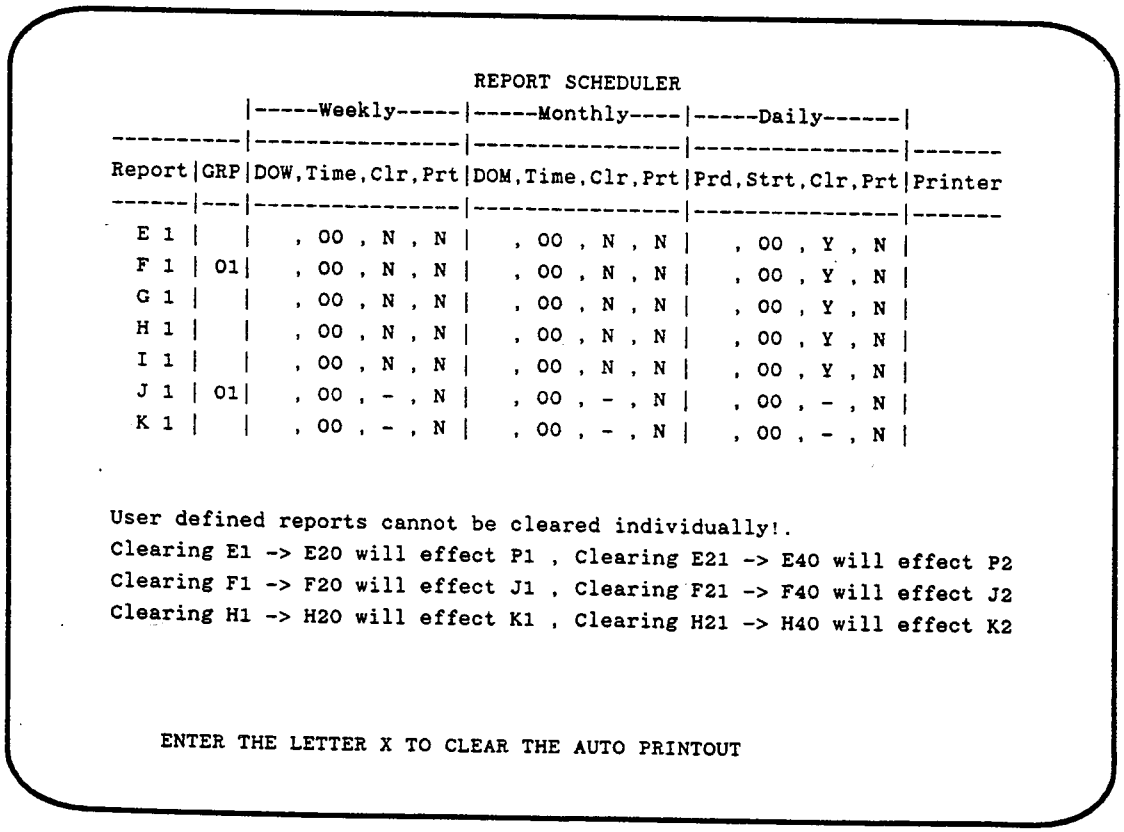
When a report is printed, it is printed in its entirety, not just the portion that appears on the programming screen.

Certain reports display information in hourly, 30 minute, or 15 minute increments. These reports are printed using the increment last shown on the terminal. For example, if the F1 report is displayed on the terminal and is shown in 30 minute increments, the report is printed using 30 minute increments.

8.21 PRINTING REPORTS AUTOMATICALLY

The *Print Scheduler* programming screen is used to print any or all of the ACD reports at a day and time of your choice. The time is in whole hours only. Each report can be individually programmed. For example, you can program the *Agent Activity* reports to print every day at 8:00 pm, and the *Group Activity* reports to print on the first of every month at 6:00 am.

The *Print Scheduler* also allows you to choose which printer (if your system is equipped with more than one) each report prints on. This selection also effects where the report prints when selected manually.



```
                              REPORT SCHEDULER
            |-----Weekly-----|-----Monthly----|-----Daily------|
 ----------|----------------|----------------|----------------|-------
 Report|GRP|DOW,Time,Clr,Prt|DOM,Time,Clr,Prt|Prd,Strt,Clr,Prt|Printer
 ------|---|----------------|----------------|----------------|-------
   E 1 |   |   , 00 , N , N |   , 00 , N , N |   , 00 , Y , N |
   F 1 | 01|   , 00 , N , N |   , 00 , N , N |   , 00 , Y , N |
   G 1 |   |   , 00 , N , N |   , 00 , N , N |   , 00 , Y , N |
   H 1 |   |   , 00 , N , N |   , 00 , N , N |   , 00 , Y , N |
   I 1 |   |   , 00 , N , N |   , 00 , N , N |   , 00 , Y , N |
   J 1 | 01|   , 00 , - , N |   , 00 , - , N |   , 00 , - , N |
   K 1 |   |   , 00 , - , N |   , 00 , - , N |   , 00 , - , N |


User defined reports cannot be cleared individually!.
Clearing E1 -> E20 will effect P1 , Clearing E21 -> E40 will effect P2
Clearing F1 -> F20 will effect J1 , Clearing F21 -> F40 will effect J2
Clearing H1 -> H20 will effect K1 , Clearing H21 -> H40 will effect K2



    ENTER THE LETTER X TO CLEAR THE AUTO PRINTOUT
```

Figure 8–22 Report Print Scheduler

The *Print Scheduler* can also be used to automatically clear reports. Most of the reports can be automatically cleared at a day and time of your choice. The *Print Scheduler* can NOT be used to automatically clear the *ACD Group Summary* report (J report), nor the *System Summary* report (K report).

> **CAUTION: Care MUST be taken when using the Print Scheduler to clear reports as the statistics for some reports are common for a number of reports. Clearing one report clears all the reports using the common data.**

If a report is programmed to print and clear, the report does not clear until it is printed.

8.21.1 WHAT TO PROGRAM

8.21.2 NOTES ON THE PRINT SCHEDULER

Review each of the reports and their use, and decide which reports you wish to print on a regular basis. For each report, decide when you would like the report to print. After deciding which reports to print and when, decide when these reports are to be cleared and restarted.

When the system is turned on for the first time, a basic program configuration exists that allows the system to operate before any programming is done. The basic configuration is called the "default program" or just the "default". The *Print Scheduler's* default program is to clear all reports daily at midnight. No reports are printed. This includes the reports designated as CUMULATIVE. They are cleared every day until programmed otherwise with the *Print Scheduler*.

In order to accumulate statistics in a report for a week, change the "clr" (clear) in the daily column, and monthly column, for that report to N (no), and the "clr" (clear) in the weekly column to Y (yes).

In order to accumulate statistics in a report for a month, change the "clr" (clear) in the daily column, and weekly column for that report to N (no), and the "clr" (clear) in the monthly column to Y (yes).

Reports F and Jeach contain 15 reports, one for each of the 15 ACD groups in the system. Each one of the reports can be programmed to print/clear individually. Thus you can print a *Group Activity Report* for group 1 daily without printing the remaining ACD groups. **Remember NOT to clear the report until all the information desired for ALL the ACD groups on reports F and J has been obtained.**

When programming a report to print monthly, do not choose days 29–31. The system prints the report on the specified day. If the month never reaches that day, the report will not print.

All reports default to the printer programmed as the SMDR printer.

> **CAUTION: The same type of reports (e.g. E1–E4 or F21–F24) share common data. As a result, if one report is cleared all the reports of the same type will also be cleared. For example, if report E2 is cleared, E1, E3 and E4 will also be cleared regardless of the setting N or Y. Reports E21–E24 are not affected. To schedule reports to print sequentially then clear them all, the highest report number (e.g. E4) must be set to Y while all reports below (e.g. E1, E2, E3) are set to N. If set to N (no), the report will not clear after it is printed (if it is printed). When this entry (N) is made, it is automatically copied to all reports of the same type (e.g. copies N to reports E1, E2, E3 and E4).**

8.21.3 REPORT PRINT SCHEDULER SCREEN

The *Print Scheduler* programming screen is divided into five major areas:

REPORT AND GROUP These columns define the report being programmed. The Group column refers to the ACD group for the report.

WEEKLY The columns in this area define the schedule for printing and/or clearing a report on a weekly basis.

- **DOW** The day of the week on which you wish to print and/or clear a report. The range is from Sun. to Sat.
- **Time** The hour at which you wish to print and/or clear a report. Enter the time in a 24-hour clock, for example enter 13 for 1 p.m.
- **Clr** Enter Y (yes) if you want to clear a report, or N (no) if you do not want to clear a report on a desired day and time.
- **Prt** Enter Y (yes) if you want to print a report, or N (no) if you do not want to print a report.

MONTHLY The columns in this area define the schedule for printing and/or clearing a report on a monthly basis.

- **DOM** The day of the month on which you wish to print and/or clear a report. The range is from 1 to 31.
- **Time** The hour at which you wish to print and/or clear a report. Enter the time in a 24-hour clock, for example enter 13 for 1 p.m.
- **Clr** Enter Y (yes) if you want to clear a report, or N (no) if you do not want to clear a report.
- **Prt** Enter Y (yes) if you want to print a report, or N (no) if you do not want to print a report.

DAILY The columns in this area define the schedule for printing and/or clearing a report on a daily basis.

- **Prd** The hourly period for which you wish to print and/or clear a report, in hourly increments from 01 through 23.
- **Strt** The hour at which you wish the report to print and/or clear. The report begins at this time and continues to print after every interval period (the time entered in the Prd column).
- **Clr** Enter Y (yes) if you want to clear a report, or N (no) if you do not want to clear a report after this interval.
- **Prt** Enter Y (yes) if you want to print a report, or N (no) if you do not want to print a report.

PRINTER This column defines which printer port (1-4) the report is sent to. The printer number is assigned on the *System Programming* screen. If there is no printer listed, or the printer is listed as 0, the report is sent to the port designated for the SMDR printer.

8.21.4 HOW TO PROGRAM THE PRINT SCHEDULER

From the *Reports menu*, press N. *Print Scheduler* appears. To exit the *Print Scheduler* and return to the *Reports Menu*, press ESCAPE on keyboard. The following keys are used to move around the *Print Scheduler* programming screen:

RETURN KEY Moves the cursor down the screen.

TAB KEY Moves the cursor across the screen.

UP ARROW KEY Increments the DOW (Day Of Week) and DOM (Day Of Month).

DOWN ARROW KEY Decrements the DOW (Day Of Week) and DOM (Day Of Month).

I and D KEY Increments and decrements the group numbers while in any column.

```
                              REPORT SCHEDULER
            |-----Weekly-----|-----Monthly----|-----Daily------|
------------|----------------|----------------|----------------|-------
Report|GRP|DOW,Time,Clr,Prt|DOM,Time,Clr,Prt|Prd,Strt,Clr,Prt|Printer
------|---|----------------|----------------|----------------|-------
  E 1 |   |   , 00 , N , N |   , 00 , N , N |   , 00 , Y , N |
  F 1 | 01|   , 00 , N , N |   , 00 , N , N |   , 00 , Y , N |
  G 1 |   |   , 00 , N , N |   , 00 , N , N |   , 00 , Y , N |
  H 1 |   |   , 00 , N , N |   , 00 , N , N |   , 00 , Y , N |
  I 1 |   |   , 00 , N , N |   , 00 , N , N |   , 00 , Y , N |
  J 1 | 01|   , 00 , - , N |   , 00 , - , N |   , 00 , - , N |
  K 1 |   |   , 00 , - , N |   , 00 , - , N |   , 00 , - , N |


User defined reports cannot be cleared individually!.
Clearing E1 -> E20 will effect P1 , Clearing E21 -> E40 will effect P2
Clearing F1 -> F20 will effect J1 , Clearing F21 -> F40 will effect J2
Clearing H1 -> H20 will effect K1 , Clearing H21 -> H40 will effect K2



   ENTER THE LETTER X TO CLEAR THE AUTO PRINTOUT
```

Figure 8–23 Report Print Scheduler

8.21.5 EXAMPLE

Use the screen shown in Figure 8–24 for reference while looking at *Print Scheduler* on your programming terminal.

In the example, you will be entering information to print and clear the CUMULATIVE GROUP ACTIVITY Report for ACD group 5. This is report **F1**. In the example, the report is to be printed on a weekly, monthly, and daily basis, and cleared monthly.

When the scheduler screen is first displayed, the cursor is located in the **Report** column of Report **E1**.

Press the **RETURN** key until the cursor reaches the **F1** report.

Press the **TAB** key once to move to the **GRP** column.

Use the **I** key (increment) to reach **05**.

Weekly:

Use the **TAB** key to move the cursor right to the **DOW** column.

Use the **UP** or **DOWN** arrow key to increment or decrement to **Tue**, which is the day used in the example that you would like to print report **F1** on a weekly basis.

Use the **TAB** key to move the cursor to the **Time** column. Enter the time (24 hour clock) at which you want the report to print on a weekly basis, e.g. 8 pm.

Use the **TAB** key to move the cursor to the **Clr** column. Type in **Y** (yes) or **N** (no) if you want all the CUMULATIVE ACD GROUP reports to clear at the specified time on a weekly basis.

Use the **TAB** key to move the cursor to the **Prt** column. Type **Y** (yes) or **N** (no) if you want the report to Print at the specified time on a weekly basis.

Monthly:

Use the **TAB** key to move the cursor right to the **DOM** column.

Use the **UP** or **DOWN** arrow key to increment or decrement to 01, which is the day used in the example that you would like to print and/or clear the report on a monthly basis.

Use the **TAB** key to move the cursor to the **Time** column. Enter the time of day at which you want the report to print and/or clear on a monthly basis, e.g. 6 am.

Use the **TAB** key to move the cursor to the **Clr** column. Type in **Y** (yes) or **N** (no) if you want all the CUMULATIVE J reports to Clear at the specified time on a monthly basis.

Use the **TAB** key to move the cursor to the **Prt** column. Type **Y** (yes) or **N** (no) if you want the screen to Print at the specified time on a monthly basis.

Daily:

Use the **TAB** key to move the cursor to the **Prd** column. This is the time period, in hours, at which time you want to print and/or clear the report. Type in the desired interval 01 thru 23 hours.

Use the **TAB** key to move the cursor to the **Strt** column, and enter the hour at which time you want the report to begin to print and/or to clear.

Use the **TAB** key to move the cursor to the **Clr** column. Type in **Y** (yes) or **N** (no) if you want the report to Clear at the specified time on a daily basis.

Use the **TAB** key to move the cursor to the **Prt** column. Type **Y** (yes) or **N** (no) if you want the report to Print at the specified time on a daily basis.

Printer:

Use the **TAB** key to move the cursor to the **Printer** column. Enter the number of the printer, 1 thru 4 to which you want the report sent to be printed. This printer number must be assigned through *System Programming*, which is accessed by pressing **B** from the *System Main Menu*.

```
                              REPORT SCHEDULER
              |-----Weekly-----|-----Monthly----|-----Daily------|
--------------|----------------|----------------|----------------|-------
Report|GRP|DOW,Time,Clr,Prt|DOM,Time,Clr,Prt|Prd,Strt,Clr,Prt|Printer
------|---|----------------|----------------|----------------|-------
  E 1 |   |                |                |                |
  F 1 | 05|Tue, 20 , N , Y |  1, 06 , Y , Y |   , 00 , N , Y |  2
  G 1 |   |                |                |                |
  H 1 |   |                |                |                |
  I 1 |   |                |                |                |
  J 1 | 01|                |                |                |
  K 1 |   |                |                |                |

User defined reports cannot be cleared individually!.
Clearing E1 -> E20 will effect P1 , Clearing E21 -> E40 will effect P2
Clearing F1 -> F20 will effect J1 , Clearing F21 -> F40 will effect J2
Clearing H1 -> H20 will effect K1 , Clearing H21 -> H40 will effect K2


   ENTER THE LETTER X TO CLEAR THE AUTO PRINTOUT
```

Figure 8-24 Report Scheduler

8.22 CLEARING REPORTS MANUALLY

The reports provided by this ACD package can be cleared at any time manually, and they can be programmed to clear automatically. Each of the reports can be programmed to clear automatically at daily, weekly, or monthly intervals on the day and time of your choice. This is accomplished through the use of the *Print Scheduler* programming screen (choice L on the ACD main menu). When a report is cleared all data for that report is lost, and statistics begin accumulating again. Some of the ACD reports share information held in system memory. Clearing any one of these reports clears the information for the remainder of the reports. The reports which share common memory and are cleared together are shown in Figure 8-25.

Do NOT clear any of the reports (manually or automatically) in these groups until all of the desired information contained in each of the reports has been examined (or printed). This is especially important when programming the *Print Scheduler*. The system processes the requests to print and clear a report in the order in which they appear on the *Print Scheduler*. Therefore, to print report E7, reports E1 through E6 must not be cleared by the *Print Scheduler*. To print report E24, reports E21 through E23 must not be cleared by the *Print Scheduler*. When the E24 report is cleared, reports E21 through E23 are also cleared.

Reports are cleared manually through the use of the CLEAR REPORT programming screen (choice M on the ACD main menu). The groups of reports listed on each line of the CLEAR menu are cleared together.

If not already on the *Clear* menu, from the ACD main menu, press the M key. The *Clear* menu appears.

1. Press the **RETURN** key to move the cursor to the report to be cleared.
2. Press the **Y** key. The selected report is then cleared.

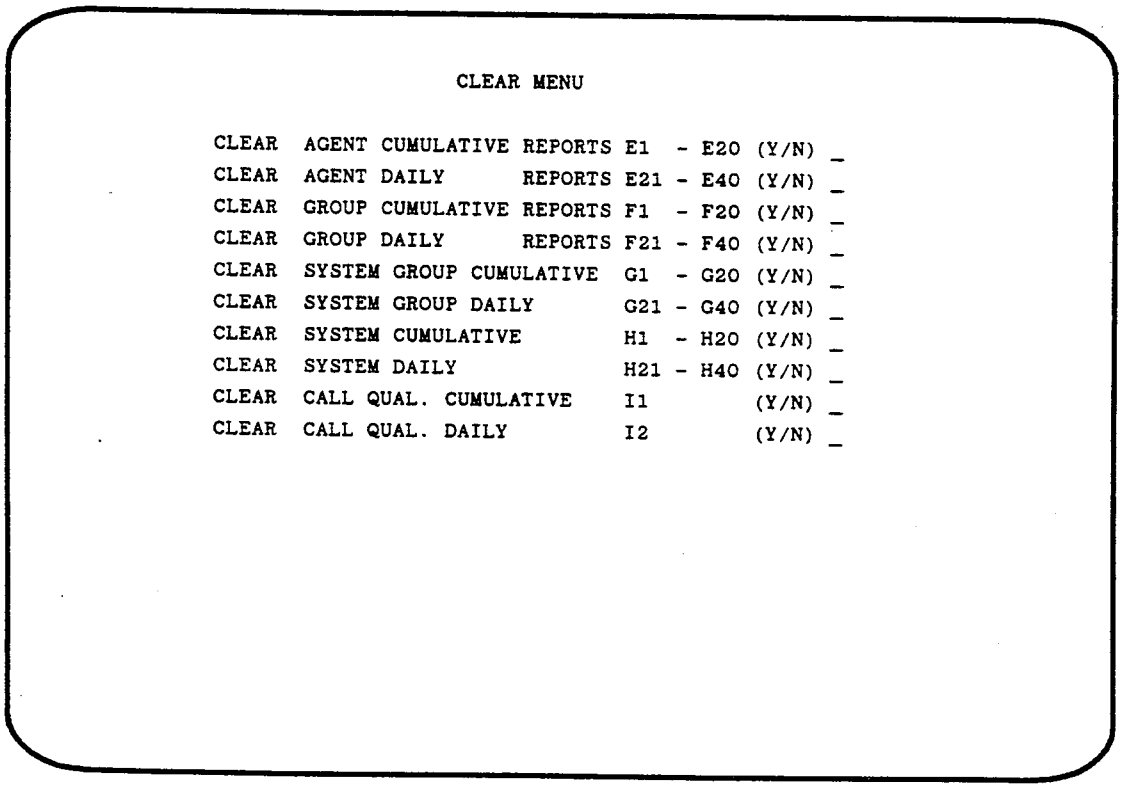


Figure 8-25 Clear Menu

Report Definitions Work Sheet

Menu ID _____ <-- [Shift @]

Column Headings

1	2	3	4	5	6	7	8	9

<-- [Ctrl A]

Column Definitions

<-- [Right Arrow]

Menu Header – _____ <-- [Ctrl B]

Menu ID _____ <-- [Shift @]

Column Headings

1	2	3	4	5	6	7	8	9

<-- [Ctrl A]

Column Definitions

<-- [Right Arrow]

Menu Header – _____ <-- [Ctrl B]

Section 9
System Management Reports

9.1 INTRODUCTION

The system provides management reports for use in evaluating the call handling performance of the telephone system. This information is available through the use of the *Reports* menu in system programming.

The 13 management Reports will help the customer control costs through better utilization of trunks. These reports provide information necessary to make the trunk configuration (how many, and what type of lines), Least Cost Routing package, and other features of the phone system as cost effective as possible. With the system reports, the customer will be able to track the volume of incoming calls handled by the system, judge how timely incoming calls are being answered, detect peak periods of telephone traffic, and determine their most costly extension users.

The *Reports Menu* is accessed through system programming, and can be reached using either the Operator's CRT terminal, or a separate programming terminal. The reports can also be read using the remote programming feature of the system.

9.2 GENERAL

The system provides 13 Management Reports covering extension activity, and line utilization. The reports are in a format which is easy–to–use, and will help effectively manage the telephone system. Each report may be printed to keep for further analysis.

GROUP UTILIZATION REPORTS (SCREENS A,B,C,D, and E)

Five reports offer you daily, hourly, and cumulative information on call activity per trunk group, including how many incoming or outgoing calls are received per hour. These reports record the number of lines in the trunk group, and total time in use for incoming and outgoing calls. These reports are especially useful for determining how many times all the trunks in a particular group are busy.

LINE UTILIZATION REPORTS (SCREENS F and G)

These reports make it possible to measure individual line (trunk) usage for a daily and cumulative period.

LCR STATISTICS REPORT (SCREEN H)

The use of this report requires that the system be equipped with the optional *Least Cost Routing* package. This package is a database, developed by ISOETEC specifically for each system, which contains pricing information for each type of telephone line in the system. With this package installed, the system automatically selects the least expensive route for an outside line call.

This report provides *Least Cost Routing* statistics on a cumulative basis. The report indicates the name of the long distance service being used, the number of calls using that service, call overflow on a particular service, the number of times the system took a route out of service, bad line calls, and the total cost of calls per service.

EXTENSION SUMMARY REPORT (SCREEN I)

The *Extension Summary Report* provides a list of each extension installed in the system, the name assigned to that extension in the system directory, a count of the incoming and outgoing calls for each extension, and the total number of calls. This report also provides the amount of time (in hours and minutes) spent on both incoming and outgoing calls, and a total of this time. If the system is equipped with the Least Cost Routing feature, a total cost of outgoing calls per extension is also provided.

SYSTEM UTILIZATION REPORTS (SCREENS J,K,L, and M)

The *System Utilization Reports* give information on how many calls are received and answered by the system. A report is available for a 60 minute, 30 minute, and 15 minute time period. The total amount of Internal (Icm) calls, incoming calls, and unanswered calls is also reported. If the system is equipped with Least Cost Routing, the number of calls made through LCR, and the total cost of outgoing calls made is provided.

PRINT AND CLEAR (SCREEN N)

Any of the 13 system reports may be **PRINTED** and/or **CLEARED**. The *Print Scheduler* allows you to program the system to print and/or clear any specific report automatically, on a daily, weekly or monthly basis.

It is also possible to print and/or clear any or all reports manually whenever desired.

9.3 HOW TO REACH THE REPORTS

The *Reports* are accessed through system programming. You may use either the Operator's CRT Terminal, or a system programming terminal in order to reach the reports. The following pages describe how to enter system programming, and how to display each of the reports. Following the description of each screen is a section on the report schedule.

ACTION — From the main menu, press R. The *Reports Menu* appears (see Figure 9–1).

COMMENTS — You are now ready to access the individual Report screens. In order to exit a report screen and return to the *Reports Menu*, press the ESCAPE key.

```
                          REPORTS MENU
                          ------------

Group Utilization                        System Utilization
  A - Cumulative                           J - System Statistics
  B - Daily                                K - 60 Minutes
  C - 60 Minutes.                          L - 30 Minutes
  D - 30 Minutes.                          M - 15 Minutes
  E - 15 Minutes.

Line  Utilization                        Print and Clear
  F - Cumulative                           N - Scheduler
  G - Daily

LCR Statistics
  H - Cumulative

Extension Summary
  I - Cumulative

SELECT ONE OF THE ABOVE >
```

Figure 9–1 Reports Menu

9.4 GROUP UTILIZATION REPORTS

9.4.1 HOW TO ACCESS SCREEN (A) CUMULATIVE

ACTION — From the *Reports menu*, press A.

COMMENTS — Provides information concerning the activity of the assigned lines within each of the 10 trunk groups.

COMMANDS — In order to exit this screen, and return to the *Reports Menu*, press ESCAPE on the keyboard.

NOTE: Although this screen offers CUMULATIVE information, it may be cleared at any interval desired through the use of the Print and Clear scheduler.

```
                        LINE GROUP UTILIZATION (A)
                        --------------------------
 Period Covered: Mon 01-04-88 06:11  Through   Wed 01-06-88 11:29

   |Num of Calls | -------- Hour:Min ------- |      |Min:Sec|
Grp|In...  |Out..  | In...|Out...|Total |All   |Times |Avg All|  CO
Num|Bound  |Bound  |Usage |Usage |Usage |Busy  |AllBsy|  Busy |Lines
---+-------+-------+------+------+------+------+------+-------+-----
 01|  2336 |  1164 |139:46| 37:10|176:57|   :00|     1|   :03 |  22
 02|       |       |      |      |      |      |      |       |
 03|       |   379 |      | 12:45| 12:45|  2:50|   172|   :59 |   2
 04|    16 |   107 |  2:20|  3:29|  5:49|   :11|    19|   :36 |   2
 05|     2 |   243 |   :03|  6:50|  6:54|  7:04|   247|  1:42 |   1
 06|       |  1288 |      | 70:40| 70:40|   :00|     1|   :02 |  12
 07|       |       |      |      |      |      |      |       |
 08|       |       |      |      |      |      |      |       |
 09|     1 |     7 |   :06|   :06|   :13|      |      |       |   4
 10|       |       |      |      |      |      |      |       |

Tot|  2355 |  3189 |142:17|131:04|273:22| 10:05|   440|  1:22 |  43


Print Now _   Clear Now _
```

Figure 9–2 Group Utilization – Cumulative

9.4.2 SCREEN DEFINITIONS - CUMULATIVE

Period Covered — This line indicates the period from the last time the statistics were cleared until the current time that it is viewed (or printed).

Grp Num — A number representing each of the 10 trunk groups is listed in this column.

In Bound — The number of incoming calls received on trunks in each group.

Out Bound — The number of outgoing calls initiated on trunks assigned to each group.

In Usage — The time, in hours and minutes, for which the trunks assigned to a specific group were in use with incoming calls.

Out Usage — The time, in hours and minutes, for which the trunks assigned to a specific group were in use with outgoing calls.

Total Usage — The total amount of time, in hours and minutes, for which trunks assigned to a specific group were in use. This time is a total of the *In Usage* and *Out Usage* columns.

All Busy — The total time, in hours and minutes, for which all the trunks assigned to a specific group were busy.

Times AllBsy — The number of times all the trunks in a specific group were busy.

Avg All Busy — This is the *Times All Busy* divided by the number *All Busy* to obtain the average time in minutes and seconds for which all trunks assigned to a specific group were busy.

CO Lines — The number of trunks assigned to a specific group.

9.4.3 HOW TO ACCESS SCREEN (B) DAILY

ACTION — From the *Reports menu*, press **B**.

COMMENTS — Provides information concerning the activity of the assigned lines within each of the 10 trunk groups on a daily basis.

COMMANDS — In order to exit this screen, and return to the *Reports Menu*, press ESCAPE on the keyboard.

NOTE: Although this screen offers DAILY information, it may be cleared at any interval desired through the use of the Print and Clear scheduler.

```
                    DAILY LINE GROUP UTILIZATION (B)
                    --------------------------------
 Period Covered: Tue 01-05-88 00:12  Through   Tue 01-05-88 18:30

   |Num of Calls | -------- Hour:Min ------- |      |Min:Sec|
Grp|In...  |Out..  | In...|Out...|Total |All   |Times |Avg All|  CO
Num|Bound  |Bound  |Usage |Usage |Usage |Busy  |AllBsy|  Busy |Lines
---+-------+-------+------+------+------+------+------+-------+-----
 01|  1170 |   583 | 70:06| 18:31| 88:37|  :00 |    1 |  :03  |  22
 02|       |       |      |      |      |      |      |       |
 03|       |   190 |      | 12:45| 12:45| 2:50 |  172 |  :59  |   2
 04|    16 |   107 | 2:20 |  3:29|  5:49|  :11 |   19 |  :36  |   2
 05|     2 |   243 |  :03 |  6:50|  6:53| 7:04 |  247 | 1:42  |   1
 06|       |  1290 |      | 70:45| 70:45|  :00 |    1 |  :02  |  12
 07|       |       |      |      |      |      |      |       |
 08|       |       |      |      |      |      |      |       |
 09|     1 |     7 |  :06 |  :06 |  :12 |      |      |       |   4
 10|       |       |      |      |      |      |      |       |

Tot|  1189 |  2413 | 72:35|112:26|185:01| 10:05|  440 | 1:22  |  43


Print Now _   Clear Now _
```

Figure 9–3 Group Utilization – Daily

9.4.4 SCREEN DEFINITIONS - DAILY

Period Covered — This line indicates the period from the last time the statistics were cleared until the current time that it is viewed (or printed).

Grp Num — A number representing each of the 10 trunk groups is listed in this column.

In Bound — The number of incoming calls received by trunks in each group.

Out Bound — The number of outgoing calls initiated on trunks assigned to each group.

In Usage — The time, in hours and minutes, within a 24 hour period for which the trunks assigned to a specific group were in use with incoming calls.

Out Usage — The time, in hours and minutes, within a 24 hour period for which the trunks assigned to a specific group were in use with outgoing calls.

Total Usage — The total amount of time, in hours and minutes, within a 24 hour period for which trunks assigned to a specific group were in use both incoming and outgoing.

All Busy — The total time, in hours and minutes, within a 24 hour period for which all the trunks in a specific group were busy.

Times AllBsy — The number of times all the trunks assigned to a specific group were busy.

Avg All Busy — This is the *Times All Busy* divided by the number *All Busy* to obtain the average time in minutes and seconds for which all the trunks assigned to a specific group were busy.

CO Lines — The number of trunks assigned to a specific group.

9.4.5 HOW TO ACCESS SCREEN (C) 60 MINUTES

ACTION — From the *Reports menu*, press C.

COMMENTS — Provides an hourly summary of the activity of each of the trunk groups. The Trunk Group displayed on the screen is indicated in the upper left corner.

COMMANDS — To move from one trunk group displayed to another, use **I** to increment, and **D** to decrement.

The UP and DOWN arrow keys can be used to scroll the screen to view the remaining hours.

To exit this screen and return to the *Reports Menu*, press ESCAPE on the keyboard.

NOTE: Although this screen offers CUMULATIVE information, it may be cleared at any interval desired through the use of the Print and Clear scheduler.

```
Line Group:01,              (C) HOURLY LINE GROUP UTILIZATION
                            ---------------------------------
Period Covered: Mon 01-04-88 06:12  Through   Wed 01-06-88 11:30
                              | ------- Hour:Min -------- |      |Min:Sec
From| To  |In...|Out..|Abndn|In... |Out...|Total |All    |# All|Avg All
    |     |Bound|Bound|Calls|Usage |Usage |Usage |Busy   | Busy|  Busy
-----+-----+-----+-----+-----+------+------+------+-------+-----+-------
06:00|07:00|    1|     |     |   :00|      |   :00|       |     |
07:00|08:00|   14|   10|    4|   :14|   :08|   :22|       |     |
08:00|09:00|  120|   34|    5|  5:03|   :45|  5:49|       |     |
09:00|10:00|  266|  108|    3| 14:45|  3:28| 18:13|       |     |
10:00|11:00|  306|  174|    3| 20:03|  5:58| 26:01|       |     |
11:00|12:00|  277|  148|    2| 18:20|  4:19| 22:40|       |     |
12:00|13:00|  208|   95|    3| 12:43|  3:38| 16:22|       |     |
13:00|14:00|  226|  109|    4| 12:08|  2:48| 14:57|       |     |
14:00|15:00|  226|  113|    7| 13:41|  3:08| 16:50|       |     |
15:00|16:00|  252|  110|    2| 14:09|  3:34| 17:44|       |     |
16:00|17:00|  260|  110|    3| 14:47|  4:47| 19:35|   :00|    1|    :03
17:00|18:00|  113|   80|    2|  9:06|  2:24| 11:30|       |     |

Totals -    2341| 1166|   44|140:21| 37:12|177:33|   :00|    1|  :03

Print Now _   Clear Now _              [ Use the arrow keys to scroll.. ]
```

Figure 9–4 Group Utilization – 60 Minutes

9.4.6 SCREEN DEFINITIONS - 60 MINUTES

Period Covered — This line indicates the period from the last time the statistics were cleared until the current time that it is viewed (or printed).

From/To — This is the hourly period on which the system is reporting.

In Bound — The number of incoming calls received on trunks in each group on an hourly basis.

Out Bound — The number of outgoing calls initiated on trunks assigned to each group on an hourly basis.

Abndn Calls — The number of incoming calls which were not answered.

In Usage — The time, in hours and minutes, within a 60 minute period, for which the trunks assigned to a specific group were in use with incoming calls.

Out Usage — The time, in hours and minutes, within a 60 minute period, for which the trunks assigned to a specific group were in use with outgoing calls.

Total Usage — The total amount of time, in hours and minutes, within a 60 minute period, for which trunks assigned to a specific group were in use both incoming and outgoing.

All Busy — The total time, in hours and minutes, within a 60 minute period, for which all the trunks assigned to a specific group were busy.

 # All Busy — The number of times all trunks in a specific group were busy within a 60 minute time period.

Avg All Busy — This is the *Times All Busy* divided by the number *All Busy* to obtain the average time in minutes and seconds for which all trunks assigned to a specific group were busy.

9.4.7 HOW TO ACCESS SCREEN (D) 30 MINUTES

ACTION — From the *Reports menu*, press D.

COMMENTS — Provides the same information as the Hourly report in 30 minute increments. The trunk group being displayed is indicated in the upper left corner.

COMMANDS — To move from one line group displayed to another, use **I** to increment, and **D** to decrement.

The UP and DOWN arrow keys can be used to scroll the screen to view the remaining half hours.

To exit this screen and return to the *Reports menu*, press ESCAPE on the keyboard.

NOTE: Although this screen offers CUMULATIVE information, it may be cleared at any interval desired through the use of the Print and Clear scheduler.

```
  Line Group:01,          (D) HOURLY LINE GROUP UTILIZATION
                          ---------------------------------
Period Covered: Mon 01-04-88 06:12  Through   Wed 01-06-881:31
                              | ------- Hour:Min -------- |      |Min:Sec
From| To  |In...|Out..|Abndn|In...  |Out...|Total |All    |# All|Avg All
    |     |Bound|Bound|Calls|Usage  |Usage |Usage |Busy   | Busy|  Busy
----+---  -+-----+-----+-----+-------+------+------+-------+-----+------
06:00|06:30|     |     |     |       |      |      |       |     |
06:30|07:00|    1|     |     |   :00|      |   :00|       |     |
07:00|07:30|    5|    6|     |   :04|   :05|   :10|       |     |
07:30|08:00|    9|    4|    4|   :09|   :02|   :12|       |     |
08:00|08:30|   41|    8|    4|  1:42|   :12|  1:55|       |     |
08:30|09:00|   79|   26|    1|  3:20|   :33|  3:54|       |     |
09:00|09:30|  130|   49|    2|  7:41|  1:53|  9:35|       |     |
09:30|10:00|  136|   59|    1|  7:03|  1:34|  8:38|       |     |
10:00|10:30|  155|   85|    2|  9:59|  2:13| 12:12|       |     |
10:30|11:00|  151|   89|    1| 10:03|  3:44| 13:48|       |     |
11:00|11:30|  179|   89|    1| 11:47|  2:20| 14:08|       |     |
11:30|12:00|   98|   60|    1|  6:33|  1:59|  8:32|       |     |

Totals -     2341| 1167|   44|140:21| 37:13|177:34|   :00|    1|  :03

Print Now _   Clear Now _              [ Use the arrow keys to scroll.. ]
```

Figure 9–5 Group Utilization – 30 Minutes

9.4.8 SCREEN DEFINITIONS – 30 MINUTES

Period Covered — This line indicates the period from the last time the statistics were cleared until the current time that it is viewed (or printed).

From/To — This is the 30 minute period on which the system is reporting.

In Bound — The number of incoming calls received by trunks in each group on a 30 minute basis.

Out Bound — The number of outgoing calls initiated on trunks assigned to each group on a 30 minute basis.

Abndn Calls — Calls which were not answered in a 30 minute period.

In Usage — The time, in minutes and seconds, within a 30 minute period, for which the trunks assigned to a specific group were in use with incoming calls.

Out Usage — The time, in minutes and seconds, within a 30 minute period, for which the trunks assigned to a specific group were in use with outgoing calls.

Total Usage — The total amount of time, in minutes and seconds, within a 30 minute period, for which trunks assigned to a specific group were in use with both incoming and outgoing calls.

All Busy — The time, in minutes and seconds, within a 30 minute period, for which all trunks assigned to a specific group were busy.

 # All Busy — The total number of instances all trunks in a specific group were busy within a 30 minute time period.

Avg All Busy — This is the *Times All Busy* divided by the number *All Busy* to obtain the average time, in minutes and seconds, for which all the CO Lines assigned to a specific group were busy.

9.4.9 HOW TO ACCESS SCREEN (E) 15 MINUTES

ACTION — From the *Reports menu*, press E.

COMMENTS — Provides the same information as the Hourly report in 15 minute increments. The trunk group being displayed is indicated in the upper left corner.

COMMANDS — To move from one line group displayed to another, use **I** to increment, and **D** to decrement.

The **UP** and **DOWN** arrow keys can be used to scroll the screen to view the remaining hours.

To exit this screen and return to the *Reports Menu*, press ESCAPE on the keyboard.

NOTE: Although this screen offers CUMULATIVE information, it may be cleared at any interval desired through the use of the Print and Clear scheduler.

```
Line Group:01,              (E) HOURLY LINE GROUP UTILIZATION
                            --------------------------------
Period Covered: Mon 01-04-88 06:12  Through   Wed 01-06-88 11:31
                              | ------- Hour:Min -------- |      |Min:Sec
From| To  |In...|Out..|Abndn|In... |Out...|Total |All    |# All|Avg All
    |     |Bound|Bound|Calls|Usage |Usage |Usage |Busy   | Busy|  Busy
----+-----+-----+-----+-----+------+------+------+-------+-----+------
06:00|06:15|     |     |     |      |      |      |       |     |
06:15|06:30|     |     |     |      |      |      |       |     |
06:30|06:45|    1|     |     |  :00 |      |  :00 |       |     |
06:45|07:00|     |     |     |      |      |      |       |     |
07:00|07:15|    4|    3|     |  :04 |  :03 |  :07 |       |     |
07:15|07:30|    1|    3|     |  :00 |  :02 |  :02 |       |     |
07:30|07:45|    2|    4|     |  :02 |  :02 |  :04 |       |     |
07:45|08:00|    7|     |    4|  :07 |      |  :07 |       |     |
08:00|08:15|   19|    2|    2|  :34 |  :07 |  :41 |       |     |
08:15|08:30|   22|    6|    2| 1:07 |  :05 | 1:13 |       |     |
08:30|08:45|   30|   15|    1|  :58 |  :17 | 1:16 |       |     |
08:45|09:00|   49|   11|     | 2:22 |  :15 | 2:37 |       |     |

Totals -     2342| 1167|   44|140:28| 37:13|177:41|   :00|    1|  :03

Print Now _   Clear Now _              [ Use the arrow keys to scroll.. ]
```

Figure 9-6 Group Utilization - 15 Minutes

9.4.10 SCREEN DEFINITIONS - 15 MINUTES

Period Covered — This line indicates the period from the last time the statistics were cleared until the current time that it is viewed (or printed).

From/To — This is the 15 minute period on which the system is reporting.

In Bound — The number of incoming calls received by trunks assigned to each group on a 15 minute basis.

Out Bound — The number of outgoing calls initiated on trunks assigned to each group on a 15 minute basis.

Abndn Calls — Calls which were not answered in a 15 minute period.

In Usage — The time, in minutes and seconds, within a 15 minute period, for which trunks in a specific group were in use with incoming calls.

Out Usage — The time, in minutes and seconds, within a 15 minute period, for which trunks assigned to a specific group were in use with outgoing calls.

Total Usage — The total amount of time, in minutes and seconds, within a 15 minute period, for which trunks assigned to a specific group were in use. This is a total of the *In Usage* and the *Out Usage* columns.

All Busy — The time, in minutes and seconds, within a 15 minute period, for which all the trunks in a specific group were busy.

 # All Busy — The number of times all trunks assigned to a specific group were busy within a 15 minute time period.

Avg All Busy — This is the *Times All Busy* divided by the number *All Busy* to obtain the average time, in minutes and seconds, for which all trunks assigned to a specific group were busy.

9.5 LINE UTILIZATION

9.5.1 HOW TO ACCESS SCREEN (F) CUMULATIVE

ACTION — From the *Reports menu*, press F.

COMMENTS — The *Line Utilization* report makes it possible to measure individual line usage on a cumulative basis. It obtains information about line usage on both incoming and outgoing calls, abandoned calls on each line, bad calls, and indicates the group to which these lines are programmed.

COMMANDS — To exit this screen and return to the *Reports menu*, press ESCAPE on the keyboard.

The **UP** and **DOWN** arrow keys are used to scroll the screen to view the remaining installed lines. The screen displays the statistics for twelve lines at a time.

NOTE: Although this screen offers CUMULATIVE information, it may be cleared at any interval desired through the use of the Print and Clear scheduler.

```
                              LINE UTILIZATION (F)
                              --------------------
 Period Covered: Mon 01-04-88 06:12  Through   Wed 01-06-88 11:32

Line|Line  Name|Incom.|In Usg|Outgo.|OutUsg|Abndnd|B.Cals|Group
----+----------+------+------+------+------+------+------|-----
 001|555-2200  |   374| 20:57|      |      |    16|      | 01
 002|555-2201  |   306| 19:14|      |      |     7|      | 01
 003|555-2202  |   298| 17:42|      |      |     6|      | 01
 004|555-2203  |   239| 16:08|      |      |     2|      | 01
 005|555-2204  |   235| 13:05|      |      |     2|      | 01
 006|555-2205  |   222| 11:46|      |      |     1|      | 01
 007|555-2206  |   190| 10:11|      |      |     2|      | 01
 008|555-2207  |   141|  8:46|      |      |     3|      | 01
 009|555-2208  |   115|  6:54|      |      |      |      | 01
 010|555-2209  |    75|  5:50|      |      |     1|      | 01
 011|555-2210  |    62|  4:07|      |      |     1|      | 01
 012|555-2211  |    39|  2:33|     1|   :00|     1|      | 01

Tot:          |  2363|143:01|  3198|131:27|    44|      |

Print Now _   Clear Now _              [ Use the arrow keys to scroll.. ]
```

Figure 9-7 Line Utilization – Cumulative

9.5.2 SCREEN DEFINITIONS - CUMULATIVE

Period Covered — This line indicates the period from the last time the statistics were cleared until the current time that it is viewed (or printed).

Line — This 3-digit number indicates the specific trunk number for which statistics are being accumulated.

Line Name — The telephone number or name assigned to a specific line in system programming.

Incom. — The number of incoming calls received on a specific line during the cumulative time period.

In Usg — The amount of time, in hours and minutes, that a specific line was in use with incoming calls.

Outgo. — The number of outgoing calls made on a specific line during the cumulative time period.

OutUsg — The amount of time, in hours and minutes, that a specific line was in use with outgoing calls.

Abndnd — This column indicates how many calls were abandoned by Outside callers after receiving no answer on a specific trunk.

B.Cals — This column indicates how many bad calls (calls which were received by the system on a line which was not functioning properly) were reported through a *Bad Line* key at an extension.

Group — The trunk group to which a specific line is assigned.

9.5.3 HOW TO ACCESS SCREEN (G) DAILY

ACTION — From the *Reports menu*, press G.

COMMENTS — This *Line Utilization* report makes it possible to measure line usage on a daily (24 hour) basis. It obtains information about line usage on both incoming and outgoing calls, abandoned calls on each line, bad call volume, dropped calls, and indicates the group to which these calls were directed.

COMMANDS — To exit this screen and return to the *Reports Menu*, press ESCAPE on the keyboard.

The **UP** and **DOWN** arrow keys are used to scroll the screen to view the remaining installed lines. The screen displays the statistics for twelve lines at a time.

NOTE: Although this screen offers DAILY information, it may be cleared at any interval desired through the use of the Print and Clear scheduler.

```
                        DAILY LINE UTILIZATION (G)
                        --------------------------
 Period Covered: Wed 01-06-88 00:02  Through   Wed 01-06-88 11:33

Line|Line  Name|Incom.|In Usg|Outgo.|OutUsg|Abndnd|B.Cals|DscSpv|OutSrv|Group
----+----------+------+------+------+------+------+------+------+------+-----
 001|555-2200  |    58|  2:43|      |      |     2|      |      |      | 01
 002|555-2201  |    24|  2:16|      |      |     1|      |      |      | 01
 003|555-2202  |    43|  2:09|      |      |      |      |      |      | 01
 004|555-2203  |    29|  1:55|      |      |      |      |      |      | 01
 005|555-2204  |    21|  1:25|      |      |      |      |     1|      | 01
 006|555-2205  |    25|  1:39|      |      |      |      |      |      | 01
 007|555-2206  |    23|  1:18|      |      |      |      |      |      | 01
 008|555-2207  |    15|  1:21|      |      |      |      |      |      | 01
 009|555-2208  |    16|   :44|      |      |      |      |      |      | 01
 010|555-2209  |     8|   :29|      |      |      |      |      |      | 01
 011|555-2210  |     8|   :20|      |      |     1|      |      |      | 01
 012|555-2211  |     5|   :29|      |      |      |      |      |      | 01

Tot:          |   285| 17:36|   383| 14:37|     4|      |     2|      |

Print Now _   Clear Now _              [ Use the arrow keys to scroll.. ]
```

Figure 9-8 Line Utilization – Daily

9.5.4 SCREEN DEFINITIONS – DAILY

Period Covered — This line indicates the period from the last time the statistics were cleared until the current time that it is viewed (or printed).

Line — This 3–digit number indicates the specific trunk number for which statistics are being accumulated.

Line Name — The telephone number or name assigned in system programming to a specific line.

Incom. — The number of incoming calls made to a specific line during a 24 hour time period.

In Usg — The amount of time, in hours and minutes, within the 24 hour time period, that a specific trunk was in use with incoming calls.

Outgo. — The number of outgoing calls made on a specific trunk during the 24 hour time period.

OutUsg — The amount of time, in hours and minutes, within the 24 hour time period, when a specific trunk was in use with outgoing calls.

Abndnd — This column indicates how many calls were abandoned by Outside callers after receiving no answer on a specific line.

B.Cals — This column indicates how many bad calls (calls which were received by the system on a line which was not functioning properly) were reported through a *Bad Line* key at an extension.

DscSpv — The number of calls released from the system, in a 24 hour time period, due to a drop signal from the Central Office.

OutSrv — The number of times within a 24 hour period which a specific line was taken out of service by the system.

Group — The trunk group to which a specific line is assigned.

9.6 LCR STATISTICS

9.6.1 HOW TO ACCESS SCREEN (H)

ACTION — From the *Reports menu*, press H

COMMENTS — This screen offers information on Least Cost Routing (LCR) statistics, including the name of the long distance carrier, the number of calls made on that service, call overflows, the number of times the system took a specific long distance carrier out of service, number of bad calls, and a cumulative cost for calls made through each specific service.

COMMANDS — To exit this screen and return to the Reports Menu, press ESCAPE on the keyboard.

NOTE: Although this screen offers CUMULATIVE information, it may be cleared at any interval desired through the use of the Print and Clear scheduler.

```
                              LCR STATISTICS (H)
                              ------------------
 Period Covered: Fri 01-01-88 08:02  Through   Wed 01-06-88 11:33

  Service |Num of|Total |Calls |Out of| Bad  | Total
    Name  |Calls |Usage |Ovflow| Serv |Calls | Cost
----------+------+------+------+------+------+-------
DDD       | 1220 | 38:31|    1 |      |      |$  121.41
SPR       |      |      |      |      |      |$     .00
FX 203777|  113 |  3:37|    3 |      |      |$    6.60
FX 203384|  251 |  7:01|  110 |      |      |$   31.46
IWT 1     |  391 | 13:46|  109 |      |      |$  150.17
SPN       | 1297 | 70:57|      |      |      |$  812.21
          |      |      |      |      |      |$     .00
          |      |      |      |      |      |$     .00
          |      |      |      |      |      |$     .00
          |      |      |      |      |      |$     .00

Totals:   | 3273 |133:56|  223 |      |      |$ 1121.88


Print Now _   Clear Now _
```

Figure 9-9 LCR Statistics

9.6.2 SCREEN DEFINITIONS - LCR STATISTICS

Period Covered — This line indicates the period from the last time the statistics were cleared until the current time that it is viewed (or printed).

Service Name — The name of the Long Distance services, (MCI, Sprint, etc.) being used with the system.

Num of Calls — The number of calls made during the cumulative period using each service.

Total Usage — The amount of time, in hours and minutes, calls were made using each service during the cumulative time period.

Calls Overflow — The number of calls attempting to use a particular Long Distance service which had to be diverted to the *next* least expensive carrier because the lines assigned to the desired service were all in use.

Out of Serv — The number of times a particular Long Distance carrier is taken out of service during the cumulative time period.

The system can be programmed to take a long distance carrier choice out of service for several minutes if dial tone is not received from the carrier.

Bad Calls — The number of Bad calls on lines associated with each Long Distance service used with the system. These bad line calls are entered into the system by use of a Bad Line key programmed at the individual stations.

Total Cost — The total cost accumulated by each Long Distance service during the cumulative time period.

9.7 EXTENSION SUMMARY

9.7.1 HOW TO ACCESS SCREEN (I) EXTENSION SUMMARY

ACTION

From the *Reports menu*, press I.

COMMENTS

The *Extension Summary* presents information on each extension installed in the system. The name of the individual assigned to each extension, and a report on the total number of incoming and outgoing calls, the cost of these calls, and the duration of each call is summarized.

COMMANDS

To exit this screen and return to the *Reports Menu*, press ESCAPE on the keyboard.

Use the **UP** and **DOWN** arrow keys to scroll the screen in order to view the statistic of the remaining extensions. The screen displays twelve extensions at a time.

NOTE: Although this screen offers CUMULATIVE information, it may be cleared at any interval desired through the use of the Print and Clear scheduler.

```
                              EXTENSION SUMMARY (I)
                              ---------------------
 Period Covered: Wed 01-06-88 08:04  Through   Wed 01-06-88 11:34

Ext|   Name    |Tot Calls|Tot  Cost|Incoming |In Time  | Outgoing|Out Time
061|CHARLIE    |         |$     .00|         |         |         |
062|FRED       |         |$     .00|         |         |         |
063|BETTY      |      21 |$    3.36|       4 |    :26  |      17 |    :33
064|JIM        |      15 |$    8.01|       3 |    :14  |      12 |    :31
065|TOM        |      19 |$    7.11|       3 |    :22  |      16 |    :28
066|DAWN       |       2 |$     .93|         |         |       2 |    :01
067|MILLIE     |       6 |$     .00|       6 |    :10  |         |
068|EDWARD     |      17 |$    4.18|       8 |    :33  |       9 |    :07
069|PAT        |       1 |$     .00|       1 |    :03  |         |
070|SUSAN      |      13 |$    3.59|       7 |    :27  |       6 |    :19
071|KIM        |       6 |$     .85|       4 |    :11  |       2 |    :03
072|LINDA      |       7 |$    1.63|       1 |    :32  |       6 |    :43

TOTALS:        |     677 |$  130.40|     287 |  14:23  |     390 |  14:09



Print Now _   Clear Now _              [ Use the arrow keys to scroll.. ]
```

Figure 9–10 Extension Summary

9.7.2 SCREEN DEFINITIONS - EXTENSION SUMMARY

Period Covered — This line indicates the period from the last time the statistics were cleared until the current time that it is viewed (or printed).

Ext — The number of the extension the summary is for.

Name — The name assigned to the extension in the system directory.

Tot Calls — The total number of incoming and outgoing calls made or received by an extension.

Tot Cost — The total cost of outgoing calls made or received by an extension. A Least Cost Routing data base is needed for call costing.

Incoming — The number of incoming calls (ringing directly or transferred) to a specific extension.

In Time — The amount of time spent by each particular extension on incoming calls.

Outgoing — The number of outgoing calls made by a specific extension.

Out Time — The amount of time spent by each particular extension on outgoing calls.

NOTE: Due to differences in timing calls, the totals for extensions on the Extension Summary *report may differ from those found on* SMDR *and* Call Accounting Reports.

9.8 SYSTEM UTILIZATION

9.8.1 HOW TO ACCESS SCREEN (J) SYSTEM STATISTICS

ACTION — From the *Reports menu*, press J.

COMMENTS — This report gives statistics on the system's call history. This report includes the total number of calls, the cost of outgoing calls, and a break down of incoming, unanswered, Internal (Icm) calls, and unanswered calls. The report also offers information on call wait time, and percentages of how many calls waited to be answered for different periods of time, thus making analysis of system and line utilization accurate and informative.

COMMANDS — To exit this screen and return to the *Reports Menu*, press ESCAPE on the keyboard.

NOTE: This screen may be cleared at any interval desired through the use of the Print and Clear scheduler.

```
                              SYSTEM CALL HISTORY (J)
                              ----------------------
 Period Covered: Wed 01-06-88 08:04  Through   Wed 01-06-88 11:35

Tot Calls|LCR Calls|Reg Calls|Icm Calls|Incoming |Unanswrd
     868 |     382 |      11 |     185 |     290 |       3

Tot Cost |LCR Cost |Reg Cost
$  130.57|$  124.29|$    6.28

 Call wait time:
  5 Sec  | 10 Sec  | 20 Sec  | 30 Sec  | 45 Sec  | 60 Sec  | 90 Sec  |  Over
    143  |     189 |     251 |     281 |     289 |     290 |         |
%  49.31 |%  65.17 |%  86.55 |%  96.89 |%  99.65 |% 100.00 |         |


Print Now _   Clear Now _
```

Figure 9–11 System Statistics

9.8.2 SCREEN DEFINITIONS - SYSTEM STATISTICS

Period Covered — This line indicates the period from the last time the statistics were cleared until the current time that it is viewed (or printed).

Tot Calls — The total number of incoming and outgoing calls made or received through the system within the cumulative time period.

LCR Calls — Total number of outgoing calls which originated from the system using Least Cost Routing lines during the cumulative time period.

Reg Calls — The total number of regular outgoing (non LCR) calls which originated from the system during the cumulative time period.

Icm Calls — The total number of Intercom (Internal) calls made during the cumulative time period.

Incoming — The number of incoming calls which were made to the system during the cumulative time period.

Unanswrd — The total number of unanswered calls which were registered by the system during the cumulative time period. These are calls which the system detects as ringing but were not answered.

Tot Cost — The total cost of all outgoing calls made from the system, including those made through Least Cost Routing (LCR) and regular CO lines.

LCR Cost — The total cost of outgoing calls which were made using Least Cost Routing (LCR).

Reg Cost — The total cost of outgoing calls which were made using regular CO lines.

Call wait time — The Call wait time columns in this report break down the number of calls which waited 5, 10, 20, 30, 45, 60, 90, or over 90 seconds to be answered during the cumulative time period. Each column also offers information on the percentage of calls which waited for each time period.

9.8.3 HOW TO ACCESS SCREEN (K) 60 MINUTES

ACTION — From the *Reports menu*, press K.

COMMENTS — This report includes information on system statistics on an hourly (60 minute) basis. Areas covered include time periods covered, the number of incoming and outgoing calls, abandoned calls, the total hours and minutes that the system is in use with incoming calls, outgoing calls, and a total of both, the minutes and seconds and number of instances that the system lines are all busy, and an average time for which the system is all busy.

COMMANDS — To exit this screen, and return to the *Reports Menu*, press ESCAPE on the keyboard.

The **UP** and **DOWN** arrow keys can be used to scroll the screen to view the remaining hours. The screen displays twelve 1 hour periods at a time.

NOTE: This screen may be cleared at any interval desired through the use of the Print and Clear scheduler.

```
                          (K) HOURLY SYSTEM UTILIZATION
                          -----------------------------
Period Covered: Wed 01-06-88 08:04  Through   Wed 01-06-88 11:35
                                | ------- Hour:Min -------- |     |Min:Sec
From| To  |In...|Out..|Abndn|In... |Out...|Total |All   |# All|Avg All
    |     |Bound|Bound|Calls|Usage |Usage |Usage |Busy  | Busy|  Busy
-----+-----+-----+-----+-----+------+------+------+------+-----+------
06:00|07:00|     |     |     |      |      |      |      |     |
07:00|08:00|     |     |     |      |      |      |      |     |
08:00|09:00|   28|   39|     |  1:30|  1:14|  2:44|   :09|    5|   1:56
09:00|10:00|   88|  104|    1|  5:15|  4:50| 10:05|   :10|   10|   1:01
10:00|11:00|   99|  129|    2|  6:51|  5:31| 12:22|   :28|   23|   1:13
11:00|12:00|   78|  121|     |  4:43|  3:15|  7:58|   :15|    8|   1:54
12:00|13:00|     |     |     |      |      |      |      |     |
13:00|14:00|     |     |     |      |      |      |      |     |
14:00|15:00|     |     |     |      |      |      |      |     |
15:00|16:00|     |     |     |      |      |      |      |     |
16:00|17:00|     |     |     |      |      |      |      |     |
17:00|18:00|     |     |     |      |      |      |      |     |

Totals -      293|  393|    3| 18:20| 14:51| 33:11|  1:03|   46| 1:22

Print Now _   Clear Now _              [ Use the arrow keys to scroll.. ]
```

Figure 9–12 System Utilization – 60 Minutes

9.8.4 SCREEN DEFINITIONS - 60 MINUTES

Period Covered This line indicates the period from the last time the statistics were cleared until the current time that it is viewed (or printed).

From/To This is the hourly period on which the system is reporting.

In Bound The number of incoming calls made to the system in the indicated time period.

Out Bound The number of outgoing calls made from the system in the indicated time period.

Abndn Calls The number of calls which were unanswered by the system.

In Usage The amount of time, in hours and minutes, that the system was in use with incoming calls during the indicated time period.

Out Usage The amount of time, in hours and minutes, that the system was in use with outgoing calls during the indicated time period.

Total Usage The amount of time, in hours and minutes, that the system was in use with incoming and outgoing calls during the indicated time period.

All Busy The amount of time, in hours and minutes, that all lines in the system were busy during the indicated time period.

 # All Busy The number of times that all the trunks in the system were busy during the indicated time period.

Avg All Busy This is the *Times All Busy* divided by the number *All Busy* to obtain the average time, in minutes and seconds, for which all trunks assigned to a specific group were busy.

9.8.5 HOW TO ACCESS SCREEN (L) 30 MINUTES

ACTION — From the *Reports menu*, press L.

COMMENTS — This report provides the same information as the Hourly report in 30 minute increments.

COMMANDS — To exit this screen, and return to the *Reports Menu*, press ESCAPE on the keyboard.

The **UP** and **DOWN** arrow keys can be used to scroll the screen to view the remaining hours. The screen displays twelve 30 minute periods at a time.

NOTE: This screen may be cleared at any interval desired through the use of the Print and Clear scheduler.

```
                          (L) HOURLY SYSTEM UTILIZATION
                          -----------------------------
Period Covered: Wed 01-06-88 08:04  Through   Wed 01-06-88 11:36
                                | ------- Hour:Min -------- |      |Min:Sec
From| To  |In...|Out..|Abndn|In... |Out...|Total |All    |# All|Avg All
    |     |Bound|Bound|Calls|Usage |Usage |Usage |Busy   | Busy|  Busy
----+-----+-----+-----+-----+------+------+------+-------+-----+------
06:00|06:30|     |     |     |      |      |      |       |     |
06:30|07:00|     |     |     |      |      |      |       |     |
07:00|07:30|     |     |     |      |      |      |       |     |
07:30|08:00|     |     |     |      |      |      |       |     |
08:00|08:30|   7|    9|     |   :36|   :20|   :56|   :07|    2|   3:35
08:30|09:00|  21|   30|     |   :53|   :54|  1:47|   :02|    3|    :50
09:00|09:30|  42|   47|     |  2:52|  2:21|  5:13|   :05|    5|   1:05
09:30|10:00|  46|   57|    1|  2:23|  2:29|  4:52|   :04|    5|    :58
10:00|10:30|  50|   57|    1|  3:41|  1:44|  5:25|   :06|    6|   1:08
10:30|11:00|  49|   72|    1|  3:10|  3:47|  6:57|   :21|   17|   1:15
11:00|11:30|  68|  106|     |  4:23|  3:01|  7:25|   :13|    7|   1:56
11:30|12:00|  11|   15|     |   :23|   :13|   :36|   :01|    1|   1:43

Totals -     294|  393|    3| 18:24| 14:51| 33:16|  1:03|   46|   1:22

Print Now _   Clear Now _              [ Use the arrow keys to scroll.. ]
```

Figure 9–13 System Utilization – 30 Minutes

9.8.6 SCREEN DEFINITIONS – 30 MINUTES

Period Covered — This line indicates the period from the last time the statistics were cleared until the current time that it is viewed (or printed).

From/To — This is the 30 minute period on which the system is reporting.

In Bound — The number of incoming calls made to the system in a 30 minute time period.

Out Bound — The number of outgoing calls made from the system in a 30 minute time period.

Abndn Calls — The number of calls which were unanswered in a 30 minute time period.

In Usage — The amount of time, in hours and minutes, that the system was in use with incoming calls during a 30 minute time period.

Out Usage — The amount of time, in hours and minutes, that the system was in use with outgoing calls during a 30 minute time period.

Total Usage — The amount of time, in hours and minutes, that the system was in use with incoming and outgoing calls during a 30 minute time period.

All Busy — The amount of time, in hours and minutes, that all trunks in the system were busy during a 30 minute time period.

 # All Busy — The number of times that all the lines in the system were busy during a 30 minute time period.

Avg All Busy — This is the **Times All Busy** divided by the number **All Busy** to obtain the average time, in minutes and seconds, for which all trunks assigned to a specific group were busy.

9.8.7 HOW TO ACCESS SCREEN (M) 15 MINUTES

ACTION — From the *Reports menu*, press M.

COMMENTS — This report provides the same information as the Hourly report in 15 minute increments.

COMMANDS — To exit this screen, and return to the *Reports Menu*, press ESCAPE on the keyboard.

The **UP** and **DOWN** arrow keys can be used to scroll the screen to view the remaining hours. The screen displays twelve 15 minute periods at a time.

NOTE: This screen may be cleared at any interval desired through the use of the Print and Clear scheduler.

```
                          (M) HOURLY SYSTEM UTILIZATION
                          -----------------------------
 Period Covered: Wed 01-06-88 08:04  Through   Wed 01-06-88 11:36
                                | ------- Hour:Min -------- |     |Min:Sec
 From| To  |In...|Out..|Abndn|In... |Out...|Total |All   |# All|Avg All
     |     |Bound|Bound|Calls|Usage |Usage |Usage |Busy  | Busy|  Busy
-----+-----+-----+-----+-----+------+------+------+------+-----+------
09:00|09:15|   19|   24|     |  1:06|  1:16|  2:23|   :04|    4|  1:11
09:15|09:30|   23|   23|     |  1:45|  1:04|  2:50|   :00|    1|   :41
09:30|09:45|   23|   31|     |  1:29|  1:11|  2:41|   :04|    5|   :58
09:45|10:00|   23|   26|    1|   :53|  1:17|  2:11|      |     |
10:00|10:15|   17|   26|     |  1:01|   :28|  1:29|   :00|    2|   :28
10:15|10:30|   33|   31|    1|  2:40|  1:15|  3:55|   :05|    4|  1:29
10:30|10:45|   28|   22|     |  1:47|  1:17|  3:04|   :11|    7|  1:36
10:45|11:00|   21|   50|    1|  1:22|  2:29|  3:52|   :10|   10|  1:00
11:00|11:15|   32|   49|     |  1:45|  1:21|  3:07|   :06|    3|  2:08
11:15|11:30|   36|   57|     |  2:38|  1:39|  4:17|   :07|    4|  1:47
11:30|11:45|   12|   16|     |   :24|   :15|   :39|   :01|    1|  1:43
11:45|12:00|     |     |     |      |      |      |      |     |

Totals -      295|  394|    3| 18:25| 14:53| 33:18|  1:03|   46| 1:22

Print Now _   Clear Now _          [ Use the arrow keys to scroll.. ]
```

Figure 9-14 System Utilization - 15 Minutes

9.8.8 SCREEN DEFINITIONS – 15 MINUTES

Period Covered — This line indicates the period from the last time the statistics were cleared until the current time that it is viewed (or printed).

From/To — This is the 15 minute period on which the system is reporting.

In Bound — The number of incoming calls made to the system in a 15 minute time period.

Out Bound — The number of outgoing calls made from the system in a 15 minute time period.

Abndn Calls — The number of calls which were unanswered in a 15 minute time period.

In Usage — The amount of time, in hours and minutes, that the system was in use with incoming calls during a 15 minute time period.

Out Usage — The amount of time, in hours and minutes, that the system was in use with outgoing calls during a 15 minute time period.

Total Usage — The amount of time, in hours and minutes, that the system was in use with incoming and outgoing calls during a 15 minute time period.

All Busy — The amount of time, in hours and minutes, that all trunks in the system were busy during a 15 minute time period.

 # All Busy — The number of times that all the trunks in the system were busy during a 15 minute time period.

Avg All Busy — This is the **Times All Busy** divided by the number **All Busy** to obtain the average time, in minutes and seconds, for which all trunks assigned to a specific group were busy.

9.9 PRINTING AND CLEARING REPORTS MANUALLY

Each report may be printed and/or cleared manually. When an individual report screen is selected, the cursor is positioned in the lower left corner of the screen, next to *Print Now*. In order to **PRINT** a specific report, press Y (yes) on the keyboard. The system prints the report as soon as the Y (yes) key is pressed.

The report prints to the printer listed in the *Report Scheduler*. If no printer is specified, the report prints to the printer designated as the SMDR printer.

In order to **CLEAR** that report, press the **RETURN** key, which moves the cursor to *Clear Now*. Press the Y (yes) key. The system clears the report as soon as the Y (yes) key is pressed. Refer to the section titled "NOTES ON CLEARING REPORTS" before attempting to clear any of the reports.

9.10 PRINTING AND CLEARING REPORTS AUTOMATICALLY

Each of the management reports can be programmed to automatically print and/or clear on a daily basis, or on a particular day of the week, or on a particular day of the month. The time of day when the report prints can also be programmed. A report programmed to print and/or clear on a daily basis can also be programmed to print and/or clear at regular intervals during the day. Three of the reports, the *Hourly, 30 Minute, and 15 Minute Group Utilization Reports (C, D, & E)*, are actually ten reports (one for each trunk group) each.

This programming is accomplished using the *Report Print/Clear Scheduler*.

REPORT SCHEDULER

		Weekly	Monthly	Daily	
Report	GRP	DOW,Time,Clr,Prt	DOM,Time,Clr,Prt	Prd,Strt,Clr,Prt	Printer
A		, 00 , N , N	, 00 , N , N	, 00 , Y , N	
B		, 00 , N , N	, 00 , N , N	, 00 , Y , N	
C	01	, 00 , N , N	, 00 , N , N	, 00 , Y , N	
D	01	, 00 , N , N	, 00 , N , N	, 00 , Y , N	
E	01	, 00 , N , N	, 00 , N , N	, 00 , Y , N	
F		, 00 , N , N	, 00 , N , N	, 00 , Y , N	
G		, 00 , N , N	, 00 , N , N	, 00 , Y , N	
H		, 00 , N , N	, 00 , N , N	, 00 , Y , N	
I		, 00 , N , N	, 00 , N , N	, 00 , Y , N	
J		, 00 , N , N	, 00 , N , N	, 00 , Y , N	
K		, 00 , N , N	, 00 , N , N	, 00 , Y , N	
L		, 00 , N , N	, 00 , N , N	, 00 , Y , N	
M		, 00 , N , N	, 00 , N , N	, 00 , Y , N	

ENTER THE LETTER X TO CLEAR THE AUTO PRINTOUT

Figure 9-15 Print/Clear Scheduler

When the system is turned on for the first time, a basic program configuration exists that allows the system to operate before any programming is done. The basic configuration is called the "default program" or just the "default". **The default program for the Print Scheduler is all reports are cleared daily at midnight (entered as 00 for the time) and are not printed.** This includes the reports designated as CUMULATIVE. They are cleared every day until programmed otherwise with the *Report Print/Clear Scheduler*.

Some of the system reports share common information which is held in system memory. **Clearing any one of these reports erases the common statistical information from memory, and the system begins collecting new information.** There are two such groups of reports: the *Group Utilization* reports for 60 minutes, 30 minutes, and 15 minutes (reports C,D, and E), and the *System Utilization* reports for 60 minutes, 30 minutes, and 15 minutes (reports K,L, and M). Therefore, if report D is cleared, reports C and E are also cleared. If report M is cleared, reports K and L are also cleared.

Do NOT clear any of the reports (manually or automatically) in these two groups until all of the desired information contained in each of the reports has been examined (or printed). This is especially important when programming the *Print/Clear Scheduler* (i.e. *Report Scheduler*). The system processes the requests to print and clear a report in the order in which they appear on the *Report Scheduler*. Therefore, to print report E, report C and D must not be cleared by the *Report Scheduler*. To print report M, report K and L must not be cleared by the *Report Scheduler*. When the M report is cleared, reports K and L will also be cleared.

Clearing the *System Statistics (J)* report also clears the *Calculated Average Call* on the *Least Cost Routing* programming screen.

If a report is programmed to print and clear, the report does not clear until it is printed.

9.10.1 WHAT TO PROGRAM

Review with the customer each of the reports and their use, and decide which reports the customer wishes to print on a regular basis. For each report, discuss when the customer would like the report to print. After deciding which reports to print and when, decide when these reports are to be cleared and restarted.

In order to accumulate statistics in a report for a week, change the "clr" (clear) in the daily column, and monthly column, for that report to N (no), and the "clr" (clear) in the weekly column to Y (yes).

In order to accumulate statistics in a report for a month, change the "clr" (clear) in the daily column, and weekly column, for that report to N (no), and the "clr" (clear) in the monthly column to Y (yes).

Reports C,D, and E each contain 10 reports, one for each of the 10 trunk groups in the system. Each one of the trunk group reports can be programmed to print/clear individually. Thus you can print a *Report By Hour* for trunk group 1 daily without printing the remaining trunk groups. **Remember NOT to clear the report until all the information desired for ALL the trunk groups on reports C,D, and E has been obtained.**

When programming a report to print monthly, do not choose days 29–31. The system prints the report on the specified day. If the month never reaches that day, the report will not print.

All reports default to the printer programmed as the SMDR printer.

9.10.2 REPORT PRINT/CLEAR SCHEDULER SCREEN

The *Report Print/Clear Scheduler* programming screen is divided into five major areas:

REPORT AND GROUP These columns define the report being programmed. The Group column refers to the trunk group for the report.

WEEKLY The columns in this area define the schedule for printing and/or clearing a report on a weekly basis.

- **DOW** The day of the week on which you wish to print and/or clear a report. The range is from Sun. to Sat.
- **Time** The hour at which you wish to print and/or clear a report. Enter the time in a 24 hour clock, for example enter 13 for 1 p.m.
- **Clr** Enter Y (yes) if you want to clear a report, or N (no) if you do not want to clear a report on a desired day and time.
- **Prt** Enter Y (yes) if you want to print a report, or N (no) if you do not want to print a report.

MONTHLY The columns in this area define the schedule for printing and/or clearing a report on a monthly basis.

- **DOM** The day of the month on which you wish to print and/or clear a report. The range is from 1 to 31.
- **Time** The hour at which you wish to print and/or clear a report. Enter the time in a 24 hour clock, for example enter 13 for 1 p.m.
- **Clr** Enter Y (yes) if you want to clear a report, or N (no) if you do not want to clear a report.
- **Prt** Enter Y (yes) if you want to print a report, or N (no) if you do not want to print a report.

DAILY The columns in this area define the schedule for printing and/or clearing a report on a daily basis.

- **Prd** The hourly period for which you wish to print and/or clear a report, in hourly increments from 01 through 23.
- **Strt** The hour at which you wish the report to print and/or clear. The report begins at this time and continues to print after every interval period (the time entered in the Prd column).
- **Clr** Enter Y (yes) if you want to clear a report, or N (no) if you do not want to clear a report after this interval.
- **Prt** Enter Y (yes) if you want to print a report, or N (no) if you do not want to print a report.

PRINTER This column defines which printer port (1–4) the report is sent to. The printer number is assigned on the System Programming screen. If there is no printer listed, or the printer is listed as 0, the report is sent to the port designated for the SMDR printer.

9.10.3 HOW TO PROGRAM THE REPORT SCHEDULER

From the *Reports menu*, press N. *Report Scheduler* appears. To exit the *Report Scheduler* and return to the *Reports Menu*, press ESCAPE on keyboard. The following keys are used to move around the *Report Scheduler* programming screen:

RETURN KEY Moves the cursor down the screen.

TAB KEY Moves the cursor across the screen.

UP ARROW KEY Increments the DOW (Day Of Week) and DOM (Day Of Month).

DOWN ARROW KEY Decrements the DOW (Day Of Week) and DOM (Day Of Month).

I and D KEY Increments and decrements the group numbers while in any column.

```
                              REPORT SCHEDULER
                 |-----Weekly-----|-----Monthly----|-----Daily------|
-----------------|----------------|----------------|----------------|-------
Report|GRP|DOW,Time,Clr,Prt|DOM,Time,Clr,Prt|Prd,Strt,Clr,Prt|Printer
------|---|----------------|----------------|----------------|-------
  A   |   |   , 00 , N , N |   , 00 , N , N |   , 00 , Y , N |
  B   |   |   , 00 , N , N |   , 00 , N , N |   , 00 , Y , N |
  C   | 01|   , 00 , N , N |   , 00 , N , N |   , 00 , Y , N |
  D   | 01|   , 00 , N , N |   , 00 , N , N |   , 00 , Y , N |
  E   | 01|   , 00 , N , N |   , 00 , N , N |   , 00 , Y , N |
  F   |   |   , 00 , N , N |   , 00 , N , N |   , 00 , Y , N |
  G   |   |   , 00 , N , N |   , 00 , N , N |   , 00 , Y , N |
  H   |   |   , 00 , N , N |   , 00 , N , N |   , 00 , Y , N |
  I   |   |   , 00 , N , N |   , 00 , N , N |   , 00 , Y , N |
  J   |   |   , 00 , N , N |   , 00 , N , N |   , 00 , Y , N |
  K   |   |   , 00 , N , N |   , 00 , N , N |   , 00 , Y , N |
  L   |   |   , 00 , N , N |   , 00 , N , N |   , 00 , Y , N |
  M   |   |   , 00 , N , N |   , 00 , N , N |   , 00 , Y , N |


ENTER THE LETTER X TO CLEAR THE AUTO PRINTOUT
```

Figure 9–16 Print/Clear Scheduler

9.10.4 EXAMPLE

Use the screen shown in Figure 9–17 for reference while looking at screen **N** on your programming terminal.

In the example, you will be entering information to print and clear the 30 minute *Group Utilization Report* for trunk group 5. This is report **D**. In the example, the report is to be printed and cleared on a weekly (Tuesday at 6 pm), monthly (at 1 am on the 1st), and printed at 6 hour intervals daily.

When the scheduler screen is first displayed, the cursor is located in the **GRP** column of Report A.

Press the **RETURN** key until the cursor reaches the **D** report.

Use the **I** (increment) and/or **D** (decrement) key to reach 05.

Weekly:

Use the **TAB** key to move the cursor right to the **DOW** column.

Use the **UP** or **DOWN** arrow key to increment or decrement to **Tue**, which is the day used in the example that you would like to to print and/or clear report **D** on a weekly basis.

Use the **TAB** key to move the cursor to the **Time** column. Enter 18 for 6 pm.

Use the **TAB** key to move the cursor to the **Clr** column. Type Y (yes).

Use the **TAB** key to move the cursor to the **Prt** column. Type Y (yes).

Monthly:

Use the **TAB** key to move the cursor right to the **DOM** column.

Use the **UP** or **DOWN** arrow key to increment or decrement to 01, which is the day used in the example that you would like to print and clear report **D** on a monthly basis.

Use the **TAB** key to move the cursor to the **Time** column. Enter 1 for 1 am.

Use the **TAB** key to move the cursor to the **Clr** column. Type in Y (yes).

Use the **TAB** key to move the cursor to the **Prt** column. Type Y (yes).

Daily:

Use the **TAB** key to move the cursor to the **Prd** column. This is the time period, in hours, at which time you want to print and/or clear report **D**. Type in 6.

Use the **TAB** key to move the cursor to the **Strt** column, and enter the hour at which time you want report **D** to begin to print.

Use the **TAB** key to move the cursor to the **Clr** column. Type in N (no).

Use the **TAB** key to move the cursor to the **Prt** column. Type Y (yes).

Printer:

Use the **TAB** key to move the cursor to the **Printer** column. Enter the number of the printer, 1 through 4 to which you want report **D** sent to be printed. This printer number must be assigned through System Programming, which is accessed by pressing **B** from the System Main Menu.

```
                          REPORT SCHEDULER
          |-----Weekly-----|-----Monthly----|-----Daily------|
----------|----------------|----------------|----------------|-------
Report|GRP|DOW,Time,Clr,Prt|DOM,Time,Clr,Prt|Prd,Strt,Clr,Prt|Printer
------|---|----------------|----------------|----------------|-------
 A    |   |                |                |                |
 B    |   |                |                |                |
 C    |   |                |                |                |
 D    |05 |Tue, 18:00, Y Y |Mon,23:00,Y   Y | 01, 23 , N , Y |     2
 E    |   |                |                |                |
 F    |   |                |                |                |
 G    |   |                |                |                |
 H    |   |                |                |                |
 I    |   |                |                |                |
 J    |   |                |                |                |
 K    |   |                |                |                |
 L    |   |                |                |                |
 M    |   |                |                |                |

ENTER THE LETTER X TO CLEAR THE AUTO PRINTOUT
```

Figure 9–17 Report Scheduler

9.11 WHAT DOES ALL THIS INFORMATION MEAN?

Do you have enough trunks to handle your outside line traffic?

Are you paying for trunks that are never (hardly ever) used?

How long is a customer (client) waiting before the phone is answered?

Are customers hanging up before being answered?

Do you need more answering positions? If so, do they need to be attended at all times, or are there peak periods of incoming traffic?

Are the majority of phone calls (in dollars) being made by the right people?

Are your long distance services being utilized?

One or more of the reports provided by the system can be used to help you answer these questions. The answers also depend on the individual business and your individual requirements.

One of the more useful pieces of information about your systems trunk traffic is a measure of how many times all the trunks in a particular group are busy. This information is found on the GROUP UTILIZATION reports, and can be accumulated for any period desired (CUMULATIVE REPORT), and analyzed for each trunk group for intervals of an hour (Report C), 30 minutes (report D), and 15 minutes (report E). If the information indicates that all trunks in a group are busy too many times (this depends on the individual business), it may be time to order more trunks for that group.

If there are no all busy indications, then perhaps there are too many trunks in a group. A look at Reports F and G (LINE UTILIZATION) will show how many times each individual line is used (incoming and outgoing). Trunks with very low usage may not be needed.

The SYSTEM CALL HISTORY contains information regarding the total number of calls handled by the system, how many calls are unanswered, and how long a time between the system detecting an incoming call and the call being answered by someone in the system.

The CALL WAIT TIME lists how many calls were answered within 5 seconds, how many were answered within 10 seconds, and so on at 20, 30, 45, 60, and 90 second intervals. Use this information along with the hourly reports to judge if more answering positions are needed.

Some of the reports contain information regarding the cost of trunk calls. The Least Cost Routing feature (optional) is needed to acquire the pricing information needed to cost calls. If the LCR feature is not installed in your system these columns will show a cost of $0.

If Least Cost Routing is installed, its performance can be displayed using Report H (LCR Statistics). The Calls Overflowed column gives an indication of calls that were routed to a second (or further) choice because the primary choice is all busy. This number may indicate the need for more trunks for a particular service.

The EXTENSION SUMMARY report gives a listing by extension of the telephone activity of a particular extension. This gives an indication of the number of calls handled by individuals, and gives a break down of incoming and outgoing calls. If the system is equipped with LCR a total cost for outgoing calls is also recorded.

The reports can also be of use for trouble shooting and maintaining the system. The LINE UTILIZATION reports contain information concerning abandoned calls (calls which the outside caller hangs up before someone in the system answered), bad lines (indicated by a station user pressing a "Bad Line" key on the telephone), calls which the system drops, and an indication of how many times the system has taken a particular line out of service.

Section 10
Applications

10.1 INTRODUCTION

The following few paragraphs contain some useful information, and some programming hints that came from real applications.

10.2 DAY/NIGHT SEQUENCE SWITCH

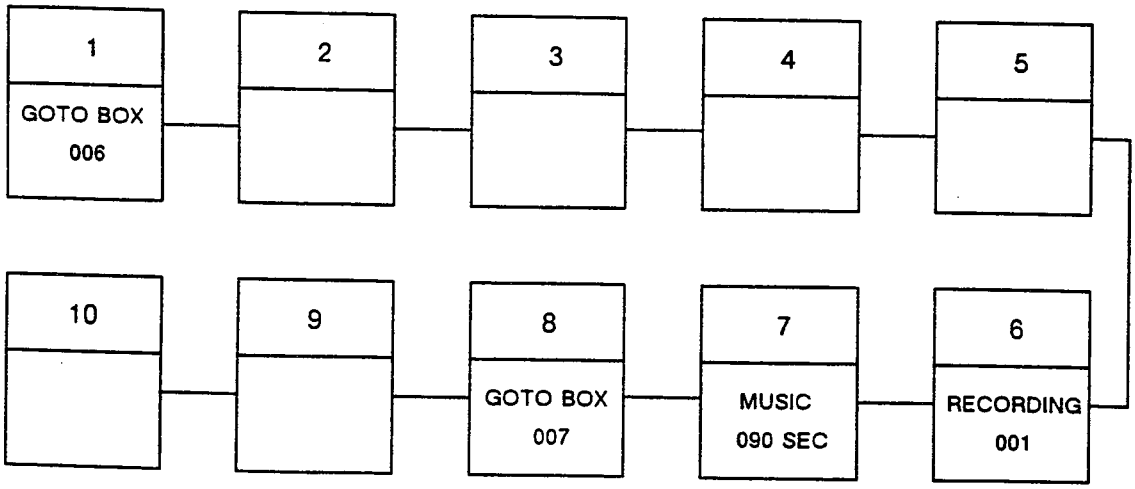
In a previous section it was noted that a call which is in queue when the system switches from DAY mode to NIGHT continues in the same instruction box in the NIGHT SEQUENCE. Provided below is an explanation on how to program an ACD system that will be utilizing both the DAY and NIGHT SEQUENCES.

EXAMPLE: There is a company that operates until 8:00 pm every day. This company would like to have all calls that come in up until 7:59 pm to be answered by their ACD agents. All calls that come into ACD after 7:59 pm they would like to send to a recording, and then release the line.

PROBLEM: When trying to set this sequence up with normal DAY AND NIGHT SEQUENCES, they noticed that calls that were in queue were being dropped when the system entered into NIGHT mode.

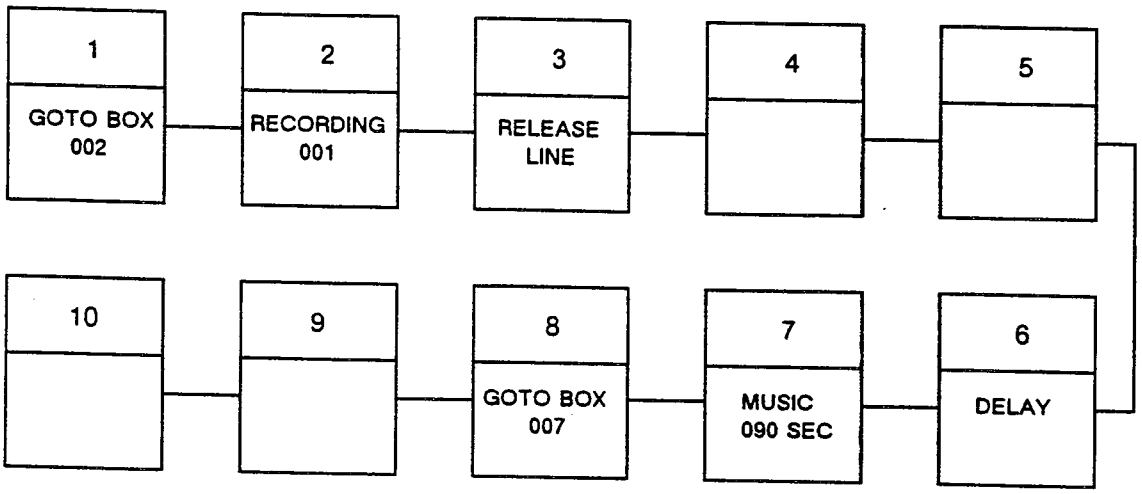
REASON: When ACD calls are in queue they are going through a sequence of boxes that are assigned numbers. When the system switches modes, either from day to night, or from night to day, the calls that are in queue are sent to the same box number of the opposite sequence. This means a call that was in day box 2 (recorder) can be sent to night box 2 (release) when the system switches from day mode to night mode.

Provided below is a possible solution to the example. During the day, all calls enter box 1 of the DAY SEQUENCE which directs calls to box 6 of the DAY SEQUENCE. In box 6 of the DAY SEQUENCE, begin by entering RECORDING 1. Box 7 will direct the call to MUSIC, and in box 8 send the call back to box 7.



DAY SEQUENCE

At night, send the new calls to box 2 which will have a short recording indicating that the company is closed. Then the call will be sent to box 3 which RELEASES the line. Set up boxes 6, 7, and 8 exactly like the DAY SEQUENCE (delay, music, goto 7). This will allow calls that were in the day queue to remain in the same queue and be handled by the ACD agents even though the system was entered into night mode.



NIGHT SEQUENCE

This is one of many solutions that can be used for this problem. Many other programming methods can be used as long as the DAY SEQUENCE boxes do not overlap the NIGHT SEQUENCE boxes.

10.3 DISCONNECT SUPERVISION

PROBLEM: Agents claim a large number of calls they connect to either have no one on the other end, or they hear dial tone.

No abandoned calls show on the ACD reports.

EXPLANATION: Most likely, the caller has hung up, but the line is still connected to the system. The system monitors the outside line for a disconnect signal while the call is waiting to be answered. If the system does not receive this signal, or is programmed to ignore it, the line is not dropped until an agent connects to the line and then hangs up.

If the incoming lines to the system are from a PBX, Centrex, or certain Central Offices, the disconnect signal when the calling party hangs up may not be sent to the system.

SOLUTION: The return to dial tone, or reorder tone heard when the caller disconnects, may be used to open each line by installing an AEC Disconnection Detection Unit.

This unit can detect tones in the 340 to 640 Hz range, and open the line loop when the tone is detected.

Also make certain the system is programmed to detect disconnect signals. The *Toll Options* on the *System Options* programming screen, and the *Drop Pulse* on the *System Programming* screen should be checked.

10.4 LINE PRIORITY

PROBLEM: A service company had both incoming DDD lines and 800 lines. This company wanted to use ACD, and have all 800 numbers coming into the ACD group answered before regular lines.

SOLUTION: This was accomplished by using line PRIORITY on ACD. All 800 lines were given line priority of 1. All incoming DDD lines were given line priority of 2. This means all 800 lines directed to the ACD group would be answered before the DDD lines.

10.5 DIVIDING GROUPS

PROBLEM: A service department has several agents which answer calls for two different companies. It is desired that both of these companies to be in one group so that agents do not have to log into different groups to answer different service calls.

Company A should be answered with one recording if no agents are available. Company B should be answered with a second recording B if no agents are available. Also when answering the call, lines in company A should be answered with Company A's name, and lines in company B should be answered with Company B's name.

SOLUTION: Assign the lines for Company A to ACD GROUP 1. In the SEQUENCE instruction boxes enter a sequence similar to this: DELAY, RECORDER 1, MUSIC, GOTO BOX 3.

Assign Company B lines to ACD GROUP 2. Enter a FORWARD command in instruction box 1 of GROUP 2 SEQUENCE that says, FORWARD TO ACD GROUP 1 BOX 6. Then in the SEQUENCE for ACD GROUP 1, beginning at box 6, enter a sequence similar to this: DELAY, RECORDER 2, MUSIC, GOTO BOX 8.

By entering these statements in the SEQUENCES for GROUP 1 and 2, ACD GROUP 1 is able to have all available agents assigned to it. Therefore, agents do not have to be specifically assigned to Company A or Company B. Also, both companies' lines receive the proper recording and are handled in the order they rang in.

There is one more part of the problem to solve. How does the agent know if the line ringing in is for Company A or Company B? This is solved by entering the lines for Company A in TRUNK GROUP 1 and lines for Company B in TRUNK GROUP 2. GROUP IN is then programmed to Yes on each extension used for ACD. TRUNK GROUP 1 and TRUNK GROUP 2 keys are also programmed on each extension used for ACD. This causes lines ringing for Company A to come in on TRUNK GROUP 1 keys, and lines ringing for Company B to come in on TRUNK GROUP 2 keys.

10.6 FORCED QUALIFICATION

PROBLEM 1: A service center receives several calls from different distributors, and would like to be able to track how many calls were received form each distributor.

SOLUTION 1: Use forced QUALIFICATION on ACD calls. This requires the ACD agent to enter a three digit number from 001 to 200 for each ACD call that was answered. To identify which distributor called, a cross reference list between numbers and distributors can be made. Each time a call comes to an ACD agent, after they are finished talking, they can reference the distributors name on the qualification list. The corresponding three digit qualification number can then be entered using the QUALIFY key.

PROBLEM 2: Calls can come in to the service center via ACD, or via lines not in the ACD.

SOLUTION 2: Use forced QUALIFICATION on non-ACD calls. This will require an ACD agent to enter a QUALIFICATION code for every call made while being logged on as an ACD agent.

The reports available in the ADVANCED and CUSTOM ACD feature packages indicate how many QUALIFICATIONS were made for each distributor.

10.7 AGENT PRIORITY

PROBLEM: A company using ACD wants to have several agents logged in to one group. They also want to be able to control the amount of ACD calls that are being placed to new employees.

SOLUTION: Use ACD agent priority. This number can be from 0 to 2. Highest priority is 0 and the lowest priority is 2. This means if a call enters into an ACD group and two agents are available, the first reference will be the agent priority number. If agent 1 has a priority of 0 and agent 2 has a priority of 1, the call will go directly to agent number 1 (regardless of the time each agent has been available).

10.8 PRIMARY AND SECONDARY SPLITS

A company has 4 agents, and two product lines to support. Product 1 sales are directed to ACD group 1. Product 2 sales are directed to ACD group 2. Product two is a very expensive item and gets very few calls during the day. Product 1 is a very popular item and gets many calls during the day.

PROBLEM: The company would like to have all agents logged into group 1 unless a call comes into group 2. If a call comes into group two, the customer would like it to be answered.

SOLUTION: Enter 1 next to primary group, and 2 next to secondary group on the *ACD Agent Setup* screen. This puts agents into both GROUPS when they log on. Also it gives them GROUP 1 calls first, and then GROUP 2 calls.

10.9 PARK FEATURE

Several calls enter into ACD group 1 in a very short period of time. The application requires the agents to handle the calls, and then give the call to a non–ACD telephone to be processed .

PROBLEM: In most ACD applications there are more CO lines than there are agents. The system only has ten orbit zones. This means that no more than 10 ACD lines can be put into orbit at any given time. This also means that ACD agents will become busy, and calls will stack up in ACD queue.

SOLUTION: Use the Park feature. This feature allows an ACD agent to handle an ACD call, and then press a PARK KEY. When this PARK key is pressed, the line will go into a park zone that is equal to its line number. Example: Line 53 would go into park zone 53. One important thing to note is in order to use this feature a display phone for all agents was necessary to indicate to the ACD agent which park zone they were entering the call into.

To retrieve a call that was entered into park, press the park key followed by the park zone number you would like to retrieve.

10.10 GUARANTEED MESSAGE

A guaranteed message is one that an ACD caller hears completely before being routed to an agent. The call is routed to a recorded message first even if ACD agents are available. Agents in a split with a guaranteed message sequence will receive incoming calls only after the caller has heard the entire recorded message.

PROBLEM: In some applications, the customer wishes callers who cannot be helped by agents to abandon the call. This would cut down on holding times for callers agents can help. Such action can increase sales and service without adding more agents.

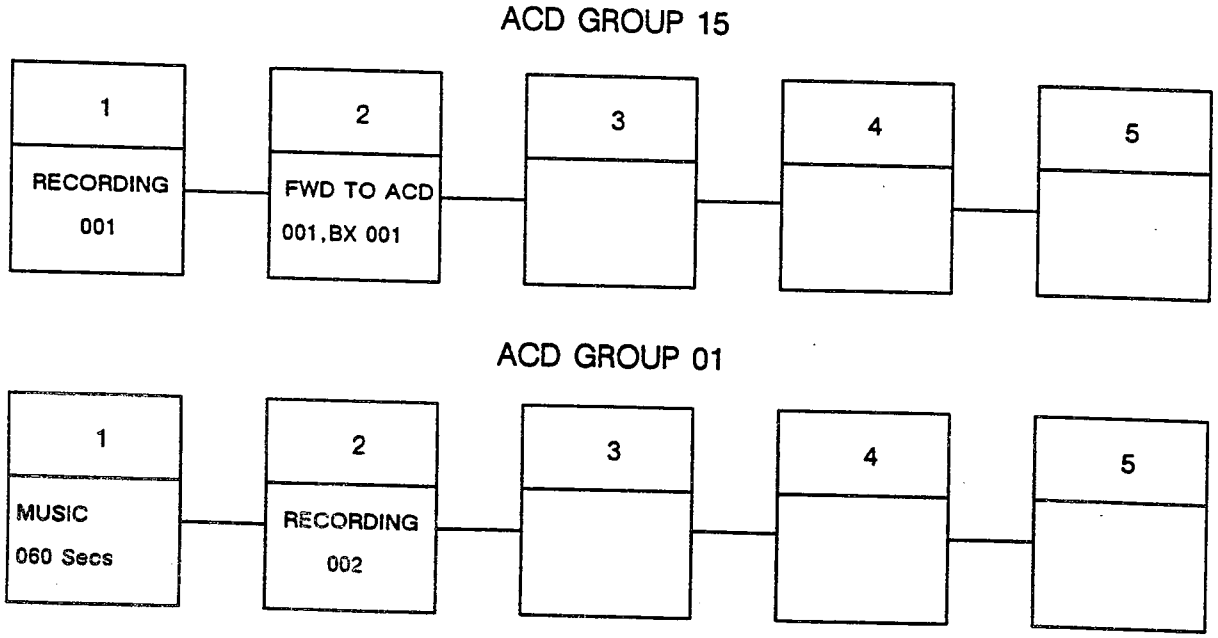
EXAMPLE: During a power outage, both cable and power utilities use a guaranteed message to inform customers that the outage had been reported, and crew has been dispatched.

EXAMPLE: A ticketing agency uses a guaranteed message to inform customers that tickets to a very popular event are sold out. Customers wishing tickets for this event can then hang up, while customers for other events can continue to hold for a ticketing agent.

EXAMPLE: During storms, a manufacturing firm uses a guaranteed message to inform customers and employees of office closings.

SOLUTION: Program incoming trunks to an ACD group whose first instruction is to send the call to a **recording**. Do **not** assign agents to this ACD group. Use the **Forward to ACD** instruction in the second box to route the call to the ACD group assigned to agents. This second ACD group should be programmed with the desired ACD sequence.

EXAMPLE: Direct incoming calls to ACD group 15 programmed as in the diagram below.



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