

**NEC**

NDA-30094  
REVISION 1  
STOCK # 151955

# **NEAX<sup>®</sup> 2000 IVS**

**ACD-MIS System Manual**

**(UAP Edition)**

APRIL, 1997  
NEC America, Inc.

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Printed in USA

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## CHAPTER 1 GENERAL DESCRIPTION

### 1. INTRODUCTION

Management Information System (MIS) is software that enhances the Automatic Call Distribution (ACD) feature of the NEAX2000 IVS. The ACD-MIS software provides a cost-effective means of supervising incoming telephone traffic and associated staff activity.

ACD-MIS permits incoming calls to terminate to a pre-arranged group of stations. Calls are distributed, in the order of arrival, to idle terminals within the group, based on which terminal has been idle the longest. Stations may log on/log off (with ID codes) from the ACD group. Supervisor stations may monitor agents' conversations. The ACD-MIS system provides real-time statistical reporting, supplemented by readily accessible help screens. ACD-MIS displays "Vacant" on logged off agent's D<sup>term</sup>.

ACD-MIS runs on the UAP as an OAI application. It communicates with the PABX using an Open Applications Interface (OAI) channel. ACD-MIS operates in conjunction with the "Log on, Log off, Break, and Work" features of the associated PABX.

Users interact with the system using screen-based menus. Menus provide access to separate functions for system configuration, system maintenance, reporting, and general administration.

This manual covers all ACD-MIS 5.x versions.

#### 1.1 Service Conditions

1. A maximum of 16 ACD groups may be assigned per system.
2. Up to 60 stations may be programmed into a single ACD group. Up to the system limit of 60 ACD stations may be programmed in the MIS PC.
3. Assignment of ACD groups is performed at the *Maintenance Administration Terminal* (MAT) or *Customer Administration Terminal* (CAT).
4. ACD Hunt groups consist of a phantom pilot station (programmed in CM10) and one or more member stations. Hunting is initiated in a circular fashion, and based on which member has been idle the longest period of time.
5. Agents must be assigned Prime Lines using CM93. Commands CM10, CM17, and CM93 must match with agent's Prime Line.
6. If all stations within the ACD group are busy, incoming calls may be serviced in the following ways:
  - remain in queue until an agent becomes available (Ringback Tone provided)
  - immediately overflow into another group, to a station, or to the Attendant
  - remain in queue until an agent becomes available (Delay Announcement or music on hold provided)
  - remain in queue for a preset time (Ringback Tone, Delay Announcement, or music on hold provided) then overflow to another group, to a station, or to the Attendant
7. Any agent in an ACD group may go into Break/Work mode. When an agent has activated Break/Work, any call targeted at the ACD group will by-pass that agent. Calls directed to the specific station number will ring at the agent position.

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8. Agents can log off their stations while idle, or while on an incoming outside call. If an agent is engaged in an ACD call and presses the Logged On, Break or Work Key, the status field of the STATUS MONITOR Screen will change from ACD Call to Logged Off, Break, or Work after the call is terminated.
9. When the pilot station has set *Call Forwarding - All Calls*, incoming calls to the ACD group will be transferred to the destination of that *Call Forwarding - All Calls* setting.
10. An ACD pilot number can be used as the destination station of *Direct Inward Termination (DIT)*, or as a designated *Night Service* station.
11. An ACD pilot number can be assigned as the destination station of *Off-Hook Alarms*, *Priority Calls*, and *Attendant Night Transfer*.
12. ACD group pilot numbers must not be placed in *Station Hunting* groups. The *Station Hunting* feature would take priority over the ACD function.
13. When a call has terminated to ACD group A, and all stations in group A are busy, and group B is assigned as the overflow destination (using *Call Forward-Busy*), the call is transferred to group B. When all the stations are busy in group B, the call queues onto ACD group A.
14. One overflow group can be provided for each ACD group. Overflow to another group is accomplished by setting *Call Forwarding - Busy Line* at the pilot station of the first ACD group.
15. When an ACD station becomes available, the caller is immediately connected to the station, even if the recorded announcement is in progress.
16. Incoming call billing to the outside party starts when the first recorded announcement begins.
17. A PN-2DATA board is required to provide the recorded announcement.
18. A Delay Announcement service can be provided for DIT, DID, or a trunk call transferred by a station user or the Attendant to a ACD Group. Internal calls or station-to-station transferred calls to the ACD Group can go into the ACD queue but do not receive the Delay Announcement.
19. Incoming calls will hunt past an agent that failed to log off, if *Call Forward - No Answer* (to another ACD number) has been set.
20. If ACD member has set *Call Forwarding - Busy Line* or *Call Forwarding - All Calls*, it is skipped in ACD hunting. However, if the ACD member that has set *Call Forwarding - Busy Line* or *Call Forwarding - All Calls* is called directly by another station, the *Call Forwarding - Busy Line* or *Call Forwarding - All Calls* destination takes effect.
21. The destination for delay overflow may be set to any station or Attendant Console. If the destination for delay overflow is an agent in the same ACD group, the call will stay in queue and hear the delay announcement repeated until the call is answered.
22. When the destination of delay overflow is a busy station (which is not a pilot of another ACD group), the incoming call will hear delay announcement for the programmed cycle. When the destination station becomes idle, the next cycle will provide overflow to the destination station.
23. If the destination station of delay overflow is in a hunt group, the hunt feature is followed.
24. If the destination station of delay overflow is set for *Call Forwarding - Busy Line* or *Call Forwarding - All Calls*, the call forwarding feature will be followed.
25. If the destination station of delay overflow is set to *Call Forwarding - Outside*, the call will stay in the ACD queue and hear the delay announcement repeated until the call is answered.

26. If the destination station of delay overflow is set to *Do Not Disturb*, the call will stay in the ACD queue and hear the delay announcement repeated until the call is answered.
27. Second Delay Announcement service can be provided for DIT, DID, or a trunk call transferred by a station user or the Attendant to an ACD Group, after the first Delay Announcement.
28. Priority Queuing is available for incoming trunk calls. The queue priorities are assigned on a trunk route basis or per station number on DID call.
29. The maximum number of queuing in each ACD group (hereinafter called Queue Size) can be specified by the system data. When the number of queuing calls reaches the pre-assigned queue size, new calls receive Busy Tone. Depending on the queue size, the Overflowed ACD call indication on a Multiline Terminal or on the external indicator is provided as shown by the information that follows:

Queue Size assigned by system data= $S$ ; Number of queuing calls= $N$

CONDITIONS	LAMP INDICATION	
	Multiline Terminal	External Indicator
$S = 1$	Steady on red	Lamp on
$1 \leq N < S$ ( $S \neq 1$ )	Steady on red	Lamp off
$S \leq N$ ( $S \neq 1$ )	Flashing red	Lamp on

30. An incoming Listed Directory Number (LDN) received from Direct-Inward Dialing (DID) line can be displayed on the LCD of a Multiline Terminal in the ACD group. System data is assigned on a trunk route basis.
31. A maximum of 90 ACD-MIS Log-On ID codes may be assigned per system.
32. Blank name will be shown on logged out agents and all statistic data will be cleared. When an agent has completely logged in, the agent's name will be shown in the name field. Other statistical values for that agent will be displayed (version 4.11 - 4.42).
33. Agents can log on at any phone in their group. The program will keep track of their activity for the statistic.
34. When OAI is disconnected for any reason, all agents are automatically logged off. When OAI is reconnected, they have to log on again.
35. Chimes for the  $D^{term}$  OAI keys can be programmed to be sent or not in PABX programming. Tones for analog stations are set up using an edit program for file MIS.TON.
36. The pilot station of the ACD group must be programmed in MIS station configuration (analog non-equipped).
37. There is a limitation of 100 max. incoming calls to an ACD group at one time.
38. MSF OAI keys for Log On with ID#, Break, and Work should be assigned to keys 1, 2, and 3, respectively, of each  $D^{term}$  set requiring MIS reporting.
39. Headset/handset button must be used in conjunction with an ADA adapter to switch the conversation between headset and handset.

## GENERAL DESCRIPTION

40. An agent on an outgoing call via the ACD line with MIS status set to available will stay available. The ACD-MIS does not have an outgoing call status.
41. When using the Create Report function, with FD inserted into Drive A, specify the destination as File. The report is saved as an ASCII file on the FD and can be imported into a spreadsheet program (e.g. Microsoft's Excel).
42. When using the Create Report function, specify the destination as Printer. A dot matrix or laser printer can be used to print the designated report.
43. ACD-MIS displays "Vacant" on logged off agent's D<sup>term</sup>.

## 2. SYSTEM OVERVIEW

ACD-MIS functions are accessible as six items on the main menu, plus additional items on submenus.

The ACD-MIS menu structure is illustrated in Figure 1-1. Each individual menu corresponds to a separate screen display. Dotted lines indicate access from a specific item within the main menu to an associated submenu.

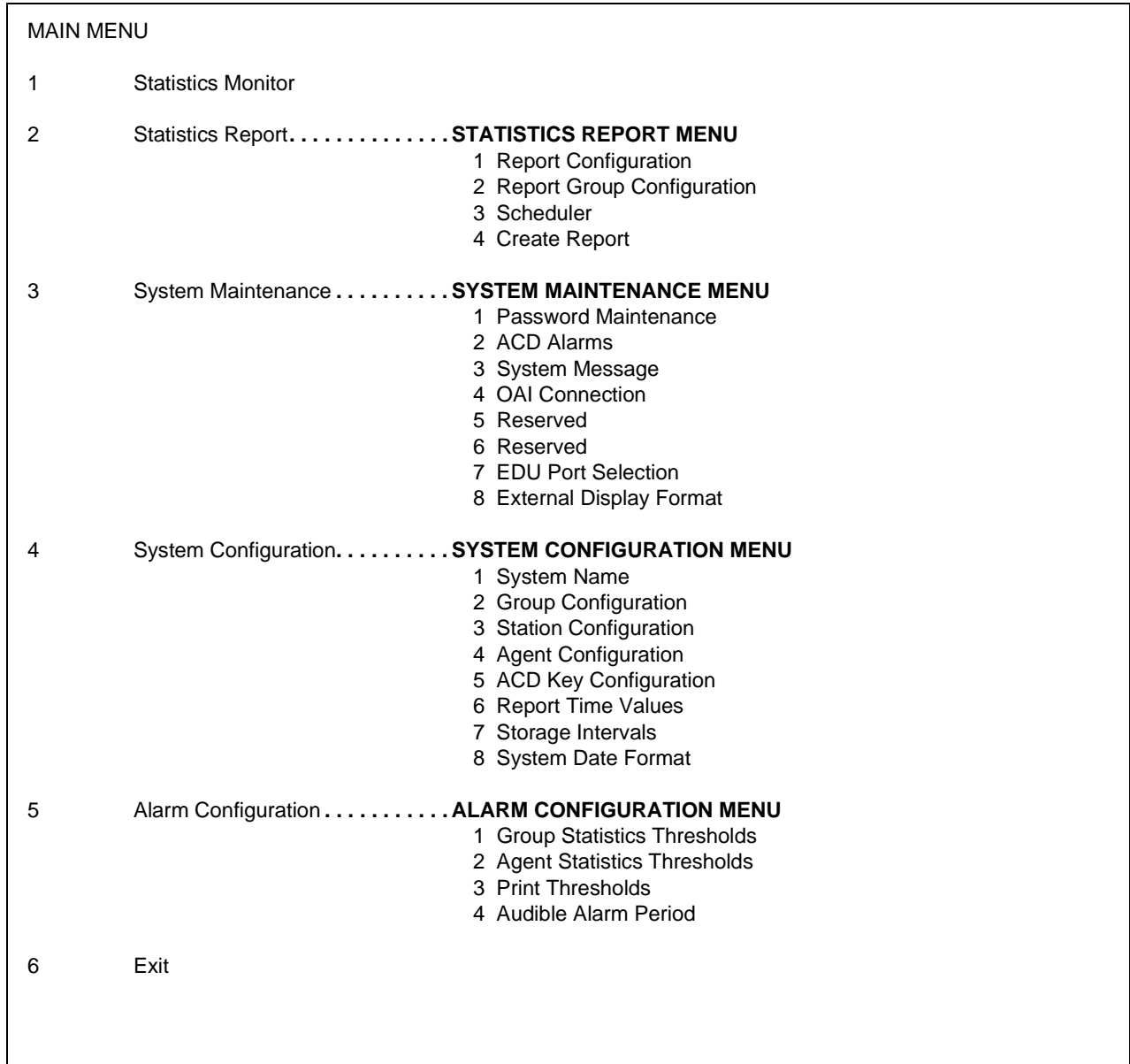


Figure 1-1 ACD-MIS Menu Structure

## GENERAL DESCRIPTION

### 2.1 Main Menu

ACD-MIS's main menu includes six menu items, described below, plus submenus. Each menu item is described in detail in the section referenced in brackets.

**1 - Statistics Monitor** Allows a general study of recorded statistics on received calls and their handling by assigned agents. (See [“Statistics Monitor”](#), Section 3.3.)

**2 - Statistics Report** Sets the structure of various reports, together with their output requirements for printout or display. This is done using the items listed in the associated submenu. (See [“Statistics Report”](#), Section 3.4.)

**3 - System Maintenance** Through its submenu, provides functions for system administration and management (including security passwords, two areas of alarm supervision, OAI control). (See [“System Maintenance”](#), Section 3.5.)

In addition, two menu items relate to set-up of the External Display Unit. (See [“External Display Unit \(EDU\)”](#), Section 3.2.)

**4 - System Configuration** Accesses procedures to program customer data during installation or when those specifications need to be changed.

The associated submenu includes facilities for programming the customer's preferred name for the system, detailing different ACD groups and their assigned agents, and setting basic parameters for the Statistics Monitor feature. (See [“System Configuration”](#), Section 3.6.)

**5 - Alarm Configuration** From its submenu, provides for the setting of call handling operational limits on a per-ACD group basis. If any limit is subsequently exceeded, visual warning indications are initiated to alert supervisory staff. The settings can be printed for reference. It also includes a facility for controlling the audible alarm associated with the Statistics Monitor feature. (See [“Alarm Configuration”](#), Section 3.7.)

**6 - Exit** Shuts down ACD-MIS (and returns to UNIX prompt) for maintenance purposes. Its use must be restricted, because call data from the PABX cannot be processed in this mode. (See [“Exit”](#), Section 3.8.)

### 3. SYSTEM FEATURES

This document covers ACD-MIS functions. Information is presented in the order in which items appear on the system menu.

#### 3.1 Terms and Definitions

The following terms and definitions are used in ACD-MIS's statistical reports. Some terms apply to all statistical reports; others apply to selected statistics (i.e., for system, groups, or agents). Times are measured in minutes and seconds (and displayed as mm:ss).

##### **GOS % (GRADE OF SERVICE % - All Statistics):**

GOS is the cumulative percentage of ACD calls that have been answered within a preset number of seconds throughout the day (i.e., from midnight). The value is calculated by the formula:

$$\frac{\text{Number of calls answered within the specified time limit (seconds)}}{\text{Total number of answered calls for the day}} \times 100\%$$

##### **AVG. TIME TALK (AVERAGE TIME TALKING - All Statistics):**

The average time agents spend in conversation on ACD calls.

##### **AVG. TIME ANSW (AVERAGE TIME ANSWER - All Statistics):**

The average time taken to answer ACD calls. For system and group statistics, this value is measured from the moment a call enters the queue. For agent statistics, this value is measured only from the moment an agent is rung and therefore excludes time spent waiting in the queue.

##### **WAITING LONG (WAITING LONGEST - System/Group Statistics):**

Amount of time the longest waiting ACD call has been queued.

##### **WAITING NO (WAITING NUMBER - System/Group Statistics):**

The number of ACD calls currently in the queue.

##### **NO. of CALLS IN (NUMBER OF CALLS IN - All Statistics):**

The total number of ACD calls received since midnight, including those abandoned.

##### **NO. of CALLS NWAIT (NUMBER OF CALLS NO WAITING - System/Group Statistics):**

The total number of ACD calls to ring agents without first being queued, since midnight. This includes any calls subsequently abandoned.

##### **NO. of CALLS ANSW (NUMBER OF CALLS ANSWERED - All Statistics):**

The total number of ACD calls answered since midnight.

##### **NO. of CALLS ABD-Q (NUMBER OF CALLS ABANDONED QUEUE - System/Group Statistics):**

The total number of ACD calls abandoned since midnight while waiting in the queue.

##### **NO. of CALLS ABD-R (NUMBER OF CALLS ABANDONED RINGING - System/Group Statistics):**

The total number of ACD calls abandoned since midnight while ringing an agent.

## GENERAL DESCRIPTION

### **NO. of CALLS NACD (NUMBER OF CALLS NON-ACD - All Statistics):**

The total number of non-ACD calls received (by AVAILABLE agents only), since midnight. This includes any subsequently abandoned calls.

### **NO. of AGENTS in STATUS (System/Group Statistics):**

The total number of agents currently:

<b>RING</b>	being rung by ACD calls either queued or not queued)
<b>TALK</b>	occupied on ACD calls
<b>FREE</b>	not occupied on ACD calls/logged on
<b>LOFF</b>	logged out from the ACD group
<b>NACD</b>	occupied on direct-in calls
<b>BREAK</b>	agent in Break mode
<b>WORK</b>	agent in Work mode

### **AVERAGE TIME ABD-Q (AVERAGE TIME ABANDON QUEUE - System/Group Statistics):**

The average time any callers wait in the queue before abandoning.

### **AVERAGE TIME ABD-R (AVERAGE TIME ABANDON RING - System/Group Statistics):**

The average time any callers wait (including time in queue) before abandoning, while ringing an agent.

### **AVERAGE TIME NACD (AVERAGE TIME NON-ACD - All Statistics):**

The average time agents are occupied (including being rung) by non-ACD calls.

### **AVERAGE TIME AVAIL (AVERAGE TIME AVAILABLE - All Statistics):**

The average time agents spend waiting between both ACD and non-ACD calls while logged on.

### **STATUS (Agent Statistics only):**

Indication of the current situation of the individual agent as one of:

<b>NO STAT</b>	Initial (temporary) system indication
<b>AVAILABLE</b>	Not presently occupied on an ACD call or non-ACD call
<b>ACD RINGING</b>	Being rung by a waiting ACD call
<b>ACD CALL</b>	Occupied on an ACD call
<b>NON ACD</b>	Occupied on a direct-in call to agent station number
<b>LOGGED OFF</b>	Logged out from the ACD group. No monitoring by ACD-MIS of any calls until agent logs on again.
<b>WORK</b>	Agent is in Work mode
<b>BREAK</b>	Agent is in Break mode

### **TIME (Agent Statistics only):**

The time an agent has been in the indicated STATUS.

### **NO. of CALLS ABND (NUMBER OF CALLS ABANDONED - Agent Statistics only):**

The total number of calls abandoned since midnight, either while queued or ringing the agent.

### **AVERAGE TIME ABND (AVERAGE TIME ABANDONED - Agent Statistics)**

The average time the specified agent is rung before callers abandon.



### 3.1.1 Other Terms

Other terms (described below) appear on ACD-MIS's screens.

#### System and Group Statistics Displays:

- Group No.** The pilot extension number of the individual ACD groups (e.g. 6300, 6336)
- Group Name** The title system or the specified name of the ACD group for group statistics (e.g., RESERVATION, INQUIRIES)
- Indial No.** A maximum of eight digits, this includes the indial prefix digits and pilot extension number for the ACD groups:

<u>Prefix</u>	<u>Extension</u>
2233	6300
2233	6336

#### Agent Statistics Displays:

- Agent No.** The extension number of the agent position
- Agent Name** The normally assigned surname of the agent when logged on
- Group No.** The pilot extension number of the ACD group (e.g., 6300, 6336) to which the agent belongs
- TN No.** The PABX tenant number for the ACD group
- Handset Type** The type of telephone handset (Analog or D<sup>term</sup>) which the agent uses

## GENERAL DESCRIPTION

### 3.2 External Display Unit (EDU)

ACD-MIS's External Display Unit (EDU) consists of up to four (4) wall-mounted data display panels. The panels are located within view of all on-duty agents. EDUs are used to indicate selected statistical information for assigned ACD groups.

The External Display Units are totally controlled from the ACD-MIS. Their operation is related to the Statistics Monitor feature, but is independent of the Statistics Report feature.

Operational features of EDUs include the following:

- The EDU connects to the ACD-MIS through a StarGate Multi-I/O board and an RS-232C interface port on the PC terminal.
- Two choices of EDU are available: Dataline and Spectrum.
- EDUs can accommodate a maximum of 20 characters, each created from a 5-by-7-dot matrix of LEDs.
- The number of Calls Waiting will be in the range 0 to 99.
- Longest Waiting Calls are displayed in minutes and seconds (mm:ss) in the range 0 to 99:59.
- By programming system data (see [“SYSTEM MAINTENANCE”](#), Section 6.), each EDU can display any one of the three (3) formats shown in the examples below.

#### 3.2.1 EDU Display Formats

##### Number of Calls Waiting for First Seven Programmed Groups

A typical display message is as follows:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	2			6			9		1	1			3			8			3

Details of this message format are shown below:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	2			6			9		1	1			3			8			3
Calls waiting Group 1		Calls waiting Group 2				— — — — — — —							Calls waiting Group 7						

**Number of Calls Waiting + Longest Waiting Time for First Two Programmed Groups**

A typical display message is as follows:

12 1:12 7 56

Details of this message format are shown below:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	2			1	:	1	2				7					5	6		
Calls waiting		Longest wait mm:ss				Calls waiting		Longest wait mm:ss											
Group 1										Group 2									

**Group Name + Calls Waiting + Longest Waiting Time for First Programmed Group**

A typical display message is as follows:

RESERVATION 10 1:32

Details of this message format are shown below:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
R	E	S	E	R	V	A	T	I	O	N		1	0			1	:	3	2
Name: maximum 11 characters											Calls waiting		Longest wait mm:ss						
Group 1																			

## GENERAL DESCRIPTION

### 3.3 Statistics Monitor

ACD-MIS's Statistics Monitor mode displays all incoming call details and their handling by assigned agents for a current 24-hour period. Records are initialized each day at midnight.

The Statistics Monitor function includes seven separate screens. Each screen is divided into two parts, which contain dual sets of common real-time statistics reflecting the current and accumulated ACD activities.

Within each of the first four screens, the upper portion (titled System Statistics) contains information relevant to total system performance. The lower portion (titled Group Statistics) registers the different ACD groups and their individual values for the same statistics.

The remaining three screens have a similar divided-screen layout, but with Group Statistics in the upper portion and Agent Statistics in the lower portion.

While viewing any System/Group Statistics display, the user can select a particular ACD group and change to the first Group/Agent Statistics screen for that group.

Examples of Statistics Monitor screens are shown below and on the following pages.

#### Statistics Monitor 1st Screen - System and Group Statistics

MASTER		ABC TRAVEL LTD.								Ver:5.XX		
OAI on		Wed Mar 25 09:32am										
System Statistics												
----	NAME-----	GOS %	--AVG. TIME-	-WAITING		-----No. of CALLS-----						
			TALK	ANSW	LONG	NO	IN	NWAIT	ANSW	ABD-Q	ABD-R	NACD
	SYSTEM	77	4:39	11	21	1	15	10	13	1	0	1
Group Statistics												
GROUP	----	GOS %	--AVG. TIME-	-WAITING		-----No. of CALLS-----						
No	NAME-----		TALK	ANSW	LONG	NO	IN	NWAIT	ANSW	ABD-Q	ABD-R	NACD
6300	RESERVATION	73	6:52	13	21	1	11	7	9	1	0	1
6336	INQUIRIES	84	2:04	5	0	0	4	3	4	0	0	0

Statistics Monitor 2nd Screen - System and Group Statistics

MASTER		ABC TRAVEL LTD.										Ver:5.XX		
OAI on		Wed Mar 25 09:32am												
System Statistics														
-----NAME-----		GOS	--AVG. TIME-	-WAITING			-No. of AGENTS in STATUS-							
		%	TALK	ANSW	LONG	NO	RING	TALK	WORK	BREAK	FREE	LOFF	NACD	
SYSTEM		77	4:39	11	21	1	1	3	1	1	3	1	0	
Group Statistics														
GROUP	-----NAME-----		GOS	--AVG. TIME-	-WAITING			-No. of AGENTS in STATUS-						
No			%	TALK	ANSW	LONG	NO	RING	TALK	WORK	BREAK	FREE	LOFF	NACD
6300	RESERVATION		73	6:52	13	21	1	1	2	1	1	1	1	0
6336	INQUIRIES		84	2:04	5	0	0	0	1	1	1	2	0	0

Statistics Monitor 3rd Screen - System and Group Statistics

MASTER		ABC TRAVEL LTD.										Ver:5.XX		
OAI on		Wed Mar 25 09:35am												
System Statistics														
-----NAME-----		GOS	--AVG. TIME-	-WAITING			----- AVERAGE TIME -----				-----			
		%	TALK	ANSW	LONG	NO	ABD-Q	ABD-R	NACD	AVAIL				
SYSTEM		75	4:53	13	23	2	15	0	18	32				
Group Statistics														
GROUP	-----NAME-----		GOS	--AVG. TIME-	-WAITING			----- AVERAGE TIME -----				-----		
No			%	TALK	ANSW	LONG	NO	ABD-Q	ABD-R	NACD	AVAIL			
6300	RESERVATION		70	6:58	15	23	2	15	0	25	26			
6336	INQUIRIES		81	2:53	10	0	0	0	0	11	36			

GENERAL DESCRIPTION

Statistics Monitor 4th Screen - System and Group Statistics

MASTER		ABC TRAVEL LTD.				Ver:5.XX	
OAI on		Wed Mar 25 09:35am					
System Statistics							
----	NAME-----	GOS	--AVG. TIME-	-WAITING			
		%	TALK	ANSW	LONG	NO	
SYSTEM		75	4:53	13	23	2	
Group Statistics							
GROUP		GOS	--AVG. TIME-	-WAITING		INDIAL NO.	
No	----	NAME-----	%	TALK	ANSW	LONG	NO
6300	RESERVATION	70	6:58	15	23	2	2233 6300
6336	INQUIRIES	81	2:53	10	0	0	2233 6336

Statistics Monitor 5th Screen - Group and Agent Statistics

MASTER		ABC TRAVEL LTD.				Ver:5.XX	
OAI on		Wed Mar 25 09:45am					
System Statistics							
GROUP		GOS	--AVG. TIME-	-WAITING		----- No. of CALLS -----	
	----	NAME-----	%	TALK	ANSW	LONG	NO
RESERVATION		73	5:05	10	26	3	26 18 23 2 1 4
Group Statistics							
AGENT		GOS	--AVG. TIME-	-----STATUS-----		-----NO.OF CALLS-----	
No	NAME	%	TALK	ANSW	-----	TIME	IN
6301	Murchison	85	4:31	9	ACD CALL	3:42	7
6312	Armstrong	84	3:47	21	NON ACD	1:04	5
6306	Harris	53	5:53	13	ACD RINGING	4	4
6325		0	0		LOGGED OFF	99:59	0
6627	Cooper	68	6:40	14	AVAILABLE	12	7
6630	Smith	75	4:05	10	Break	2:22	4
6317	Jones	63	7:10	18	Work	3:14	2

Statistics Monitor 6th Screen - Group and Agent Statistics

MASTER		ABC TRAVEL LTD.										Ver:5.XX	
OAI on												Wed Mar 25 09:45am	
System Statistics													
GROUP	NAME	GOS %	AVG. TALK	AVG. ANSW	WAITING LONG	WAITING NO	No. of CALLS		ABD-Q	ABD-R	NACD		
RESERVATION		73	5:05	10	26	3	26	18	23	2	1	4	
Group Statistics													
AGENT No	NAME	GOS %	AVG. TALK	AVG. ANSW	STATUS		AVERAGE TIME		ABND	NACD	AVAIL		
6301	Murchison	85	4:31	9	ACD CALL		3:42	3	1:15	10			
6312	Armstrong	84	3:47	21	NON ACD		1:04	17	73	12			
6306	Harris	53	5:53	13	ACD RINGING		4	0	1:47	14			
6325		0	0	0	LOGGED OFF		99:59	0	0	0			
6627	Cooper	68	6:40	14	AVAILABLE		12	0	0	9			
6630	Smith	75	4:05	10	Break		2:22	0	0	11			
6317	Jones	63	7:10	18	Work		3:14	2	0	8			

Statistics Monitor 7th Screen - Group and Agent Statistics

MASTER		ABC TRAVEL LTD.										Ver:5.XX	
OAI on												Wed Mar 25 09:47am	
System Statistics													
GROUP	NAME	GOS %	AVG. TALK	AVG. ANSW	WAITING LONG	WAITING NO	No. of CALLS		ABD-Q	ABD-R	NACD		
RESERVATION		73	5:05	10	26	3	26	18	23	2	1	4	
Group Statistics													
AGENT No	NAME	GOS %	AVG. TALK	AVG. ANSW	STATUS		AVERAGE TIME		GROUP No.	TN No.	Handset Type		
6301	Murchison	85	4:31	9	ACD CALL		3:42	6300	0	DTerm			
6312	Armstrong	84	3:47	21	NON ACD		1:04	6300	0	DTerm			
6306	Harris	53	5:53	13	ACD RINGING		4	6300	0	DTerm			
6325		0	0	0	LOGGED OFF		99:59	6300	0	DTerm			
6627	Cooper	68	6:40	14	AVAILABLE		12	6300	0	DTerm			
6630	Smith	75	4:05	10	Break		2:22	6300	0	DTerm			
6317	Jones	63	7:10	18	Work		3:14	6300	0	DTerm			

## GENERAL DESCRIPTION

### 3.4 Statistics Report

This function lets you specify content of ACD-MIS statistical reports. (For agent-related reporting, only totals are produced.)

The Statistics Report function also lets you specify a breakdown (by day, period, etc.), as summarized in [Table 1-1](#):

**Table 1-1 Breakdown of Report Statistics**

Breakdown type	Source of data	Valid range
By Period	Detailed Summary Data	Up to 45 Working Days from Today
By Hour		
By Day of the Week	Daily Summary Data	Up to the Start of the Last Year
By Month		

ACD-MIS stores information for two separate maximum periods:

- For reports detailing hourly (or more regular) summaries of call statistics, the limit is 45 days. Thereafter, records are deleted on a daily basis at midnight when a new file is created for the next day.
- For all daily summary reports, information is stored for up to two years. Thereafter, the records are deleted on an annual basis.

Submenus associated with the Statistic Report function are listed below and described in other sections, as noted. The first three submenu items are interrelated and must be accessed in the order listed to schedule printing of records. The last item is independent and is used for immediate display or printing options.

- [“Report Configuration”](#), Section 3.4.1
- [“Report Group Configuration”](#), Section 3.4.2
- [“Scheduler”](#), Section 3.4.3
- [“Create Report”](#), Section 3.4.4



### 3.4.1 Report Configuration

The Report Configuration option lets you set a variety of report formats by combining a number of parameters. Any Report Configuration can be modified or deleted.

#### Report Configuration Screen

MASTER	ABC TRAVEL LTD.	Ver:5.XX						
OAI on		Wed Mar 25 09:48am						
Report Configuration								
Report Name	: Duration - P.M.	Action : Modify						
Report Type	: Call Duration							
Class	: Selected							
Date Type	: last month							
Breakdown	: by period							
<table border="0"> <tr> <td>a by period</td> <td>c daily</td> <td>e weekly</td> </tr> <tr> <td>b hourly</td> <td>d monthly</td> <td>f total</td> </tr> </table>			a by period	c daily	e weekly	b hourly	d monthly	f total
a by period	c daily	e weekly						
b hourly	d monthly	f total						

**Report Name** the title you assign to a report (up to 20 alphanumeric characters).

**Report Type** specifies one of the following ten reports available in the system:

- Calls Waiting
- Calls Abandoned
- Call Duration
- Traffic Analysis
- Group Break and Work
- Group Workload
- Group Performance
- Agent Performance
- Agent Demand
- Agent Break and Work

These reports are described in [“Report Data”](#), [Section 3.4.5](#).

**Class** defines the report content and format according to:

Full	Statistics for all existing ACD groups are included in one report.
All	The same statistics are presented in separate reports for each ACD group.
Selected	Specified when reporting on a single ACD group.

## GENERAL DESCRIPTION

<b>Date Type</b>	selects statistics for one of ten reporting periods: Today Yesterday This week (Sunday to Saturday) Last week (Sunday to Saturday) This month Last month This year up to today (i.e., Year To Date) Last year For date (any specified day) Date range (any specified calendar period)
<b>Break Down</b>	tallies statistics per line, for the specified reporting period, according to the following options: a - By period in 10-, 15-, 20-, 30- or 60-minute time segments within each hour, depending on original data set (see Section 3.6.5 - Storage Intervals)  b - Hourly in hour blocks of time, irrespective of any data settings as above  c - Daily per-day totals for the specified period  d - Monthly per-calendar-month totals for the specified period  e - Weekday individual totals for the relevant days of the week  f - Total per-ACD-group totals (i.e., where Class is Full or All), for the specified period.  <b>Note:</b> <i>Certain combinations of the Date Type and Breakdown parameters are not legitimate (Today + Monthly, For Date + Monthly, etc.). In such cases a warning message displays.</i>  <b>Note:</b> <i>Breakdown is applicable to all ACD group reports but has no meaning for the Agent Performance Report (because only total statistics are produced).</i>
<b>Action</b>	allows existing Report Configurations to be modified or deleted:  Modify change any current parameter selection(s)  Delete erase the entire configuration from system memory

### 3.4.2 Report Group Configuration

After the required reports have been configured, they can be arranged into convenient groups to facilitate printing. Established report groups can be modified or deleted.

#### Report Group Configuration Screen

```

MASTER                                ABC TRAVEL LTD.                        Ver:5.XX
-----
OAI on                                Wed Mar 25 09:50am
-----
                                Report Groups Configuration

Report Group Name : RESERVATIONS - P.M.
Report
1  Waiting - P.M.           6300   6301   ..../...   ..../...
2  Abandoned - P.M.       6300   6301   ..../...   ..../...
3  Duration - P.M.        6300   6301   ..../...   ..../...
4  no report              6300   6301   ..../...   ..../...
5  no report              6300   6301   ..../...   ..../...
6  no report              6300   6301   ..../...   ..../...
7  no report              6300   6301   ..../...   ..../...
8  no report              6300   6301   ..../...   ..../...
9  no report              6300   6301   ..../...   ..../...
10 no report              6300   6301   ..../...   ..../...
-----
a  no report              h  Agent Demand - Y.T.D.
b  Waiting - P.M.
c  Abandoned - P.M.
d  Duration - P.M.
e  Traffic - P.M.
f  Group Work - Y.T.D.
g  Group Perf - Y.T.D.
    
```

**Report Group Name** Name of the ACD group (up to 20 alphanumeric characters)

**Report** Report format /type specified in Report Configuration. Current reports are listed at the bottom of the screen.

**Group** Identifying pilot extension number of each assigned ACD group in the PABX. ACD-MIS automatically selects the first number, but all are displayed at the bottom of the screen.

**Agent** This parameter has no application in the current version of ACD-MIS.

**Start Date** Date, month, and year entry to specify a particular day or the start of a calendar period.

**End Date** Date, month, and year entry to specify the end of a calendar period.

Application of the above parameters is dependent on individual reporting functions.

**GENERAL DESCRIPTION**

**3.4.3 Scheduler**

ACD-MIS's Scheduler function is used to arrange both the single printing and repeated automatic printing of specified reports, but only after completion of the Report Configuration and Report Group Configuration screens. A maximum of 20 schedules can be programmed: 10 on the first display screen and another 10 on a second screen. The second screen can only be accessed once the first is completely filled. Schedules can be modified or deleted.

**Report Scheduler Screen**

```

MASTER                                ABC TRAVEL LTD.                        Ver:5.XX
-----
OAI on                                Wed Mar 25 09:53am
-----
                                Report Scheduler
Group      Schedule      Day      Time      Date
1  RESERVATIONS - P.M.  Monthly  Fri      07:00    27/03/94
2  RESERV/ENQ. - P.M.   Monthly  Fri      07:30    27/03/94
3  RESERV/ENQ. - Y.T.D. Monthly  Fri      08:00    27/03/94
4  no group             no rep.  Sun      00:00    ___/___/___
5  no group             no rep.  Sun      00:00    ___/___/___
6  no group             no rep.  Sun      00:00    ___/___/___
7  no group             no rep.  Sun      00:00    ___/___/___
8  no group             no rep.  Sun      00:00    ___/___/___
9  no group             no rep.  Sun      00:00    ___/___/___
10 no group             no rep.  Sun      00:00    ___/___/___
-----
x no group
a RESERVATIONS - P.M.
b RESERV/ENQ. - P.M.
c RESERV/ENQ. - Y.T.D.
    
```

**Group** group specified in Report Configuration. Current assignments appear on-screen

**Schedule** one of five printing options (displayed at the bottom of the screen)  
(The scheduling options are summarized in [Table 1-2.](#))

**Table 1-2 Report Schedule**

Schedule	Printing conditions
Once	On a specified future day, date, and time.
Hourly	Every hour starting from the previous hour
Daily	Each day at a specified time starting from the previous day
Weekly	Each week at a specified day and time from the previous week
Monthly	At a specified day, date and time from the previous month

**Day** the preferred weekday (Sunday to Saturday) on which to print the specified report(s)

**Time** the hour and minute of the specified day on which to print the report(s) [required entry]

**Date** the date, month, and year on or after which any report(s) is to be printed [required entry]

Not all parameters always need to be entered. (More details are included in [Chapter 3, “OPERATING PROCEDURES,”](#) .

### 3.4.4 Create Report

ACD-MIS’s Create Report function is used to request an immediate one-time display or printout for an individually selected report.

#### Report Parameter Screen

```

MASTER                                ABC TRAVEL LTD.                        Ver:5.XX
-----
OAI on                                Wed Mar 25 09:57am
-----
                                Report Parameter
Report Type      : Agent Performance      Destination    : Printer
Class           : Selected                Selected      : 6336
Date Type       : date range              From 02/03/92 To: 06/03/92
Break Down      : total

a today         c this week      e this month    g YTD           i for date
b yesterday     d last week     f last month    h last year     m date range
    
```

**Report Type** (same as in Report Configuration), specifies one of the ten ACD-MIS reports

**Destination** directs the report output to the screen, printer, or file

**Class** (same as in Report Configuration), specifies the report content and format as Full, All, or Selected

**Selected** identifies the pilot extension where a particular ACD group is to be specified. (The extensions will be listed on-screen.)

**Date Type** (same as in Report Configuration), selects statistics for one of ten periods

## GENERAL DESCRIPTION

<b>From</b>	date, month, and year to specify either a single day or the start of a calendar period (same as Start Date in Report Configuration)
<b>To</b>	date, month, and year to specify the end of a calendar period (same as End Date in Report Configuration)
<b>Break Down</b>	(same as in Report Configuration), tallies statistics according to a selected option (by period, hourly, daily, monthly, weekly, or total)

### 3.4.5 Report Data

The ACD-MIS system includes the following reporting features:

- Reports can be individually specified in regard to type, application, and reporting period (see [“Report Configuration”](#), Section 3.4.1). They can be specified in relation to all or individual ACD groups.
- The statistics produced can be presented in one of several formats according to the selected break down (such as hourly or daily). (See [“Report Configuration”](#), Section 3.4.1.)
- Separately specified reports can be combined into groups to facilitate later printing (see [“Report Group Configuration”](#), Section 3.4.2). The typical application would be for reports which are common in nature (e.g., all reports relating to the one ACD group).
- The assigned groups of reports can then be scheduled for automatic printing immediately or at regular intervals (see [“Scheduler”](#), Section 3.4.3).
- Any individual report can be prepared for immediate display or printout by a separate, independent function (see [“Create Report”](#), Section 3.4.4).
- Call statistics are retained in the system for a maximum of either 45 days or 2 years.

Data is stored for 45 days for the following reports:

Calls Waiting Report  
Calls Abandoned Report  
Call Duration Report  
Traffic Analysis Report

Data is stored for 2 years for the following reports:

Group Workload Report  
Group Performance Report  
Group Work and Break Report  
Agent Demand Report  
Agent Performance Report  
Agent Work and Break Report

The header information on a report (title, dates, ACD group or groups, etc.) is determined by the selections made for report type, reporting period, and ACD group(s). The statistics columns differ for each report type. The format of the far left-hand column (Call Arrival/Group Number) varies according to the Breakdown parameter selected. (Different Breakdown parameters are illustrated on the following pages.)

### 3.4.6 Examples of Reports and Report Formats

The following pages illustrate:

- Different report formats based on Break down selection
- Examples of ACD-MIS reports

Procedures and available options are described in [Chapter 3, "OPERATING PROCEDURES,"](#).

#### Report Format versus Break Down Selection

NEAX 2000 IVS		ABC TRAVEL LTD		Page No: 1						
ACD-MIS		Calls Waiting for 02/24/94 to 02/28/94		Date: 03/25/94						
Ver 5.XX		Group No.: 6300		Time: 15:46						
Call Arrival	No. of Calls		----Calls answered within (secs)----				Avg	Long		
	offer	answer	<5	<10	<15	<20	<30	30+	Delay	Delay
									mm:ss	mm:ss
00:00-00:59										
01:00-01:59										
02:00-02:59										
03:00-03:59										
04:00-04:59										
05:00-05:59										
06:00-06:59										
07:00-07:59										
08:00-08:59										
09:00-09:59										
:										
:										
23:00-23:59										
-----										
Total										
*****										
Cumulative percentage										

**GENERAL DESCRIPTION**

**Break down = Hourly**

Total statistics are recorded on an hourly basis for either the specified single date (e.g., Date Type = today, yesterday, or for date) or the full reporting period (Date Type = last week, this month, date range, etc.).

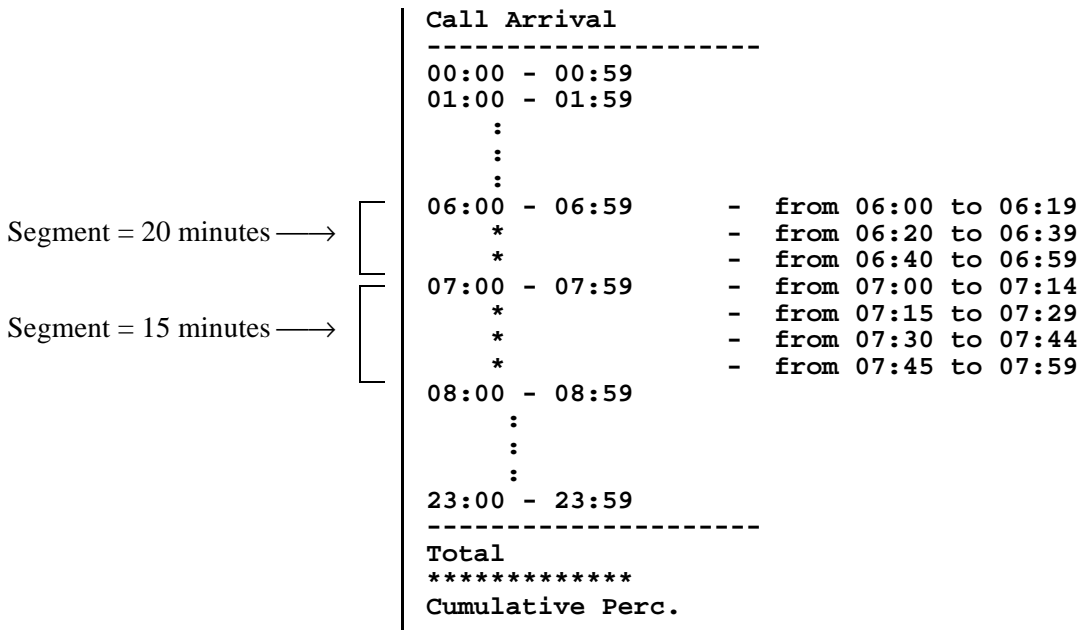
```
Call Arrival
-----
00:00 - 00:59
01:00 - 01:59
      :
      :
      :
22:00 - 22:59
23:00 - 23:59
-----
Total
*****
Cumulative Perc.
```

**Break down = By Period**

Total statistics are recorded for each preset time interval (Storage Interval) of the specified single date or full reporting period.

In this application, the presence of asterisks for any one hour period indicates the segment has been set in at less than 60 minutes (see Section 3.6.7 - Storage Intervals). The number of asterisks displayed is dependent on the segment selected.

For example, in the diagram below, two (2) asterisks for 06:00 - 06:59 indicate a segment of 20 minutes; and three (3) asterisks for 07:00 - 07:59 indicate a segment of 15 minutes. Recorded statistics correspond to individual periods, as shown below:





**Break down = Daily**

Total statistics are recorded for each **calendar date** in the specified reporting period:

Call Arrival
-----
03/22/94
03/23/94
:
:
:
03/28/94
-----
Total
*****
Cumulative Perc.

**Break down = Monthly**

Total statistics are recorded for each **month** of the specified reporting period:

Call Arrival
-----
January
February
March
April
May
June
July
-----
Total
*****
Cumulative Perc.

**Break down = Weekday**

Total statistics are recorded for each **day of the week** (for each full week) of the specified reporting period:

Call Arrival
-----
Sunday
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
-----
Total
*****
Cumulative Perc.

**Break down = Total**

Total statistics per **ACD group** are recorded for the specified single date or full reporting period:

Group Number
-----
6300
6336
-----
Total
*****
Cumulative Perc.

# Calls Waiting Report

NEAX 2000 IVS ACD-MIS Ver 5.XX		ABC TRAVEL LTD Calls Waiting for 3/24/94 Group No.: 6300							Page No: 1 Date: 03/25/94 Time: 11:00	
Call Arrival	No. of Calls offer	No. of Calls answer	--Calls answered within (secs)--						Avg Delay	Long Delay
			<10	<15	<20	<30	<50	50+	mm:ss	mm:ss
00:00 - 00:59	0	0	0	0	0	0	0	0	0	0
01:00 - 01:59	0	0	0	0	0	0	0	0	0	0
:					:				:	:
:					:				:	:
09:00 - 09:59	38	33	3	28	2	0	0	0	12	19
10:00 - 10:59	60	59	2	45	12	0	0	0	17	19
11:00 - 11:59	84	73	1	62	8	2	0	0	15	23
12:00 - 12:59	23	23	8	14	1	0	0	0	11	15
13:00 - 13:59	18	18	4	14	0	0	0	0	10	13
14:00 - 14:59	37	35	2	26	7	0	0	0	18	17
15:00 - 15:59	42	40	1	28	10	1	0	0	22	29
16:00 - 16:59	14	13	5	8	0	0	0	0	10	13
17:00 - 17:59	9	5	3	2	0	0	0	0	19	12
:					:				:	:
:					:				:	:
22:00 - 22:59	0	0	0	0	0	0	0	0	0	0
23:00 - 23:59	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>325</b>	<b>299</b>	<b>29</b>	<b>227</b>	<b>40</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>29</b>
*****										
<b>Cumulative percentage</b>			<b>10</b>	<b>86</b>	<b>99</b>	<b>100</b>	<b>100</b>	<b>100</b>		

The Calls Waiting report profiles main aspects of ACD call handling. The statistics are defined as:

**No. of Calls - Offered:** The total number of ACD calls received by the system, including answered, abandoned, and undetermined (e.g., still queued), for the specified period of the report. Non-ACD calls are excluded.

The total (0000-2359) is a direct addition.

**No. of Calls - Answered:** The number of original calls that resulted in conversation with an agent.

The total (0000-2359) is a direct addition.

**Calls Answered Within:** The separation of general calls answered into specified individual time limit periods (set in Report Time Values). Values in any one column include calls answered up to and including the time limit indicated for that column. Cumulative percentage values of calls registered within each time limit are also given at the end of the report.

The totals (0000-2359) are direct additions.

**Average Delay:** The average waiting time of ACD calls which are either in the queue or ringing agents, calculated as:

$$\frac{\text{Total delay for the period}}{\text{Total calls offered for the period}}$$

The total (0000-2359) is calculated as:

$$\frac{\text{Total delay for the system}}{\text{Total calls offered for the day}}$$

**Longest Delay:** The maximum time taken to answer any ACD call, either while queued or ringing an agent.

The total is the highest recorded value for the whole reporting period.

# Calls Abandoned Report

Call Arrival	No. of Calls		-Calls abandoned within (secs)-						Avg Delay	Long Delay
	offer	abandn	<5	<10	<15	<20	<50	50+	mm:ss	mm:ss
00:00 - 00:59	0	0	0	0	0	0	0	0	0	0
01:00 - 01:59	0	0	0	0	0	0	0	0	0	0
:					:				:	:
09:00 - 09:59	38	5	2	2	1	0	0	0	08	13
10:00 - 10:59	60	1	1	0	0	0	0	0	04	04
11:00 - 11:59	84	11	1	3	4	2	1	0	14	31
12:00 - 12:59	23	0	0	0	0	0	0	0	0	0
13:00 - 13:59	18	0	0	0	0	0	0	0	0	0
14:00 - 14:59	37	2	0	1	1	0	0	0	09	12
15:00 - 15:59	42	2	0	1	1	0	0	0	11	14
16:00 - 16:59	14	1	0	1	0	0	0	0	08	08
17:00 - 17:59	9	4	2	2	0	0	0	0	08	09
:					:				:	:
22:00 - 22:59	0	0	0	0	0	0	0	0	0	0
23:00 - 23:59	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>325</b>	<b>26</b>	<b>6</b>	<b>10</b>	<b>7</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>11</b>	<b>31</b>
*****										
<b>Cumulative percentage</b>			<b>23</b>	<b>61</b>	<b>88</b>	<b>96</b>	<b>100</b>	<b>100</b>		

mm:ss = minutes and seconds

The Calls Abandoned report is an analysis of received calls that were disconnected by the callers before an agent became available. Statistics are defined as follows:

**No. of Calls - Offered:** The total number of ACD calls received by the system, including answered, abandoned, and undetermined (e.g., still queued), for the specified period of the report. Non-ACD calls are excluded.

The total (0000-2359) is a direct addition.

**No. of Calls - Abandoned:** The number of calls where the caller disconnected while queued or ringing an agent.

The total (0000-2359) is a direct addition.

**Calls Abandoned Within:** The separation of general calls abandoned into specified individual time limit periods (set in Report Time Values). Values in any one column include calls abandoned up to and including the time limit indicated for that column. Cumulative percentage values of calls registered within each time limit are also given at the end of the report.

The totals (0000-2359) are direct additions.

**Average Delay:** Average waiting time before disconnection by callers, either from the queue or while ringing an agent, calculated as:

$$\frac{\text{Total queue time} + \text{total ring time}}{\text{Total calls abandoned for the period}}$$

The total (0000-2359) is calculated as:

$$\frac{\text{Total waiting time for the system}}{\text{Total calls abandoned for the day}}$$

**Longest Delay:** The longest time before abandonment of any call that is queued or ringing an agent.

The total is the highest recorded value for the whole reporting period.

# Call Duration Report

NEAX 2000 IVS ACD-MIS Ver 5.XX		ABC TRAVEL LTD Calls Duration for 3/24/94 Group No.: 6300							Page No: 1 Date: 03/25/94 Time: 11:00	
Call Arrival	No. of Calls offer	No. of Calls talked	-Calls talked within (secs)-						Avg Talk	Long Talk
			<60	<200	<300	<500	<600	600+	mm:ss	mm:ss
00:00 - 00:59	0	0	0	0	0	0	0	0	0	0
01:00 - 01:59	0	0	0	0	0	0	0	0	0	0
:	:	:	:	:	:	:	:	:	:	:
09:00 - 09:59	38	33	2	12	14	3	2	0	06:33	09:44
10:00 - 10:59	60	59	3	19	22	13	2	0	08:03	09:33
11:00 - 11:59	84	73	1	3	28	27	11	3	09:51	13:22
12:00 - 12:59	23	23	0	3	11	3	4	2	07:53	13:33
13:00 - 13:59	18	18	0	2	9	5	2	0	05:21	09:51
14:00 - 14:59	37	35	1	11	18	2	3	0	04:45	08:27
15:00 - 15:59	42	40	4	9	21	3	2	1	04:39	10:05
16:00 - 16:59	14	13	1	4	5	2	1	0	04:41	08:24
17:00 - 17:59	9	5	0	0	1	4	0	0	07:16	08:13
:	:	:	:	:	:	:	:	:	:	:
22:00 - 22:59	0	0	0	0	0	0	0	0	0	0
23:00 - 23:59	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>325</b>	<b>299</b>	<b>12</b>	<b>63</b>	<b>129</b>	<b>62</b>	<b>27</b>	<b>6</b>	<b>07:09</b>	<b>13:33</b>
*****										
<b>Cumulative percentage</b>			<b>4</b>	<b>25</b>	<b>68</b>	<b>89</b>	<b>98</b>	<b>100</b>		

mm:ss= minutes:seconds

The Call Duration report considers aspects of actual conversation time as an analysis of successful calls. The statistics are defined as follows:

**No. of Calls - Offered:** The total number of ACD calls received by the system, including answered, abandoned, and undetermined (e.g., still queued), for the specified period of the report. Non-ACD calls are excluded.

The total (0000-2359) is a direct addition.

**No. of Calls - Talked:** The number of original calls that resulted in conversation with an agent.

The total (0000-2359) is a direct addition.

**Calls Talked Within:** The breakdown of conversation times into specified individual time periods (set in Report Time Values).

Values in any one column include call durations up to and including the limit indicated for that column. Cumulative percentage values of calls registered within each period are also given at the end of the report.

The totals (0000-2359) are direct additions.

**Average Talk:** The average conversation time for all answered calls, calculated as:

$$\frac{\text{Total duration time for the period}}{\text{Total calls answered for the period}}$$

The total (0000-2359) is calculated as:

$$\frac{\text{Total duration time for the system}}{\text{Total calls answered for the day}}$$

**Longest Talk:** The maximum conversation time of any answered call.

The total is the highest recorded value for the whole reporting period.

# Traffic Analysis Report

Call Arrival	No. of Calls			---Average Time---			---Longest Time---		
	offer	answer	abandn	answd mm:ss	talk mm:ss	abandn mm:ss	answd mm:ss	talk mm:ss	abandn mm:ss
NEAX 2000 IVS	ABC TRAVEL LTD			Page No: 1			Date: 03/25/94		
ACD-MIS	Calls Duration for 3/24/94			Time: 11:00			Group No.: 6300		
Ver 5.XX									
00:00 - 00:59	0	0	0	0	0	0	0	0	0
01:00 - 01:59	0	0	0	0	0	0	0	0	0
:	:	:	:	:	:	:	:	:	:
09:00 - 09:59	38	33	5	12 06:33		08	19 09:44		13
10:00 - 10:59	60	59	1	17 08:03		04	19 09:33		04
11:00 - 11:59	84	73	11	15 09:51		14	23 13:22		31
12:00 - 12:59	23	23	0	11 07:53		0	15 13:33		0
13:00 - 13:59	18	18	0	10 05:21		0	13 09:51		0
14:00 - 14:59	37	35	2	18 04:45		09	17 08:27		12
15:00 - 15:59	42	40	2	22 04:39		11	29 10:05		14
16:00 - 16:59	14	13	1	10 04:41		08	13 08.24		08
17:00 - 17:59	9	5	4	09 07:16		08	12 08.13		09
:	:	:	:	:	:	:	:	:	:
22:00 - 22:59	0	0	0	0	0	0	0	0	0
23:00 - 23:59	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>325</b>	<b>299</b>	<b>26</b>	<b>15 07:09</b>		<b>11</b>	<b>29 13:33</b>		<b>31</b>
*****									

mm:ss = minutes and seconds

The Traffic Analysis report summarizes the call-handling performance by including total, average, and maximum values for the parameters contained in the Calls Waiting, Calls Abandoned, and Call Duration reports. The statistics are:

**No. of Calls - Offered:** The total number of ACD calls received by the system, including answered, abandoned, and undetermined (e.g., still queued), for the specified period of the report. Non-ACD calls are excluded.

The total (0000-2359) is a direct addition.

**No. of Calls - Answered:** The number of original calls that resulted in conversation with an agent.

The total (0000-2359) is a direct addition.



**No. of Calls - Abandoned:** The number of calls where the caller disconnected while queued or ringing an agent.

The total (0000-2359) is a direct addition.

**Average Time Answered:** The average waiting time between ringing an agent and start of conversation for all calls answered, calculated as:

$$\frac{\text{Total waiting time for the period}}{\text{Total calls answered for the period}}$$

The total (0000-2359) is calculated as:

$$\frac{\text{Total waiting time for the system}}{\text{Total calls answered for the day}}$$

**Average Time Talk:** The average conversation time of all calls answered, calculated as:

$$\frac{\text{Total conversation time for the period}}{\text{Total calls answered for the period}}$$

The total (0000-2359) is calculated as:

$$\frac{\text{Total conversation time for the system}}{\text{Total calls answered for the day}}$$

**Average Time Abandon:** Average waiting time before disconnection by the caller while either queued or ringing an agent, calculated as:

$$\frac{\text{Total waiting time for the period}}{\text{Total calls abandoned for the period}}$$

The summary total (0000-2359) is calculated as:

$$\frac{\text{Total waiting time for the system}}{\text{Total calls abandoned for the day}}$$

**Longest Time Answered:** The longest waiting time before start of conversation of any call ringing an agent.

The total is the highest recorded value for the whole reporting period.

**Longest Time Talk:** The longest conversation time of any calls answered.

The total is the highest recorded value for the whole reporting period.

## GENERAL DESCRIPTION

**Longest Time Abandon:** The longest waiting time before disconnection of any calls abandoned.

The total is the highest recorded value for the whole reporting period.

# Group Workload Report

NEAX 2000 IVS	ABC TRAVEL LTD						Page No:	1		
ACD-MIS	Group Workload for 3/24/94						Date:	03/25/94		
Ver 5.XX	Group No.: 6300						Time:	11:00		
	No. of Calls			---Average Time---			no	---handled---		
	offer	answer	abandn	answd	talk	abandn	delay	answd	abandn	
Group Number				mm:ss	mm:ss	mm:ss	%	%	%	
6300	325	299	26	15	07:09	11	3	92	8	
Total	325	299	26	15	07:09	11	3	92	8	
*****										

mm:ss = minutes and seconds

The Group Workload report compares the demand and response aspects of call handling by the addition of percentage statistics. The statistics are defined as follows:

**No. of Calls - Offered:** The total number of ACD calls actually directed to the assigned group(s) for the specified period of the report, including calls answered, abandoned, and undetermined (e.g., still queued). Non-ACD calls are excluded.

The total is the sum for all assigned groups.

**No. of Calls - Answered:** The number of original calls that resulted in conversation with an agent.

The total is the sum for all assigned groups.

**No. of Calls - Abandoned:** The number of original calls where the caller disconnected while queued or ringing an agent.

The total is the sum for all assigned groups.

**Average Time - Answered:**

The average waiting time of calls answered by agents, including time in queue, calculated per assigned group as:

$$\frac{\text{Total waiting time for all answered calls}}{\text{Total number of calls answered}}$$

The total is similarly calculated, but with respect to the whole system.

## GENERAL DESCRIPTION

**Average Time - Talk:** The average conversation time of the calls answered by agents, calculated per assigned group as:

$$\frac{\text{Total conversation time}}{\text{Total number of calls terminated after conversation}}$$

The total is similarly calculated, but with respect to the whole system.

**Average Time  
- Abandoned:**

The average waiting time of calls that were disconnected by the caller while in the queue and/or ringing an agent, calculated per assigned group as:

$$\frac{\text{Total waiting time for all abandoned calls}}{\text{Total number of calls abandoned}}$$

The total is similarly calculated, but with respect to the whole system.

**No Delay %:**

The percentage of calls answered without being queued, calculated per assigned group as:

$$\frac{\text{Total number of calls answered directly by agents} \times 100}{\text{Total number of answered and abandoned calls}}$$

The total is similarly calculated, but with respect to the whole system.

**% Handled - Answered:** The percentage of calls that were eventually answered by agents, either with or without delay, calculated per assigned group as:

$$\frac{\text{Total number of calls answered by agents} \times 100}{\text{Total number of calls originally offered}}$$

The total is similarly calculated, but with respect to the whole system.

**% Handled - Abandoned:** The percentage of calls that were disconnected by the caller, either while in the queue or ringing an agent, calculated per assigned group as:

$$\frac{\text{Total number of calls disconnected by callers} \times 100}{\text{Total number of calls originally offered}}$$

The total is similarly calculated, but with respect to the whole system.

# Group Performance Report

NEAX 2000 IVS	ABC TRAVEL LTD					Page No:	1		
ACD-MIS	Group Performance for 3/24/94					Date:	03/25/94		
Ver 5.XX	Group No.: 6300					Time:	11:00		
	No. of Calls		---Average Time---			----Total Time----			
	ACD	NACD	ACD	NACD	AVAIL	ACD	NACD	AVAIL	
Group Number			mm:ss	mm:ss	mm:ss	hh:mm	hh:mm	hh:mm	
6300	325	84	07:09	03:59	01:03	35:37	11:06	12	
Total	325	84	07:09	03:59	01:03	35:37	11:06	12	
*****									

hh:mm:ss = hours, minutes and seconds

The Group Performance report compares occupancy on non-ACD and ACD calls and idle (available) mode for the specified ACD group(s). The relevant statistics are:

**No. of Calls - ACD:** The total number of ACD calls directed to the assigned group(s) for the specified period of the report, including calls answered, abandoned, and undetermined (e.g., still queued). Non-ACD calls are excluded.

The total is the sum for all assigned groups.

**No. of Calls - NACD:** For the specified period of the report, the total number of non-ACD calls (either answered or abandoned) directed to agents in the assigned group(s), but only while in the AVAILABLE status.

The total is the sum for all assigned groups.

## GENERAL DESCRIPTION

**Average Time - ACD:** The average conversation time for all ACD calls which were answered, calculated per assigned group as:

$$\frac{\text{Total conversation time on ACD calls}}{\text{Total number of ACD calls answered}}$$

The total is similarly calculated, but with respect to the whole system.

**Average Time - NACD:** The average conversation time on non-ACD calls that were answered, calculated per ACD group as:

$$\frac{\text{Total conversation time on non-ACD calls}}{\text{Total number of answered non-ACD calls}}$$

The total is similarly calculated, but with respect to the whole system.

**Average Time - Available:** The average waiting time between both ACD and non-ACD calls, but only while logged on, calculated per assigned group as:

$$\frac{\text{Total time agents wait for (non-)ACD calls}}{\text{Total occasions agents available and logged on}}$$

The total is similarly calculated, but with respect to the whole system.

**Total Time - ACD:** The total conversation time on ACD calls that were answered.

The total is the sum for all assigned groups.

**Total Time - NACD:** The total conversation time on non-ACD calls that were answered.

The total is the sum for all assigned groups.

**Total Time - Available:** The total time agents spent waiting between both ACD and non-ACD calls, but only while logged on.

The total is the sum for all assigned groups.

## Group Break and Work Report

Call Arrival	---Avg Time---		---Total Time---		-----Percentage-----				
	BRK mm:ss	WORK mm:ss	BRK hhh:mm	WORK hhh:mm	ACD %	NACD %	BRK %	WORK %	AVAIL %
NEAX 2000 IVS	ABC TRAVEL LTD				Page No: 1				
ACD-MIS	Group Break and Work for 3/24/94				Date: 03/25/94				
Ver 5.XX	Group No.: 6300				Time: 11:00				
00:00-00:59	0	0	0	0	0	0	0	0	0
01:00-01:59	0	0	0	0	0	0	0	0	0
:									
09:00: 09:59	6:31	5:23	45	5	2	13	53	7	25
:									
13:00-13:59	27	51	0	1	1	3	1	1	94
:									
17:00 - 17:59	1:04	1:46	3	1	0	33	30	17	20
<b>Total</b>	<b>4:08</b>	<b>2:12</b>	<b>49</b>	<b>8</b>	<b>1</b>	<b>5</b>	<b>12</b>	<b>3</b>	<b>79</b>

The Group Break and Work Report compares occupancy on ACD, non-ACD, Break, Work, and Idle (available) mode for the specified ACD group(s). (ACD+ NACD + Break + Avail = 100%.) The report also shows the average and total time that the group has been in Break and Work mode.

**Average Time - Break:** The average time that the group was in the Break mode, calculated per assigned group as:

$$\frac{\text{Total break time}}{\text{Total number of agents (logged on)}}$$

**Average Time - Work:** The average time that the group was in the Work mode, calculated as:

$$\frac{\text{Total work time}}{\text{Total number of agents (logged on)}}$$

**Total Time - Break:** The total time in the Break mode. The total is the sum for all assigned agents in that group.

**Total Time - Work:** The total time in the Work mode. The total is the sum for all assigned agents in that group.

## GENERAL DESCRIPTION

<b>Percentage ACD:</b>	The percentage of time that the group spent on ACD calls.
<b>Percentage NACD:</b>	The percentage of time that the group spent on non-ACD calls.
<b>Percentage Break:</b>	The percentage of time that the agents of the specified group were in Break mode.
<b>Percentage Work:</b>	The percentage of time that the agents of the specified group were in Work mode.
<b>Percentage Avail:</b>	The percentage of time that the agents of the specified group were idle (available).



# Agent Demand Report

NEAX 2000 IVS ACD-MIS Ver 5.XX		ABC TRAVEL LTD Agent Demand for 3/24/94 Group No.: 6300					Page No: 1 Date: 03/25/94 Time: 11:00					
Call Arrival	No. of Agt	No. of Calls (per agent) offer	Calls answered	GOS %	Aband %	---Average Time---			---Longest Time---			
						answr	talk	aband	answr	talk	aband	
						mm:ss	mm:ss	mm:ss	mm:ss	mm:ss	mm:ss	
00:00 - 00:59	0	0	0	0	0	0	0	0	0	0	0	
01:00 - 01:59	0	0	0	0	0	0	0	0	0	0	0	
:												
09:00 - 09:59	3	11	11	94	13	12	06:33	08	19	09:44	13	
10:00 - 10:59	5	10	10	80	2	17	08:03	04	19	09:33	04	
11:00 - 11:59	5	16	15	86	13	15	09:51	14	23	13:22	31	
12:00 - 12:59	2	12	12	96	0	11	07:53	0	15	13:33	0	
13:00 - 13:59	1	18	18	100	0	10	05:21	0	13	09:51	0	
14:00 - 14:59	3	12	12	80	5	18	04:45	09	17	08:27	12	
15:00 - 15:59	3	14	13	73	5	22	04:39	11	29	10:05	14	
16:00 - 16:59	2	7	7	100	7	10	04:41	08	13	08:24	08	
17:00 - 17:59	1	7	5	100	44	09	07:16	08	12	08:13	09	
:												
22:00 - 22:59	0	0	0	0	0	0	0	0	0	0	0	
23:00 - 23:59	0	0	0	0	0	0	0	0	0	0	0	
<b>Total</b>	<b>5</b>	<b>61</b>	<b>59</b>	<b>86</b>	<b>8</b>	<b>15</b>	<b>07:09</b>	<b>11</b>	<b>29</b>	<b>13:33</b>	<b>31</b>	
*****												

For each hourly recording period, the Agent Demand report shows the varying agent availability for the specified ACD group(s), together with numerical and percentage values profiling the call-handling performance. The statistics are:

**No. of Agents:** The maximum number of agents logged on at any time during the hourly period. The total (0000-2359) is the maximum number of agents for the day.

**No. of Calls (Per Agent) - Offered:** The average number of calls directed to each agent. This value expresses the workload for staff on duty, calculated as:

$$\frac{\text{Total number of ACD calls}}{\text{Total number of available agents}}$$

The total is calculated as:

$$\frac{\text{Total number of calls offered for the day}}{\text{The maximum number of agents logged on}}$$

**No. of Calls (Per Agent) - Answered:** The average number of calls answered by each agent. This value expresses the general performance of the staff on duty, calculated as:

$$\frac{\text{Total number of ACD calls answered}}{\text{Total number of available agents}}$$

## GENERAL DESCRIPTION

The total is calculated as:

$$\frac{\text{Total number of calls answered for the day}}{\text{The maximum number of agents logged on}}$$

### **GOS %:**

The percentage of ACD calls answered within the x-seconds time limit for the system's Grade of Service (set in Report Time Values), calculated as:

$$\frac{\text{Total number of calls answered in x seconds}}{\text{Total number of calls answered for the period}} \times 100$$

The total is the GOS for the day.

### **Abandoned %:**

The percentage of all received ACD calls that were disconnected by the callers while queued or ringing agent, calculated as:

$$\frac{\text{Total number of calls abandoned}}{\text{Total number of calls received for the period}} \times 100$$

The total is the average for the day.

### **Average Time - Answered:**

The average waiting time before calls were answered, including time in queue, calculated as:

$$\frac{\text{Total waiting time for all answered calls}}{\text{Total number of calls answered}}$$

The total is similarly calculated, but with respect to the whole system.

### **Average Time - Talk:**

The average conversation time for answered calls, calculated as:

$$\frac{\text{Total conversation time}}{\text{Total number of calls terminated after conversation}}$$

The total is similarly calculated, but with respect to the whole system.

### **Average Time - Abandoned:**

The average waiting time of calls that were disconnected by the caller while in the queue and/or ringing an agent, calculated as:

$$\frac{\text{Total waiting time for all abandoned calls}}{\text{Total number of calls abandoned}}$$

The total is similarly calculated, but with respect to the whole system.

### **Longest Time - Answered:**

The longest waiting time before start of conversation of any call ringing an agent. The total is the highest value recorded in the report.

### **Longest Time - Talk:**

The longest conversation time of any answered call. The total is the highest value recorded in the report.

### **Longest Time - Abandoned:**

The longest waiting time before disconnection of any abandoned call. The total is the highest value recorded in the report.

## Agent Performance Report

The Agent Performance report compares agents within and between ACD groups. Although the statistics are the same as those in the Group Performance report, they are applied separately as follows:

- Per each agent in the specified group(s)
- The average for each of the specified group(s)
- The total for each of the specified group(s)
- The total for all assigned groups

NEAX 2000 IVS		ABC TRAVEL LTD					Page No: 1		
ACD-MIS		Agent Performance for 3/21/94					Date: 03/25/94		
Ver 5.XX		Group No.: 6300					Time: 11:00		
-----Agent-----		No. of Calls		---Average Time---			---Total Time---		
Number	Name	ACD	NACD	ACD	NACD	AVAIL	ACD	NACD	AVAIL-
				mm:ss	mm:ss	mm:ss	hh:mm	hh:mm	hh:mm
6301	J. Murchison	3	5	5:42	8:00	37	17	40	10
6312	P. Armstrong	8	1	6:41	1:33	1:01	53	1	9
6306	M. Harris	6	3	7:07	2:07	53	42	6	9
6325	T. Presano	0	0	0	0	0	0	0	0
6625	S. Cooper	0	0	0	0	0	0	0	0
<b>Report Total</b>		17	9	6:30	3:53	50	1:53	48	29
<b>Report Average</b>		3	3	-	-	-	38	16	10
<b>System Average</b>		20	13	31:30	11:25	2:04	2:05	1:08	26

**No. of Calls - ACD:** The total number of original ACD calls that were answered by agents within the specified group(s).

**No. of Calls - NACD:** The total number of non-ACD calls that were answered by agents in the specified group(s), but only while in the AVAILABLE status.

**Average Time - ACD:** The average conversation time for ACD calls answered, calculated as:

$$\frac{\text{Total duration time for the period}}{\text{Total number of calls answered for the period}}$$

**Average Time - NACD:** The average conversation time for non-ACD calls, calculated with respect to the specified calls as:

$$\frac{\text{Total conversation time}}{\text{Total number of calls}}$$

## GENERAL DESCRIPTION

**Average Time - Available:** The average waiting time between both ACD and non-ACD calls, only while logged on, calculated as:

$$\frac{\text{Amount of time agents wait for both ACD and non-ACD calls}}{\text{Total occasions agents available and logged on}}$$

**Total Time - ACD:** The total conversation time for ACD calls.

**Total Time - NACD:** The total conversation time for non-ACD calls.

**Total Time - Available:** The total time agents spent waiting between both ACD and non-ACD calls, only while logged on.

### Report Average

These per-agent values are calculated on the basis of the actual total complement of agents assigned to the ACD group, not only the number available or logged on, generally calculated as:

$$\frac{\text{Total value for the group}}{\text{Total number of assigned agents}}$$

**No. of Calls - ACD:** Direct calculation using the formula above.

**No. of Calls - NACD:** Direct calculation using the formula above.

**Average Time - ACD, NACD, and Available:** These statistics have no real meaning (i.e., averages of averages). All reports will show blanks in these areas.

**Total Time - ACD, NACD, and Available:** Direct calculations using the formula above.

### Report Total and System Average

**No. of Calls - ACD and NACD:** By direct additions of the per-agent values.

**Average Time - ACD, NACD, and Available:** The general formula is:

$$\frac{\text{Total conversation or available time for the group}}{\text{Total number of calls handled or times available in the group}}$$

**Total Time - ACD, NACD, and Available:** By direct additions of the per-agent values.

## Agent Break and Work Report

NEAX 2000 IVS ACD-MIS Ver 5.XX		ABC TRAVEL LTD Agent Break and Work for 3/24/94 Group No.: 6300				Page No: 1 Date: 03/25/94 Time: 11:00		
-----Agent-----		---Total Time---		-----Percentage-----				
ID No.	Name	BRK hhh:mm	WORK hhh:mm	ACD %	NACD %	BRK %	WORK %	AVAIL %
170	G.BRUCE	50	0	1	5	6	0	88
171	M.JOSE	43	19	1	12	16	8	63
173	j.joe	0	0	0	0	0	0	0
Report Total		1:33	19	1	6	9	2	82
Report Avg.		31 6		1	6	9	2	82
System Avg.		2 0	6	71	1	1	1	26

The Agent Break and Work Report compares agents within and between ACD groups. The statistics are the same as those in the Group Break and Work report [ACD = NACD + Break + Work + Avail = 100%]; however, the statistics are applied separately, as follows:

- Per each agent in the specified group(s)
- Average for each of the specified group(s)
- Percentage for each of the specified group(s)
- Total for all assigned groups

**Average Time - Break:** The average time that the agent was in the Break mode, calculated as:

$$\frac{\text{Total duration time for the period}}{\text{Total time spent in Break mode}}$$

**Average Time - Work:** The average time that the agent was in the Work mode, calculated as:

$$\frac{\text{Total duration time for the period}}{\text{Total time spent in Work mode}}$$

**Total Time - Break:** The total time that each agent was in the Break mode.

**Total Time - Work:** The total time that each agent was in the Work mode.

**Percentage - ACD:** The percentage of agents that were on ACD calls.

**Percentage - NACD:** The percentage of agents that were on non-ACD calls.

**Percentage - Break:** The percentage of agents that were in the Break mode.

**Percentage - Work:** The percentage of agents that were in the Work mode.

**Percentage - Avail:** The percentage of agents that were idle (available).

## GENERAL DESCRIPTION

### **Report Average:**

These per-agent values are calculated on the basis of the actual complement of agents assigned to the ACD group, not only the number available or logged on, generally calculated as:

$$\frac{\text{Total value for the group}}{\text{Total number of assigned agents}}$$

### **Report Total and System Average:**

Report total is calculated by direct addition of the per-agent values. The system average is calculated with total number of agents in all groups.

### 3.5 System Maintenance

This menu option covers system administration (such as password control, system back-up, alarm setting, etc.). This option includes eight submenus, which are described in the following sections:

- “Password Maintenance” , Section 3.5.1
- “ACD Alarms” , Section 3.5.2
- “System Message” , Section 3.5.3
- “OAI Connection” , Section 3.5.4
- “EDU Port Selection” , Section 3.5.6
- “External Display Format” , Section 3.5.7

#### 3.5.1 Password Maintenance

The ACD-MIS system can accommodate a total of 12 passwords. Initially two are set in default data with the following specifications:

- The first password (which corresponds to the Enter key) is set to considerably limit access to system features. This status can be altered if required.
- The second password is programmed for fixed, unrestricted access to all features. The original name is "mis" (in lowercase letters), which can be changed to one preferred by the user.

When setting the remaining passwords, limit each password to 10 alphabetical characters.

Thereafter, the existing structure of a password can be added to or modified, within the limitations mentioned.

During normal use of the system, white represents permitted access to certain features or services; an amber color indicates that access is restricted.

#### 3.5.2 ACD Alarms

ACD-MIS lets you set limits on various statistics parameters. These are described in “[Alarm Configuration](#)” , [Section 3.7](#).

If any data is equal to or greater than a specified setting, the parameter will change color in the Statistics Monitor display.

If the screen is not in display mode at the particular time, a warning message will display (at the top of the screen) to indicate the affected area (system, group or agent statistics) and the alarm level (urgent or non-urgent). If the longest waiting time statistic exceeds the maximum value, an audible alarm is given at a preset period.

All alarm occurrences are recorded to file that can be displayed or printed for a specified date.

## GENERAL DESCRIPTION

### 3.5.3 System Message

This function records all actions and fault occurrences (e.g., power interruptions, unauthorized interference) that affect the normal operation of ACD-MIS. The current list can be displayed or printed. Events are presented in reverse chronological order.

Appropriate on-screen messages are displayed to guide the user throughout the operations.

### 3.5.4 OAI Connection

This function controls the ACD-MIS communications channel connected with the PABX. Whenever it is selected, one of two messages will appear to ask whether the opposite mode is/is not required.

The current status (on/off) is always displayed on the left-hand side of the amber banner at the top of the screen.

### 3.5.5 Configuration Data Backup

Entries for several areas of configuration data can be backed up to floppy disk.

The files copied refer to:

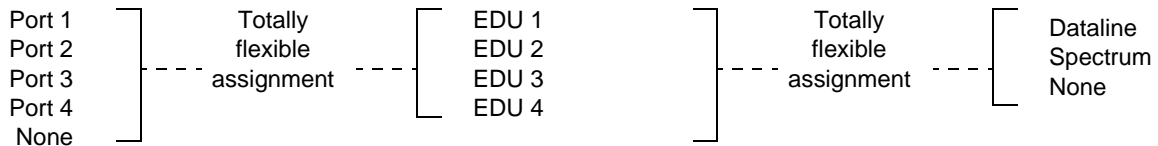
- General System Configuration
- Report Configuration and Scheduling
- Alarm Thresholds
- Agent ID Codes

The ACD-MIS menu is not used to activate backup procedure. See Section 6.5.1 on how to backup and reload files.

### 3.5.6 EDU Port Selection

The External Display feature (see [“External Display Unit \(EDU\)”](#), Section 3.2) can accommodate up to four (4) data display panels, called External Display Units (EDUs). Each installed EDU is cabled to a separate port on the StarGate multi-I/O board, which is connected to the PC terminal.

The Auxiliary Port Selection function simply assigns installed EDUs to Ports on the I/O board. (“None” is assigned if the particular I/O port is not used.) Either the Dataline or Spectrum EDUs may be used.



The display formats for the EDUs are individually selected through the External Display Format submenu (described in the next section).



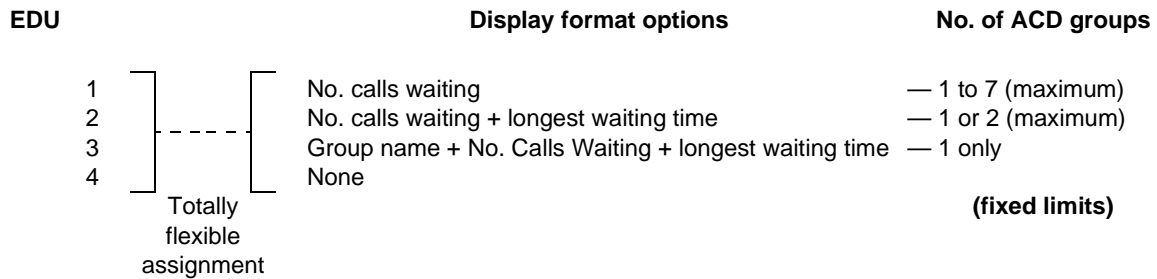
### 3.5.7 External Display Format

The External Display Format function specifies both the display format and applicable ACD group(s) for each installed EDU (i.e., EDU 1 to 4). With version 4.14 and higher, either the Dataline or Spectrum EDU may be used.

EDU 1 to 4 are assigned to the required ports on the I/O board through the Auxiliary Port Selection menu (see the preceding section). “None” is assigned if a particular EDU is not used.

Any format can be displayed on any EDU. Also, the same format can be displayed on all EDUs.

The diagram below illustrates the available options for the display format:



## GENERAL DESCRIPTION

### 3.6 System Configuration

ACD-MIS's System Configuration menu item lets you set up or modify the following:

- System site name
- ACD groups and their assigned agents
- Various operational default parameters that affect the reporting functions

The System Configuration menu includes eight submenus, which are described in the following sections:

- “System Name”, Section 3.6.1
- “Group Configuration”, Section 3.6.2
- “Station Configuration”, Section 3.6.3
- “Agent Configuration”, Section 3.6.4
- “ACD Key Configuration”, Section 3.6.5
- “Report Time Values”, Section 3.6.6
- “Storage Intervals”, Section 3.6.7
- “System Date Format”, Section 3.6.8

#### 3.6.1 System Name

This function lets you program the preferred site name that displays on all screens. The same site name is included in the header information of report printouts.

Up to 40 characters can be specified for the selected name.

#### 3.6.2 Group Configuration

This function lets you specify information about ACD groups. The ACD-MIS can accommodate up to 16 ACD groups. For each group, the following details can be specified:

- The selected name for the customer
- The relevant initial prefix digits
- The pilot extension number

Name and initial prefix are identical to assignments within the PABX itself; there must be an exact correspondence between the two systems.

Three different on-screen messages (New Group, In Use, and Not Used) indicate the status of each of the available groups.

#### 3.6.3 Station Configuration

There can be a maximum of 60 extensions per MIS system, in any combination of 16 ACD groups. Several details can be assigned to identify each. Certain information (tenant number, telephone type, extension number, etc.) duplicates PABX programming and must correspond exactly.

The separate items entered for each station are:

- Extension number
- Tenant number
- Type of telephone instrument (digital or analog) provided for each agent position or the classification as specified in the PABX in the case of a pilot number
- Associated ACD group number

**Note:** *An assigned pilot extension does not appear on any screen displays or in any reports.*

#### 3.6.4 Agent Configuration

There can be a maximum of 90 agent ID codes per system, in any combination of 16 ACD groups. Several details are assigned to identify each. Agent information is programmed only in the ACD-MIS, not in the PABX.

The separate items entered for each agent are:

- Agent ID
- Name of the agent
- Initial of the agent
- Associated ACD group number

**Note:** *The Agent ID is assigned to an ACD group and not to an ACD station.*

#### 3.6.5 ACD Key Configuration

This configures the required MSF number and the LED number for Log On/Off, Break, and Work. The MSF and LED numbers must be the same as those entered in CM90 of system programming. These two parameters are system parameters, so they cannot be different for each station.

## GENERAL DESCRIPTION

### 3.6.6 Report Time Values

Report Time Values are time limits that are relevant to the Statistics Monitor mode (see “[Statistics Monitor](#)”, [Section 3.3](#)) and Report Data (see “[Report Data](#)”, [Section 3.4.5](#)). Their individual applications are summarized in [Table 1-3](#).

**Table 1-3 Report Time Values**

Report time value	Application
Time to Answer (GOS)	Used in calculation of Grade of Service for the Statistics Monitor mode and the Agent Demand Report
Abandoned Ignore Time	Minimum time a call which is disconnected by the caller before answer, must have been queued before it is considered as abandoned. Applicable to: <ul style="list-style-type: none"><li>- Statistics Monitor mode</li><li>- Calls Abandoned report</li><li>- Traffic Analysis report</li><li>- Group Workload report</li><li>- Agent Demand report</li></ul>
Answer Time, Abandon Time, Duration Time	Increments required for the Calls in the: <ul style="list-style-type: none"><li>- Call Waiting report</li><li>- Calls Abandoned report</li><li>- Call Duration report</li></ul>

### 3.6.7 Storage Intervals

Storage Intervals are specified individual call recording periods within each hour of the day. Their application is in the presentation of statistics for each of the following reports where the selected option for report breakdown is set to “By Period.”

- Calls Waiting Report
- Calls Abandon Report
- Call Duration Report
- Traffic Analysis Report
- Agent Demand Report
- Group Break and Work Report
- Agent Break and Work Report

Although initially set at one hour in the basic system data, storage intervals can be specified at more regular intervals of 10, 15, 20 and 30 minutes where required. Typically, storage interval settings are used to provide more frequent analysis during peak traffic periods.

### **3.6.8 System Date Format**

This function determines the way that the date is formatted--both on the screens and printed out in reports. Three options are available:

- dd/mm/yyyy
- mm/dd/yyyy
- yyyy/mm/dd

## GENERAL DESCRIPTION

### 3.7 Alarm Configuration

Several of the parameters appearing in the Statistics Monitor mode are associated with dual operational limits which are programmed within Alarm Configuration as part of the overall administration of the system. If either limit is equaled or exceeded, visual and audible indications will be given to warn supervisory staff, who can then take appropriate action. Once the condition returns to normal, the alarm function is automatically cleared.

The separate alarm level indications are represented by a color change in the display of the particular statistical value:

- White (normal)
- Amber (low: non-urgent)
- Red (high: urgent)

If the group or agent concerned is not currently displayed, a warning message will be given on the screen, together with an indication of the alarm level and the relevant statistics area.

An audible alarm is given at a specified period (i.e., when the longest waiting time exceeds the preset limit).

These conditions are also recorded in the ACD Alarm file.

The Alarm Configuration menu includes four submenus, which are described in the following sections:

[“Group Statistics Threshold”](#) , Section 3.7.1

[“Agent Statistics Threshold”](#) , Section 3.7.2

[“Print Thresholds”](#) , Section 3.7.3

[“Audible Alarm Period”](#) , Section 3.7.4

#### 3.7.1 Group Statistics Threshold

This menu option lets you set low and high alarm limits for both system and ACD group parameters.

Preferred values are set for System and Group Statistics regarding:

GOS (Grade of Service)  
Average Answer  
Average Talk  
Average Available  
Calls Waiting  
Longest Waiting Call

GOS (Grade of Service) is a percentage value related to ACD call-handling efficiency. The respective settings for the two alarm limits are therefore assigned to correspond to a descending GOS, as in the example below:

GOS Target = 90 (%)  
Low Alarm Setting = 70 (%)  
High Alarm Setting = 50 (%)

Average Answer, Average Talk, Average Available, and Longest Waiting Call (defined in Section 3.1) are direct time measurements (in minutes and seconds) related to call handling. Their settings are specified in ascending order.

### **3.7.2 Agent Statistics Threshold**

Similar limits are set for agent parameters. This includes the low and high alarms for Average Answer and Average Talk statistics on a per-ACD-group basis.

Direct time measurements (in minutes and seconds) related to call handling include the following: Average Answer, Average Talk, Average Available, Max Talk, Max Avail, Max O/G, and Max Logged Off. Their settings are specified in ascending order.

### **3.7.3 Print Thresholds**

A printout of the System/Group and Agent Statistic Threshold settings can be obtained at any time. This would be most appropriate after initial configuration of the settings or when later adjustments are made.

The recorded details are presented on separate pages for the two areas and include an indication of the date and time of the last modification.

### **3.7.4 Audible Alarm Period**

A warning tone sounds whenever the value of the Waiting Longest parameter in the Statistics Monitor Mode - System and Group Statistics exceeds the preset value for the high level threshold.

This tone is repeated every 5, 10, 20, 30, 60 or 90 seconds, depending on the period selected using this feature. If preferred, the alarm can be disabled.

Any adjustment to the current setting takes effect immediately, even while a warning tone is being given.

## GENERAL DESCRIPTION

### 3.8 Exit

The Exit function completely shuts down ACD-MIS and returns you to UNIX prompt.

**CAUTION:** *No call data from the PABX can be processed when ACD-MIS is shut down.*

To exit from ACD-MIS, go to Exit on the menu.



## 4. MULTIPLE SUPERVISOR TERMINALS

### 4.1 General

One UAP Computer (See Figure 1-2) can supports multiple ACD-MIS applications and multiple users can login into each ACD-MIS applications. Since the ACD-MIS user is an UNIX user, the user can connect via RS-232 link or by TCP/IP Ethernet. The terminal type is ANSI terminal.

The first user to log in is called the Master. The Master is allowed to use all the commands in the ACD-MIS menu. Other users are called the Sub-Master. The general rule is that the Sub-Master cannot modify the ACD-MIS database (System and Agent) and the Sub-Master cannot start/stop the ACD-MIS program. The Sub-Master can monitor and print Statistics data.

GENERAL DESCRIPTION

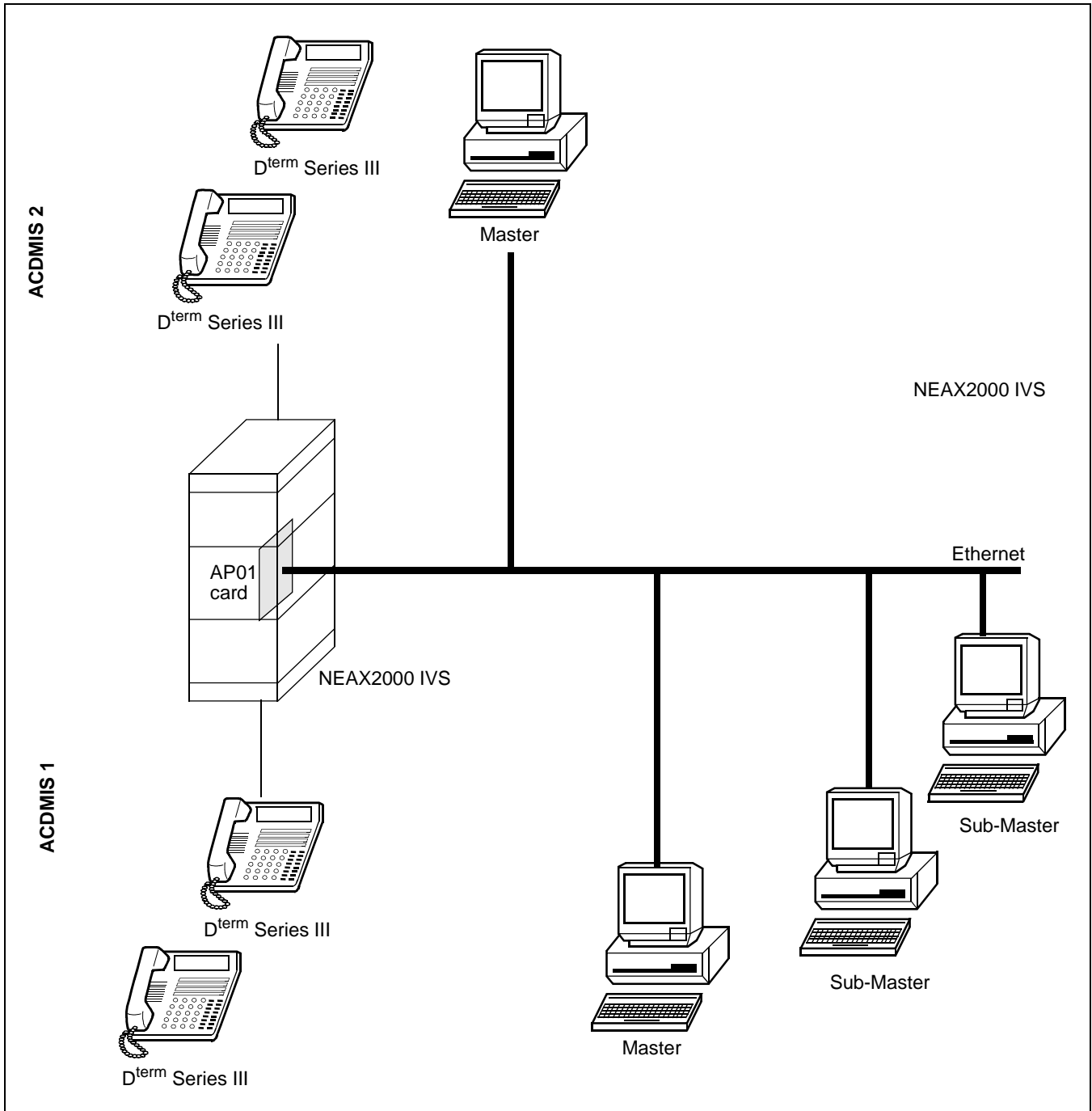


Figure 1-2 Connection of Multiple MIS Terminals

## CHAPTER 2 INSTALLATION PROCEDURES

### 1. INTRODUCTION

Installation of the NEAX2000 IVS ACD-MIS system involves a number of actions, which are summarized in this chapter. In addition, you may need to refer to:

- Chapter 3, Operating Instructions
- Specific NEAX2000 IVS manuals
- SCO User's Guide

Before installing the ACD-MIS, the following requirements must be met:

- A personal computer with SCO must be connected to Ethernet.
- The NEAX2000 IVS must be equipped with an interface to transmit/receive the control signals between the PBX and the computer through Ethernet. The interface supports TCP/IP protocol. Refer to "NEAX 2000 IVS Open Application Interface (OAI) System Manual" for hardware and software requirements, hardware installation, and system data programming.
- OAI Application Manager (APM) must be installed in the computer. Refer to "APM Installation Manual" for APM installation.

## **2. SYSTEM HARDWARE SPECIFICATION**

### **2.1 External Display Units**

In an ACD environment, an end-user can indicate (to agents) the total number of calls, and the longest period of time that calls have been in an ACD group queue waiting to be answered. With the ACD-MIS software, external display units/wallboards may be interfaced with the personal computer (which provided the MIS capability).

This wallboard may be centrally located among the agents and can provide the call-waiting information. The wallboard can provide information on up to seven ACD groups. Up to four wallboards may be interfaced with the personal computer.

### **2.2 Required Equipment**

In order to provide wallboard capabilities, two items are required in addition to the NEAX2000 IVS system and the ACD-MIS personal computer:

- A wallboard
- A driver board, which is installed into the personal computer. The board provides multiple RS-232 asynchronous communications channels. Recommended board is DIGI PC/X (from DIGI International Inc, 6400 Flying Cloud Dr., Eden Prairie, MN 55344, (800) 344-4273 (612)943-9020). Only one drive board is required for one to four wallboards.

### 3. INSTALLATION PROCEDURES

#### 3.1 Select or add destination link

Before adding ACD-MIS installation link, go to APM system configuration menu. Check the existing destination link or add a new destination link for the ACD-MIS. Make sure the destination link port number is set to 0 so that the destination link can be shared with other application and can run TSAPI application. Refer to "APM Operation manual" for detail of adding a destination link.

**Note:** *The number of facilities required for ACD/MIS to open is a minimum of 16. Refer to OAI Library Configuration, Chapter 3.1 of the APM Operation Manual.*

#### 3.2 How to install the ACD-MIS software from the distribution disk:

- Login as a super user.
- Insert the distribution disk to the disk drive.
- Type "tar xv install.sh" and hit return key. The files will be copied to the directory.
- Type "./install.sh" and hit return key.
- Follow the instruction on the screen to finish the installation.

Installation example:

- login as super user.
- Type "./install.sh" and hit return key.
- The screen will show the copy file statements. Then the screen will show (See Figure 2-1):

```
This installation script will set up user login directory and Install
echo ACDMIS application under APM. It then copies executables and data files
to user login directory
```

```
Please enter number 1 to 5 and RETURN key for the following choices:
```

```
1- User Login Name acdmis1, User ID 4201
2- User Login Name acdmis2, User ID 4202
3- User Login Name acdmis3, User ID 4203
4- User Login Name acdmis4, User ID 4204
5- Other User Login Name and ID
```

Figure 2-1 APM Installation Script

## INSTALLATION PROCEDURES

- Enter "1" and hit return key. The screen shows:

```
User Login Name acdmis1 and User ID 4201 has been entered  
Do you want to continue with the installation? (y/n)
```

**Figure 2-1 APM Installation Script (Cont)**

- Enter "y" and hit return key. The screen shows:

```
ACD-MIS Installation Procedure for SCO UNIX  
  
ACD-MIS Version 5.0  
  
The default acdmis directory is /oai/app/acdmis1.  
Is this acceptable? (y or n)
```

**Figure 2-1 APM Installation Script (Cont)**

- Enter "y" and hit return key. The screen shows:

```
The default ACDMIS OWNER is acdmis1.  
Is this acceptable? (y or n)
```

**Figure 2-1 APM Installation Script (Cont)**

- Enter "y" and hit return key. The screen shows:

```
The default ACDMIS login name is acdmis1.
Is this acceptable? (y or n)
```

**Figure 2-1 APM Installation Script (Cont)**

- Enter "y" and hit return key. The screen shows:

```
Unless there is a known conflict, press "Enter" at
the prompt to accept the default value [in brackets].

Enter user-ID for the ACDMIS Admin account[4201]:
```

**Figure 2-1 APM Installation Script (Cont)**

- Hit return key. The screen shows:

```
Installation parameters are:*****

Login name is acdmis1

Logging group is apm

ACDMIS home directory is /oai/app/acdmis1

The ACDMIS user ID is 4201

The ACDMIS group ID is 2000

*****

Is this configuration of the ACDMIS acceptable? (y or n)
```

**Figure 2-1 APM Installation Script (Cont)**

## INSTALLATION PROCEDURES

- Enter "y" and hit return key. The screen shows:

```
you want to configure ACD Agent at this time? (y or n)
```

**Figure 2-1 APM Installation Script (Cont)**

- Enter "y" and hit return key. The screen shows:

```
The recommended name for the component is acdmis1.  
Is this acceptable? (y or n)
```

**Figure 2-1 APM Installation Script (Cont)**

- Enter "y" and hit return key. The screen shows:

```
The default data directory is /oai/app/data/acdmis1.  
Is this acceptable? (y or n)
```

**Figure 2-1 APM Installation Script (Cont)**



- Enter "y" and hit return key. The screen shows:

```
The data directory shall be /oai/app/data/acdmis1.
The recommended IPC ID is 4201.
Is this acceptable? (y or n)
```

**Figure 2-1 APM Installation Script (Cont)**

- Enter "y" and hit return key. The screen shows:

```
elect the source and destination links from following list:
[1] source: OAI1TCP   dest: PBX2000 (TCP/IP protocol)
[2] other (specify)
[q] quit installation
Enter bracketed value -->
```

**Figure 2-1 APM Installation Script (Cont)**

- Enter "1" and hit return key. The screen shows:

**Note:** Refer to 5.2 on select a destination link.

```
Source will be OAI1TCP. Destination will be PBX2000.

Is this configuration of the ACD Agent acceptable? (y or n)
```

**Figure 2-1 APM Installation Script (Cont)**

## INSTALLATION PROCEDURES

- Enter "y" and hit return key. The screen shows:

```
/oai/utils/autocfg running...  
  
/oai/utils/autocfg: acdmis1 is already configured.  
/oai/utils/autocfg: Reconfigure (y/n)?
```

**Figure 2-1 APM Installation Script (Cont)**

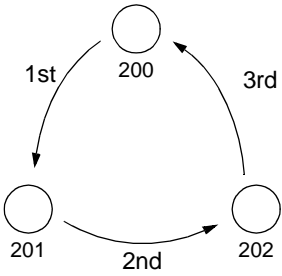
- Enter "y" and hit return key. The screen shows:

```
/oai/utils/autocfg: acdmis1 application configured.  
  
/oai/utils/autocfg terminated normally.  
  
ACD-MIS Agent configuration completed.  
  
Installation of ACD-MIS is complete.
```

**Figure 2-1 APM Installation Script (Cont)**

3.3 ACD-MIS Data Assignment

3.3.1 To activate ACD

Command	Description	Data
CM10	Assign the Pilot (phantom) and agents to each LEN.	(1) 0000-0511 (LEN) (2) X~XXXX Pilot/Agent station number FX~FXXXX Agent station number
CM12	Assign the tenant number to each ACD Pilot and all agents.	YY=04 (1) X~XXXX (Station No.) (2) 1 ◀: Tenant Number
CM17	<p>Assign ACD group. For one ACD group, assign station numbers one by one, in the order they will hunt.</p> <p><b>Note:</b> Up to 60 stations can be assigned into a single ACD group.</p> <p><b>Example:</b> Setting Station Numbers 200, 201, 202 into one ACD group.</p> <div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>1st operation { (1) 200 (2) 201</p> <p>2nd operation { (1) 201 (2) 202</p> <p>3rd operation { (1) 202 (2) 200</p> </div>  </div>	<p>Y=0</p> <p>(1) X~XXXX (Station No.) (2) X~XXXX (Another Station No. to be linked)</p>
	<p>Assign the Pilot station and member station.</p> <p><b>Note:</b> The Pilot station must be a non-existing LEN (CM10) phantom. Agent stations must be assigned Prime Line (CM93). Agent station numbers must be the same number assigned in CM10, CM17, and CM93.</p>	<p>Y=1</p> <p>(1) X~XXXX (ACD Station No.) (2) 1/0 ◀: Pilot Station/Member Station</p>

Continued on next page

**INSTALLATION PROCEDURES**

Command	Description	Data
CM17	Assign the ACD Group Number.	Y=2 (1) X~XXXX (Pilot/Agent Station No.) (2) 00~15 (ACD Group 00~15)
	Specify the ACD service for each type of call . <b>Note:</b> <i>Agent station number must be the same number assigned in CM10, CM17, and CM93.</i>	Y=4 (Internal Call: from station/ATTCON) (1) X~XXXX (Pilot Station No. of the ACD Group) (2) 0/1 ◀: Not to be provided/To be provided  Y=5 (C.O. Incoming Call: DDD: FX/WATS) (1) X~XXXX (Pilot Station No. of the ACD Group) (2) 0/1 ◀: Not to be provided/To be provided  Y=6 (TIE Line Incoming Call) (1) X~XXXX (Pilot Station No. of the ACD Group) (2) 0/1 ◀: Not to be provided/To be provided  Y=7 (DID Call) (1) X~XXXX (Pilot Station No. of the ACD Group) (2) 0/1 ◀: Not to be provided/To be provided  Y=A (Delay Announcement Service) (1) X~XXXX (Pilot Station No. of the ACD Group) (2) 0/1 ◀: To be sent periodically/To be sent once  Y=B (Queue Size Limitation) (1) X~XXXX (Pilot Station No. of the ACD Group) (2) 0/1 ◀: Provided /Not to be provided

Continued on next page

Command	Description	Data
CM08	Specify the processing for an incoming call when all ACD Stations are busy.	(1) 212 (2) 0/1 ◀: Busy Tone Connection /Queuing
	Specify the processing for a held call after setting the ACD Busy-Out.	(1) 214 (For the held Call from TIE Line) (2) 0/1 ◀: Reconnected by Switchhook Flash/ Disconnected  (1) 215 (For the held call from C.O. Line) (2) 0/1 ◀: Reconnected by Switchhook Flash/ Disconnected
	Specify whether the transferred C.O. call from a station or HA-610Z/SN610 ATTCON is placed into queueing mode when all ACD stations are busy.  <b>Note:</b> <i>This data is effective only when CM08-212 is set to 1.</i>	(1) 227 0: The call is placed into queueing mode. <b>Note</b> 1 ◀: Recall to the transferring station (when the call is transferred from station) or attendant Camp-On is set (when the call is transferred from ATTCON.) (2) {
	Specify the diversion display on a Multiline terminal or SN610 ATTCON when originating or terminating an ACD call.	(1) 357 (2) 0/1 ◀: Available/Not Available
	Transferred C.O. call from a station or HA-610 ATTCON is placed into queueing mode when all ACD stations are busy.  <b>Note:</b> <i>This data must be set to 0 for proper operation.</i>	(1) 460 (2) 0: Counts as 1 call.  1 ◀: Counts as 2 calls.
CM93	Specify Prime Line for ACD station number assigned in CM10 and CM17.  <b>Note:</b> <i>Agent station number must be the same number assigned in CM10, CM17, and CM93.</i>	(1) X~XXXX Primary Extension Number (from CM10) (2) X~XXXX Prime Line (same number as CM10)

**INSTALLATION PROCEDURES**

**3.3.2 To start up MSF from D<sup>term</sup> by using an OAI function key**

Command	Description	Data
CM90	Assign the OAI function key for starting up MSF to a D <sup>term</sup> .	YY=00 (1) My Line No. + <input type="text"/> + Key No. (2) { F1032: OAI Function Key No. 0 : F1047: OAI Function Key No. 15
CMD7	When starting up MSF by pressing the OAI function key, assign the operation code to the OAI function key assigned by CM90.	Y=0 (1) { F1032: OAI Function Key No. 0 : F1047: OAI Function Key No. 15 (2) 128-191:Operation Code for MSF
	When starting up MSF by dialing a digit code (1-3 digits) after pressing the OAI function key, assign the digit number of digit code; then assign the operation code to the digit code.	Y=0 (1) { F1032: OAI Function Key No. 0 : F1047: OAI Function Key No. 15 (2) DCS (X=1-3): Digit Number of Digit Code  Y=6 (1) X-XXX: Digit Code (X=0-9, #) (2) 128-191:Operation Code for MSF
	Assign the waiting timer for receiving an answer signal after starting up MSF, if required.	Y=3 (1) 00 (2) 000-127:Timer data of 8-508 sec. in 4 sec. increments. If no data is set, the default setting is 8 sec.
	Specify a chime from D <sup>term</sup> when receiving RR signal of MSF.	Y=7 (1) { F1032: OAI Function Key No. 0 : F1047: OAI Function Key No. 15 (2) 00 ◀ /01:Not sent/sent

**Note:** CM90 Key Assignments must match ACD Key configurations in MIS.

3.3.3 To Start Up MSF from PB Telephone/D<sup>term</sup> by using an access code

Command	Description	Data
CM12 and CM15	<p>Assign the Class of Service for starting up MSF to the required stations.</p> <p><b>Note:</b> <i>After starting up MSF from PB telephone or D<sup>term</sup>, the PB receiver is in busy during MSF mode. Thus, make sure that a call origination is not available if all PB receivers are used. To prevent the all busy, we recommend that the OAI function key of D<sup>term</sup> is used because the PB receiver is not used for the D<sup>term</sup>.</i></p>	<p>CM12, YY=02</p> <p>(1) X-XXX: Station No.</p> <p>(2) XXXX   Service Restriction Class (B) (00-15 ◀)</p> <p>CM15, YY=59</p> <p>(1) XX: Service Restriction Class (B)n assigned by CM12 YY=02</p> <p>(2) 1 ◀: Allowed</p>
CM20	<p>Assign the access code for starting up MSF.</p> <p><b>Note:</b> <i>Need 3 separate access codes.</i></p>	<p>YY=0-3</p> <p>(1) X-XXX: Access Code for MSF</p> <p>(2) 084</p>
CMD7	<p>Assign the operation code to the access code assigned by CM20-084.</p> <p><b>Note 1:</b> <i>The operation code means a number to designate each OAI application.</i></p> <p><b>Note 2:</b> <i>The maximum number of operation code is 16.</i></p>	<p>YY=1</p> <p>(1) X-XXX: Access Code assigned by CM20-084</p> <p>(2) 128-191: Operation Code for MSF</p> <p><b>Note 2</b></p>
	<p>Assign the waiting timer for receiving an answer signal after starting up MSF, if required.</p>	<p>Y=3</p> <p>(1) 00</p> <p>(2) 000-127: Timer data of 8-508 sec. in 4 sec. increments. If no data is set, the default setting is 000 (8 sec.).</p>

**INSTALLATION PROCEDURES**

**3.3.4 To Provide ACD / UCD Priority Queuing**

**ACD/UCD Priority Queuing per trunk route**

<b>Command</b>	<b>Description</b>	<b>Data</b>
CM35	Assign the data for Priority Queuing to the Trunk Routes assigned by CM30.	YY = 60 (Priority Queuing) (1) Trunk Route No. (00-63) (2) 0: To be provided  YY = 18 (Received Digit Conversion) (1) Trunk Route No. (00-63) (2) 1 ◀: Not to be provided

**ACD/UCD Priority Queuing per DID incoming LDN Number**

<b>Command</b>	<b>Description</b>	<b>Data</b>
CM35	Assign the data for Priority Queuing to the Trunk Routes assigned by CM30.	YY = 60 (Priority Queuing) (1) Trunk Route No. (00-63) (2) 0: To be provided  YY = 18 (Received Digit Conversion) (1) Trunk Route No. (00-63) (2) 0: To be provided
CM76	Assign the Priority Queuing per DID incoming LDN number.	Y = 6 (1) X-XXXX: Station Number received (2) 1 ◀: To be provided



**3.3.5 To Provide the Delay Announcement for ACD, when sending the delay announcement periodically or only once**

Command	Description	Data
CM10	Assign the Voice Recording Memory Card (PN-2DATA) to each LEN.	(1) 0000~0511 (LEN No.) (2) EB000~EB127 (Voice Recording Memory Card No.)
CM20	Assign an access code to record, replay, and delete the Voice Recording card.	Y=0-3 (1) X-XXX Access Code (2) { A00: Record A01: Replay A02: Delete
CM17	Specify the pattern of the message sent to each ACD group.	Y=A (1) X~XXXX: Pilot Station number of the ACD Group (2) { 0: To be sent periodically 1 ◀: To be sent only once.
CM41	If the data for CM17, Y=A is "0," set the interval time of the ACD Delay Announcement.	Y=0 (1) FUNCTION No.: 47 (2) 01~30 (12 sec.~134 sec.) If no data is set, the default setting is 44~50 sec.
	Define the maximum waiting time of ACD call for the ACD PEG Count. This timing is also applied to the duration of Ringback Tone after a call arrives.	Y=0 (1) FUNCTION No.: 16 (2) 02~30 (8 sec.~120 sec.) If no data is set, the default setting is 32~36 sec.
CM49	Assign the ACD Delay Announcement function to the required Voice Recording Memory Card(s) (PN-2DATA).	YY=00 (1) 000~127 (Voice Recording Memory Card No.) (2) 0B0XX └─┬─┘ ACD Group No. (00~15)
CM51	When transferring the call to an extension or Attendant after the first interval time of ACD Delay Announcement, assign the destination  <b>Note:</b> This command is effective when CM17, Y=A is set to 0 (set periodically).	Y=17 (1) 00-63 : Tenant No. (2) Destination: X-XXXX: Station No. E000: HA-610Z/SN610 ATTCON

**INSTALLATION PROCEDURES**

**3.3.6 To provide the Delay Announcement for ACD, when sending the ACD Second Delay Announcement**

Command	Description	Data
CM49	Assign the ACD Second Delay Announcement function to the required Voice Recording Card(s) (PN-2DATA).	YY=00 (1) 000-127 (Voice Recording Memory Card No.) (2) 11XX ACD Group No. (00-15)
CM08	When a caller encounters all ACD/UCD stations busy	(1) 212 (2) 0: Busy Tone Connection 1 ◀: Caller is placed into queuing mode
CM10	Assign the Voice Recording Memory Card (PN-2DATA) to each LEN No.	(1) 0000-0511 (LEN No.) (2) EB000-EB127 (Voice Recording Memory Card No.)
CM17	Assign the pattern of the message to be sent to each ACD group periodically.	Y=A (1) X-XXXX: Pilot Station number of the ACD Group (2) 0: To be sent periodically
CM41	If the data for CM17, Y=A is "0", set the interval time of ACD Delay Announcement.	Y=0 (1) FUNCTION No.: 47 (2) 01-30 (12 sec.-132 sec.) If no data is set, the default setting is 44-48 sec.
	Define the maximum waiting time of ACD Call for the ACD Delay Announcement. This timing is also applied to the duration of Ringback Tone after a call arrives.	Y=0 (1) FUNCTION No.: 16 (2) 01-30 (12 sec.-132 sec.) If no data is set, the default setting is 44-48 sec.

3.3.7 To monitor an ACD call, with or without Warning Tone

Command	Description	Data
CM08	Specify the warning tone sent to connected parties (in two-way calling) when monitoring.	(1) 259 (2) { 0: No Tone 1 ◀: One Warning Tone
CM12 and CM15	Assign the Class of Service for monitoring stations.	CM12, YY = 02 (1) X~XXXX: Station number (2) <u>XXXX</u> └─── Service Restriction Class (A) (00-15 ◀)  CM15, YYY = 103 (1) XX: Service Restriction Class (A) 00-15 assigned by CM12, YY = 02 (2) 1 ◀: Allowed
CM12 and CM15	Assign the Class of Service for monitored stations.  <b>Note:</b> <i>Monitoring telephone conversations may be illegal under certain circumstances and laws. Consult a legal advisor before implementing the monitoring of telephone conversations. Some federal and state laws require a party monitoring a telephone conversation to use beep-tone(s), to notify all parties to the telephone conversation, and/or obtain consent from all parties to the telephone conversation. Some of these laws provide strict penalties for illegal monitoring of telephone conversations.</i>	CM12, YY = 02 (1) X~XXXX: Station number (2) <u>XXXX</u> └─── Service Restriction Class (A) (00-15 ◀)  CM15, YYY = 104 (1) XX: Service Restriction Class (A) 100-15 assigned by CM12, YY = 02 (2) 1 ◀: Allowed
CM20	Assign the access code for monitoring (if required).	Y=0-3 (Number Plan Group 0-3) (1) X-XXX: Access Code (2) 033: Monitor
CM90	Assign monitoring function key to the required multiline terminals (if required).	YY= 00 (1) X-XXX: (Primary Ext. No.) + <input type="text"/> , + Key No. (01-16) (2) F0033: Monitor



For connecting the Indicator for ACD Call Waiting:

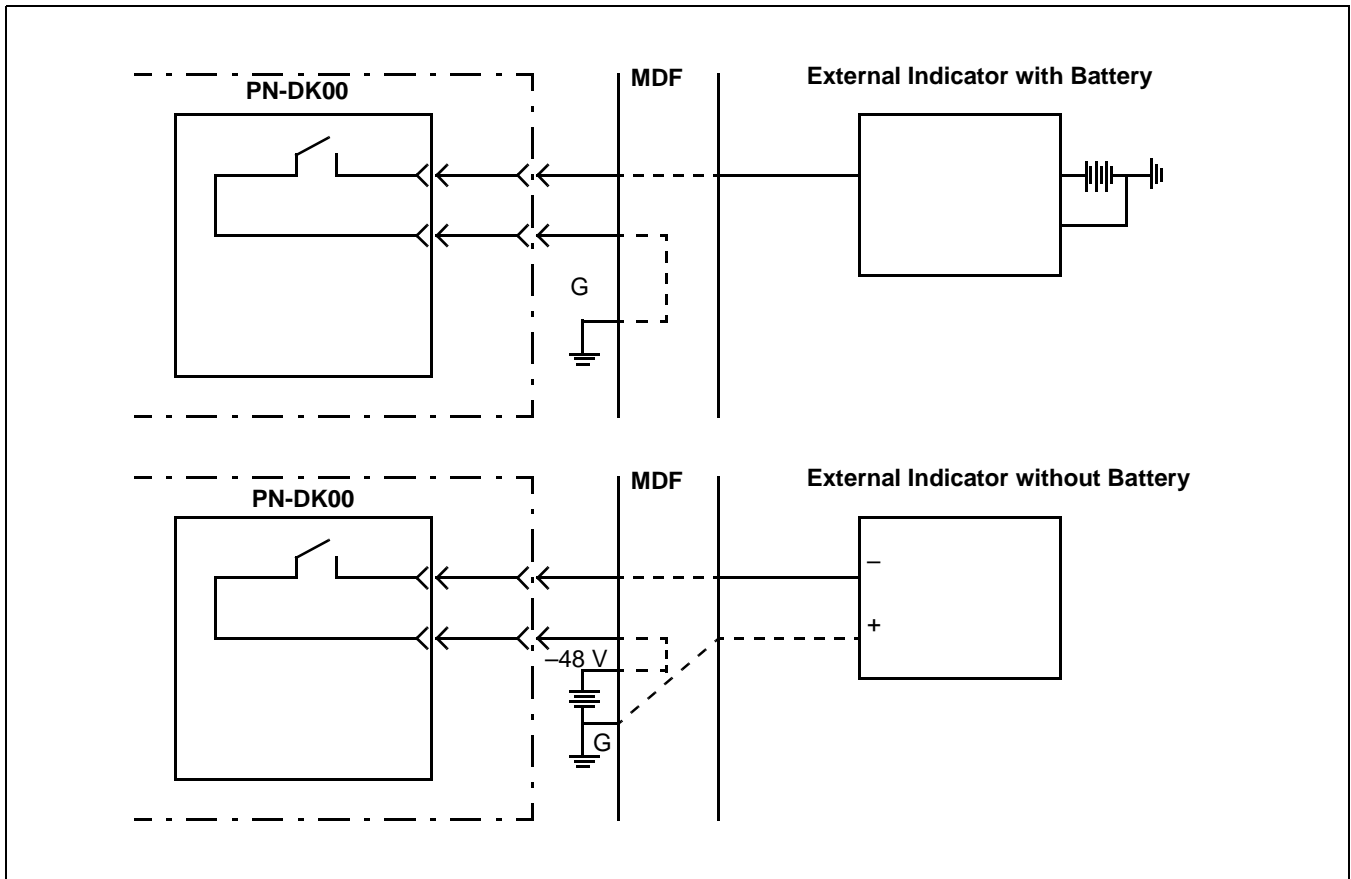


Figure 2-2 Indicator Connection for ACD Call Waiting

INSTALLATION PROCEDURES

3.3.9 To provide the call waiting lamps on the Multiline Terminal for ACD Call

Command	Description	Data								
CM08	Assign the incoming call to queuing mode when all ACD stations are busy.	(1) 212 (2) 1 ◀: Queuing								
	<p>Specify the maximum number of queuing in each ACD group for controlling the call waiting lamp of Multiline Terminal.</p> <p><b>Note:</b> <i>Depending on the number of the queuing station/trunk, the lamp indication pattern on Multiline Terminal is different, as shown in the table below.</i></p> <p>N = Number of queuing station/trunk</p> <table border="1"> <thead> <tr> <th>Conditions</th> <th>Lamp indication</th> </tr> </thead> <tbody> <tr> <td>2nd Data = 01</td> <td>Steady on red irrespective of number of queuing station/trunk.</td> </tr> <tr> <td>1 ≤ N &lt; 2nd Data (2nd Data ≠ 01)</td> <td>Steady on red.</td> </tr> <tr> <td>2nd Data &lt; N (2nd Data ≠ 01)</td> <td>Flashing red.</td> </tr> </tbody> </table>	Conditions	Lamp indication	2nd Data = 01	Steady on red irrespective of number of queuing station/trunk.	1 ≤ N < 2nd Data (2nd Data ≠ 01)	Steady on red.	2nd Data < N (2nd Data ≠ 01)	Flashing red.	<p>(1) 15 (2) 01-99 (Number of queuing in each ACD group)</p> <p>If no data is set, the default setting is 01.</p>
Conditions	Lamp indication									
2nd Data = 01	Steady on red irrespective of number of queuing station/trunk.									
1 ≤ N < 2nd Data (2nd Data ≠ 01)	Steady on red.									
2nd Data < N (2nd Data ≠ 01)	Flashing red.									
CM90	Assign the ACD Call Waiting Indication LED to the required Multiline Terminal.	<p>YY=00</p> <p>(1) Primary Extension No. + <input type="text"/>, + Key No.</p> <p>(2) { F1280: ACD Group 00 : : F1295: ACD Group 15</p>								

3.3.10 To provide DID incoming LDN display on Multiline Terminal

Command	Description	Data
CM35	<p>Assign DID incoming LDN display on Multiline Terminal.</p> <p><b>Note:</b> <i>When the 2nd Data is set to "1", a Trunk ID number assigned by CM30, YY=19 is displayed.</i></p>	<p>YY=75 (DID incoming LDN Display on Multiline Terminal)</p> <p>(1) Trunk Route No. (00-63)(2)</p> <p>(2) { 0: Available 1 ◀: Not available <b>Note</b></p>

3.3.11 To provide DID Number Conversion for an ACD Group

Command	Description	Data
CM35	Assign the data for DID to the Trunk Routes assigned by CM30.	<p>YY=12 (Number of digit to be received)</p> <p>(1) Trunk Route No. (00-63)</p> <p>(2) { 0: Available 3 ◀: 4 digits</p> <p>YY=18 (Received digit conversion)</p> <p>(1) Trunk Route No. (00-63)</p> <p>(2) 0: To be provided</p> <p>YY=78 (Digit conversion of leading 2-4 digits of DID incoming LDN)</p> <p>(1) Trunk Route No. (00-63)</p> <p>(2) 0: Available</p>
CM76	<p>When CM35 YY=18 is set to "0" (Received Digits Conversion is to be provided), assign the data for interpreting the digits received.</p> <p><b>Note:</b> <i>When the digit conversion of leading 2-4 digits of DID incoming LDN is available (CM35, YY=78, Data=0), leading 2-4 digits LDN should be assigned as the first data of CM76. (When the DID incoming LDN is 1 digit, the digit conversion for only one digit is not available.</i></p>	<p>Y=0 (Day Mode)</p> <p>Y=1 (Night Mode)</p> <p>(1) X-XXXX: Station Number received. X-XXXX: Station/Data Station Number to be terminated.</p> <p>DXX: Change Terminating System to:</p> <p>(2) D01 D13: TAS D04: DIT D14: HA-610Z/ SN610 AT-TCON D16: DISA D09: Automated Attendant (PN-2DATA)</p>

## INSTALLATION PROCEDURES

### 3.4 How to run the ACD-MIS

**Note:** *The remaining steps refer to entering specific customer data and performing an initial check of the system's operation.*

Step 1. Enter the unrestricted default password mis (lower case letters). The Main Menu will be displayed.

**Note:** *Steps 7, 8, and 9 are required for minimum system configuration.*

Step 2. Specify the required ACD Groups(s). Do not enter more than 12 characters per Group Name.

Step 3. Enter the required Station Details. Be sure that the correct assignment of extension (e.g., analog or digital) has been made.

Step 4. Enter the required agent detail.

Step 5. Enter the required ACD key detail. Be sure that the PABX assignment matches the ACD-MIS assignment.

Step 6. Configure the required Report Time Values.

Step 7. Configure any requirement for Storage Intervals.

Step 8. Format the correct date format.

Step 9. Perform the required Report Configurations.

Step 10. Perform the required Report Group Configurations.

Step 11. Set the requirements for Report Scheduler.

Step 12. Set the required Group Statistics Threshold.

Step 13. Set the required Agent Statistics Threshold.

Step 14. Program the required passwords and their individual access arrangements. Include the new name for the default password "mis" (where specified), and the altered access status of the default password ENTER key.

Step 15. Allow a suitable time for collection of preliminary data, then verify the recording of statistics.

### 3.5 Hardware Required

- To provide the delay announcement for ACD: PN-2DATA card
- To provide the Indicator for Overflowed ACD Call Waiting: PN-DK00 Card X 1
- External Indicator (visual or audible type) provided by the customer.



## 4. TROUBLESHOOTING

### 4.1 General

This section explains the troubleshooting information to be used after installing the ACD-MIS system.

### 4.2 Troubleshooting Procedures

**Note:** See *NEAX2000 IVS System manual* for troubleshooting on TCP/IP link.

**Table 2-1 Troubleshooting Procedures**

Trouble	Cause	Action
(1) Entering a password has no effect.	Improper password.	Reenter correct password.
(2) In Statistics Monitor Mode, an extension does not appear for a group.	The PC does not expect messages for these extensions.	Make sure that all assignments in the station configuration are equipped for the extensions to be reported.
(3) Wall Boards cause improper operation or lock up.	Stargate Driver version 2.0	Obtain version 1.0 or 4.0 drivers.

## **5. EXTERNAL DISPLAY UNIT (EDU) SET-UP**

The following instructions refer to the EDU/PC hardware (Figures 2-3 through 2-4) and software aspects only. Programming of the customer specifications is done in conjunction with the MIS Set-Up procedures.

### **5.1 RS-232C Board (DIGI PC/X) Installation**

- Install the RS-232C driver board according to the DIGI PC/X board installation manual.

5.2 Communication Cable Assembly

5.2.1 For Spectrum EDU

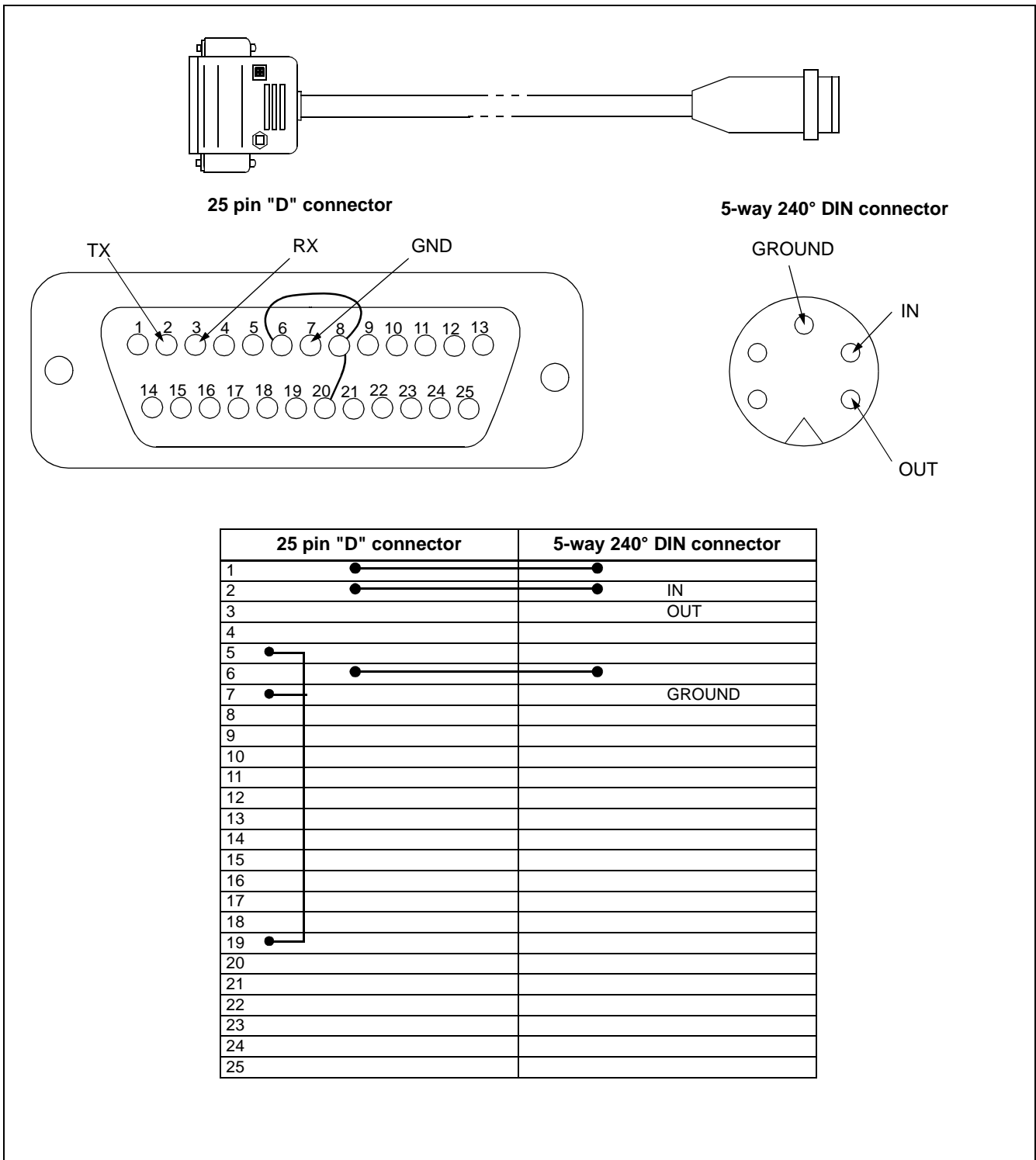
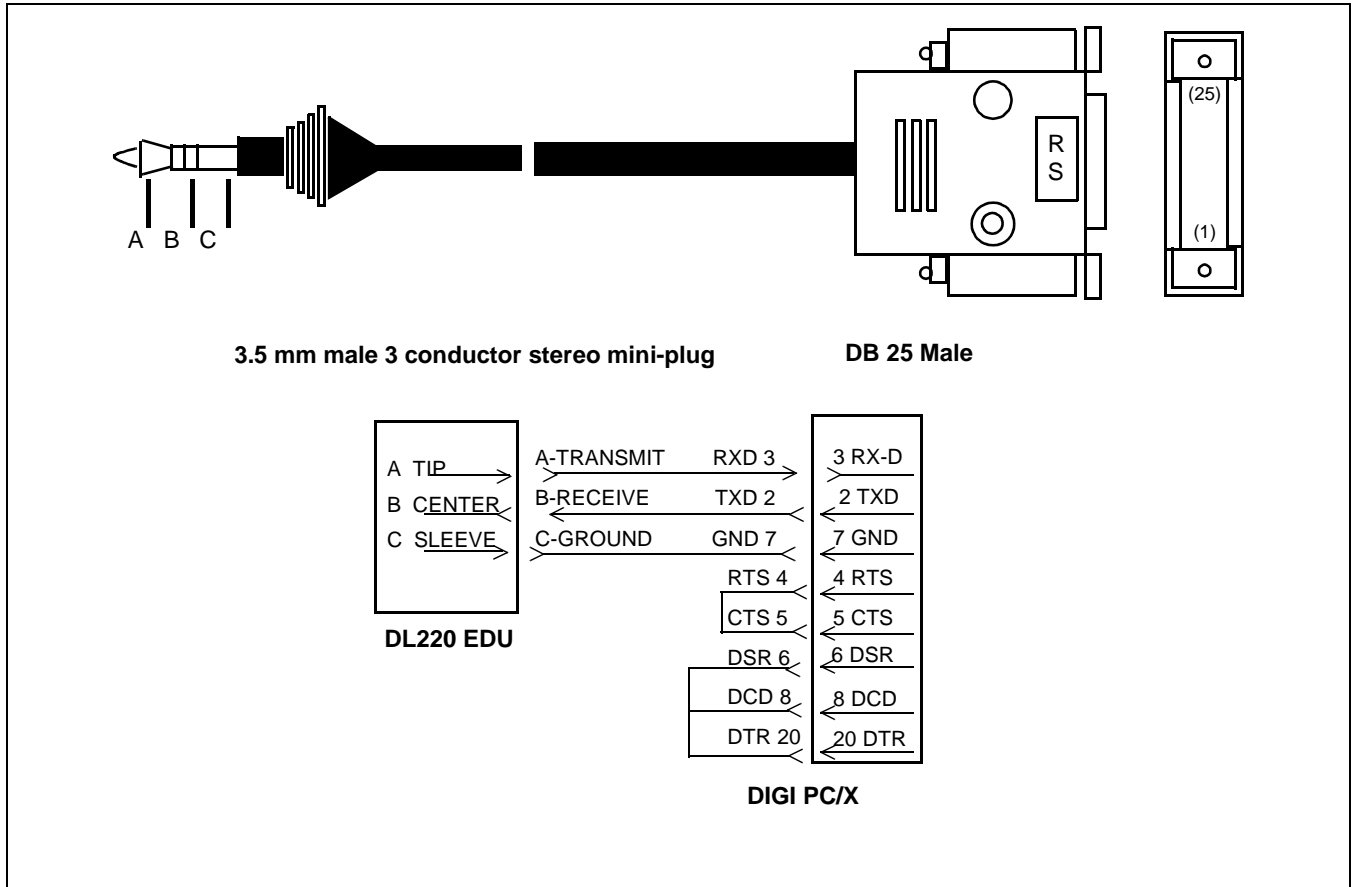


Figure 2-3 Communication Cable Assembly for Spectrum EDU

**INSTALLATION PROCEDURES**

**5.2.2 For Dataline EDU**



**Figure 2-4 Communication Cable Assembly for Dataline EDU**

### **5.3 Display Mounting**

Refer to the DIGI PC/X Manual (PC/Xe, AccelePort Xe, Intelligent Asynchronous Serial Communications Boards) for the installation of the DIGI PC/Xe board and the board switch settings.

Refer to DIGI MenuPort Interface (MPI) SCO UNIX Manual for installation of the DIGI driver software.

## INSTALLATION PROCEDURES

### 5.4 Purchasing EDU Equipment

- The wallboard is manufactured by Data Display Co. Ltd. and may be purchased by contacting:  
Eurotronics Service Inc.  
320 West Drive  
Copiague, New York  
Bus. # 516-842-2055 FAX # 516-789-3972

NEC America, Inc. has performed compatibility testing with the Model# DL220.

DL220 Specifications:

Length:	37.7"	Height:	4.5"	Depth:	1.5"
Character Size:	5.00 cm	Character Type:	Red LED		
Number of Characters:	20	Character Memory:	6000		

- Wallboard manufactured by Spectrum may be purchased by contacting:  
Spectrum Corporation  
10048 Easthaven  
Houston, TX 77075  
TEL: 800-302-5050  
FAX: 713-944-1290

NEC America, Inc. has performed compatibility testing with the Model #215.

#215 Specifications:

Length:	29"	Height:	4.5"	Depth:	2.2"
Character Size:	2"	Character Type:	Red LED		
Number of Characters:	15	Character Memory:	7000		

## CHAPTER 3 OPERATING PROCEDURES

### 1. GENERAL OPERATING PROCEDURES

The system supervises incoming telephone traffic to assigned ACD groups and activities of the associated agent (answering) positions using a wide range of statistical reports. These functions operate in conjunction with the Log On/Off feature within the associated PABX.

This chapter covers initial configuration of the group(s) and agents, report parameters, and alarm indications, as well as the instructions for day-to-day operation.

#### 1.1 To Log On at an ACD Station

**Multiline:**

- (1) Press the Log On/Off Key.
- (2) Enter the ID when prompted ("Enter ID" will be displayed) followed by #.
- (3) If a valid ID is entered, the LED for that key will be steadily green and message "LOGON" is displayed on the DtermIII momentarily. If an invalid ID or an ID that is already in use is entered, a message stating "Invalid ID" or "ID In Use" will display.

**Analog:**

- (1) Lift the handset and receive the extension dial tone.
- (2) Dial Log On/Off Access code.
- (3) Dial the ID followed by #.
- (4) If tone has been activated, you will receive tone; otherwise you will receive a reorder tone.

#### 1.2 To Log Off at an ACD Station

**Multiline:**

- (1) Press the Log On/Off key. LED on key will go out., and message "VACANT" is displayed on the DtermIII momentarily.
- (2) If an agent presses the Log On/Off key during a conversation, status will change to log off after the agent hangs up.

**Analog:**

- (1) Lift the handset and receive the extension dial tone.
- (2) Dial Log On/Off Access code. If tones have been activated, you will receive tone back; otherwise you will receive a reorder tone.
- (3) To dial Log On/Off code during a conversation, the agent has to hook flash, dial the access code, and hook flash again to return to the conversation.

**Note:** For a detailed users guide, see Appendix A

## OPERATING PROCEDURES

### 1.3 To Set Break

#### Multiline:

- (1) Agent presses the Break key; the LED flashes slowly and message "BREAK" is displayed on the DtermIII momentarily.
- (2) If the agent presses the Break key during a conversation, the status will change to Break after hangup.

#### Analog:

- (1) Lift the handset and receive dial tone.
- (2) Dial Break code.
- (3) To dial the Break code during conversation, the agent has to hook flash, dial the code, and hook flash again to return to the conversation.

### 1.4 To Cancel Break

#### Multiline:

- The agent presses the Break key; the LED goes out.

#### Analog:

- The agent dials the Break code.

### 1.5 To Set Work

- Use the same operating procedure as Break.

### 1.6 To Cancel Work

- Use the same operating procedure as Break.

### 1.7 To Monitor Conversation / To Cancel Monitoring

- (1) Lift the handset or depress SPKR, and receive the extension dial tone.
- (2) Dial the monitor feature access code, or press the MONITOR key.
- (3) Dial the extension number to be monitored.
- (4) Monitor the conversation via handset or speaker.
- (5) When the monitored station goes on hook and receives a second call, pressing the MONITOR key re-establishes the Monitor Feature.

**Note:** *Monitoring telephone conversations may be illegal under certain circumstances and laws. Consult a legal advisor before implementing the monitoring of telephone conversations. Some federal and state laws require a party monitoring a telephone conversation to use beep tone(s), to notify all parties to the telephone conversation, and/or obtain consent from all parties to the telephone conversation. Some of these laws provide strict penalties for illegal monitoring of telephone conversations.*



## 1.8 Recommended Sequence of Actions

At the time of initial installation, after the PABX has been programmed and the terminal set up, a specific sequence of actions is recommended:

- System Configuration:
  - System Name
  - Group Configuration
  - Station Configuration
  - Agent Configuration
  - ACD Key Configuration
  - Report Time Values
  - Storage Intervals
  - System Date Format
  
- Alarm Configuration:
  - Group Statistics Threshold
  - Agent Statistics Threshold
  - Print Thresholds
  - Audible Alarm Period
  
- System Maintenance:
  - Password Assignment
  - OAI Connection
  - Configuration Data Back up

The following items apply to the normal use of the system and its subsequent administration and maintenance:

- Statistics Monitor
  
- Statistics Report:
  - Report Configuration
  - Report Group Configuration
  - Scheduler
  - Create Report
  
- System Maintenance:
  - ACD Alarms
  - System Message

## 2. GETTING STARTED

### 2.1 System Initialization

When UNIX prompts for login, enter the user name and password, ACD-MIS will start automatically. It then asks to select the terminal (keyboard and display) types:

- 1 SUN Workstation - Monochrome Display
- 2 IBM-PC Compatible Keyboard with Color Display
- 3 IBM-PC Compatible Keyboard with Monochrome Display

User should enter the number and return key.

Afterward, the following on-screen messages will display:

```
Configuration File System initialized successfully.  
  
OAI Data Communications initialization completed.  
Initiating call collection resources..... Please wait.  
  
Call Collection resource initialization completed.....  
External display initialization completed.....  
  
The system has now finished initializing files.
```

The Welcome screen then displays. (This screen is described in the following section.)

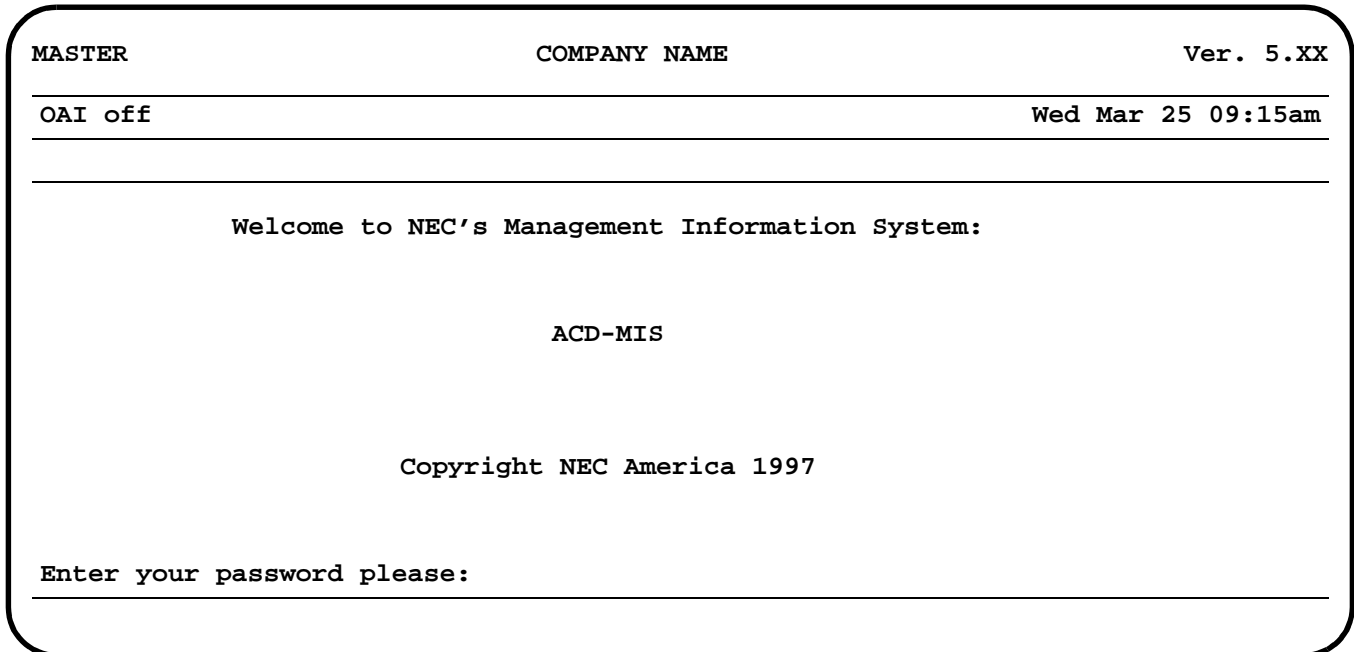


Figure 3-1 The ACD-MIS Welcome Screen

## 2.2 The Welcome Screen

The very top line (blue banner) is used to display the name of your company or organization. This can be programmed by the customer or preset during the production process.

The type of terminal (Master or Submaster) is indicated in the upper left corner (blue banner).

The version number is indicated in the right-hand corner.

The next line (amber banner) is used to indicate the OAI port status on the left-hand side (i.e., **OAI on/off**). This function is controlled from a user option (which will be explained later).

On the right side, the current date and time display. These have been set during installation and should not require adjustment except for time changes.

The bottom line (red banner) is normally blank. The left-hand part displays system information (error codes) or warning messages. Error codes are only of interest to the service technician; but warning messages may display if you have overlooked something concerning the printer or floppy disk drive.

A warning message will overwrite any currently displayed error code and will be accompanied by a standard request for your response (in the right-hand part). A typical example is:

```
Printer not on line:           Retry (Y/N)?
```

Other available messages are listed below:

Messages related to the printer:

```
Printer out of paper
Printer cable disconnected
Printer unknown error
```

Messages related to the disk drive:

```
Floppy Disk protected
Floppy Drive not ready
Floppy Disk faulty
Floppy Disk unformatted
Floppy Drive problem: . . . .
```

**Note:** *Printer-related messages are displayed for a maximum of 5 minutes.*

## OPERATING PROCEDURES

### 2.3 Passwords

Access to each area of ACD-MIS operation can be controlled by passwords, which are preset at installation or specified by the user to suit individual requirements. The following basic facts apply:

- Accessible menu items appear in white; those that are restricted are amber color.
- You can use the preset password (mis in lowercase letters) to access to all items without restriction. If you wish, you can assign a different name later.
- A menu item indicated as restricted can be accessed if you enter the appropriate password. (When the item is selected, the message Enter Password displays.)

**Note:** *Programming of passwords is described in “Passwords” , Section 6.1.*

### 2.4 Moving Through the Menus

After an appropriate password has been entered, the Main Menu of six items (described in Chapter 1) is displayed. The cursor will be positioned at Item 1 - Statistics Monitor.

You can identify individual items on any menu by scrolling the cursor. A brief summary of the functions of each will be displayed at the bottom of the screen.

Any allowed feature can be directly selected by pressing the appropriate digit key. Otherwise, press the Enter key once the cursor is located at a required item.

### 2.5 Key Functions

Often-used keys are summarized in [Table 3-1](#):

**Table 3-1 Specific Key Functions**

Key(s)	Function(s)
Arrow keys	General control of cursor position
TAB	Move the cursor horizontally across separate fields, from left to right
SHIFT + TAB	Move the cursor horizontally across separate fields, from right to left
SPACEBAR	Toggle various parameter options (listed at bottom of screen) during data specification
ENTER	<ul style="list-style-type: none"> <li>- Enter specified data into system memory</li> <li>- Alternate between System + Group and Group + Agent screen displays in the Statistics Monitor mode</li> </ul>
PAGE DOWN	<ul style="list-style-type: none"> <li>- Complete data entry for particular set-up screen and return to menu</li> <li>- Display next page of registrations within the Group or Agent Detail screens (see also F3)</li> </ul>
PAGE UP	Display previous page - as above
ESC	Abort the function currently being performed and return to associated submenu (except System Alarms and Alarm Configuration Print features)
F3	Scroll forward through the various System/Group Statistics or Group/Agent Statistics screens within the Statistics monitor mode
F4	Scroll in reverse as above
F1	Access help screen as indicated by particular on-screen messages.

### 3. STATISTICS MONITORING

The Statistics Monitor mode involves a total of seven separate screen displays, each of which is divided into two portions. The first four screens present combined System and Group Statistics. The remaining three screens present Group and Agent Statistics. In either case, the last screen also includes specific system details (e.g., ACD group initial numbers, agent names, etc.).

By simple key operations it is possible to scroll forward and in reverse through the various System/Group and Group/Agent screens. From any System and Group Statistics display you can select a particular ACD group and change to its first associated Group and Agent Statistics screen.

Step 1. From the Main Menu, press **1**.

The first Statistics Monitor screen displays. The information within the upper window (System Statistics) refers to the total system. The lower window (Group Statistics) registers the assigned ACD groups together with their individual values for the same statistics. Note the cursor position at the first group. From here you can transfer to several alternative displays.

Step 2. Press **F3**. The right-hand side only of the screen will change to display a different set of common System and Group Statistics.

Step 3. Press **F3** again. The right-hand side will now display the third and last set of common System and Group Statistics.

Step 4. Press **F3** again. The right-hand side will now display only the initial numbers for the respective ACD groups.

Step 5. If **F3** is pressed again, the display reverts to the original screen.

Alternatively, by repetitive pressing of **F4** you can scroll in reverse through all previous screens.

Step 6. While viewing any of these screens, move the cursor bar to a required ACD group and press **ENTER**. The display will change to that first set of common Group and Agent Statistics for the group.

Step 7. Press **F3** again. Only the lower right-hand side will change to display a different set of Agent Statistics.

Step 8. Press **F3** again. The lower window right hand side will now display details of the individual agents (i.e., group and tenant numbers, etc.).

Step 9. If **F3** is pressed again, the display will revert to the original screen. Alternatively, by repetitive pressing of **F4** you can scroll in reverse through the previous two screens.

Step 10. Press **ENTER** to return to the original System/Group screen.

Step 11. If required, move the cursor to another group and repeat the above from Step 6.

Step 12. When appropriate, press **ESC** to return to the Main Menu.

**Note:** *You can scroll through the screens only when there are agents logged on.*

#### 4. STATISTICS REPORTING

This function enables printing or display of statistical records as a range of seven ACD-group-related reports and one agent-related report.

In general, ACD-MIS stores information for two separate maximum periods:

- For reports with detailed hourly (or more regular) summaries of call statistics, the limit is 45 days. Thereafter, records are deleted daily at midnight, with a new file created for the next day.
- For all daily summary reports, information is stored for up to two years. Thereafter, the records are deleted on an annual basis.

The information presented for the ACD group-related reports can be broken down by one of several options according to period, date, day of the week, etc. However, for the agent-related report, only totals are produced. (See [Table 3-2](#) below.)

**Table 3-2 Breakdown of Report Statistics**

Breakdown type		
By Period	Detailed Summary Data	Up to 45 Working Days from Today
By Hour		
By Day of Week	Daily Summary Data	Up to the Start of Last Year
By Date		
By Month		
By Total		

From the Main Menu, press **2**. The REPORT submenu displays.

The first three items in the REPORT submenu are interrelated and are associated only with the scheduled printing of summary reports. In the initial setting up of any requirements, they must be applied in the order listed. They can be accessed freely for modification to or deletion of specifications.

- Item 1 - Report Configuration - Structure individual reports
- Item 2 - Report Group Configuration - Specify sets of related reports
- Item 3 - Scheduler - Specify printing arrangements
- Item 4 - Create Report - (for immediate display or printing of reports) is independent of the others and can be selected at any time.

## OPERATING PROCEDURES

### 4.1 Report Configuration

- Step 1. From the Statistics Report submenu, press **1**. The Report Configuration screen displays.
- Step 2. Type in the preferred Report Name and press **ENTER**. The cursor will move to the Report Type parameter. All parameters will display their default values. If the entered Report Name already exists, current assignments will be displayed instead and the cursor will move to the Action parameter.

Action allows existing Report Configurations to be controlled by two options:

- Modify: change any current parameter selection(s)
- Delete: erase the entire report configuration from system memory

To modify a Report Name, move the cursor back to the first line and using the Arrow, **DELETE**, **BACK SPACE**, and **INSERT** keys, delete the necessary characters, re-type the new details and press **ENTER** again.

Report Name should be a meaningful title (using a maximum of 20 alphanumeric characters).

If the requirement is to delete the particular Report Configuration, select the Delete option for the Action parameter and go to Step 7.

- Step 3. For both initial assignment and later modification, select the required Report Type from the listing at the bottom of the screen either by toggling (with **SPACE BAR**) or pressing the indicated digit (1-8). Then press **ENTER**.

Report Type indicates the statistical reports relating to ACD group and agent performance. Each report is described in Chapter 1, Section 3.4.5 - Report Data.

- Step 4. Enter your requirements for Class.

Class can be defined as:

- Full Statistics for all existing ACD groups are included in one report.
- All The same statistics are presented in separate reports for each ACD group.
- Selected Specified when reporting on a single ACD group

- Step 5. Enter your requirement for Date Type. Date Type is one of the ten reporting periods listed on-screen.

- Step 6. Enter your requirement for the parameter Breakdown.

Breakdown tallies statistics per line, for the specified Date Type reporting period (by period, hourly, daily, monthly, weekly, or total).

- Step 7. Press **PAGE DOWN**. Confirm your entries then press **E**, **D**, **R**, or **C** according to:

- Execute** = enter specifications or changes and return to Report Name for the next entry
- Default** = during modification, return to original selections and repeat all entries
- Redo** = return to original selections and repeat selected entries only
- Cancel** = revert to system default options without effecting any entries or changes.

- Step 8. Press **ESC** at any time to return to the submenu.



## 4.2 Report Group Configuration

- Step 1. From the Statistics Report submenu, press **2**.  
The Report Group Configuration screen will display.
- Step 2. Type in the selected Report Group Name then press **ENTER**. The cursor will move to the first line of the Report parameter. If an existing Report Group Name is specified, the range of included reports and assigned parameters will be displayed. For a new entry, the no report default value will instead be displayed.  
  
To modify a Report Group Name (up to 20 alphanumeric characters), move the cursor back to the first line and using the Arrow, **DELETE**, **BACK SPACE**, and **INSERT** keys, delete the necessary characters, re-type the new details and press **ENTER** again.
- Step 3. For either initial assignment or later modification, select the required Report from the listing at the bottom of the screen either by toggling with **SPACE BAR** or pressing the indicated letter (**a**, **b**, **c**, etc.). Then press **ENTER**.  
  
The listed options for Report (Name) are those assigned as in Report Configuration. To delete a particular report from a Report Group, position the cursor at the specific Report (Name) and by the method described above, change the selection to no report. To totally erase a Report Group, do this for each Report (Name) entry.  
  
**Note:** *The requirement to enter data in Steps 4 - 8 is dependent on your selection for certain parameters in Report Configuration. In several cases they will not be required. The applicable conditions are specified in the following text.*
- Step 4. Press **TAB** to move the cursor to Group. The pilot extension numbers of all assigned ACD groups will now be displayed.
- Step 5. For both initial assignment and modification of existing specifications, select the required Group's pilot extension by toggling the displayed options with the **SPACE BAR** or by pressing the indicated letter **a**, **b**, **c**, etc.  
  
Entry of Group is necessary only where the Selected Class has been specified (in Report Configuration).  
  
The Agent parameter has no application in the current version ACD-MIS and is omitted.
- Step 6. Press **TAB** twice to move the cursor direct to Start Date. Type in the (mm/dd/yy) details where necessary. Start Date is required only for Date entries:  
  
For date - to indicate a complete reporting period  
Date range - to indicate commencement of a reporting period.
- Step 7. Press **TAB** to move to End Date and type in the necessary (mm/dd/yy) details. End Date is required only for Date entry: date range - to indicate completion of the relevant reporting period.
- Step 8. If required, press **TAB** to move the cursor now to Report Name on the next line and repeat the procedures from Step 3 for any further entry.
- Step 9. Press **PAGE DOWN** to confirm your entries. The screen will return to the submenu.

**4.3 Report Scheduler**

Step 1. From the Statistics Report submenu, press **3**. The Report Scheduler screen displays, showing any current assignments.

Check the Group column. Each entry will be either the default value (no group) or a specified Report Group.

Step 2. For new assignments, move the cursor down to the first no group line and select the required (Report) Group from the listing at the bottom of the screen either by toggling with **SPACE BAR** or pressing the indicated letter **a, b, c, d**, etc. Press **ENTER**.

To modify an existing entry, position the cursor at the required line and select the new (Report) Group as above. To delete a particular schedule, simply select no group and go to Step 10.

Step 3. **TAB** to Schedule. The available schedules are displayed at the bottom of the screen. They are each defined in Table 3-3.

Step 4. For both initial assignment and later modification, move the cursor to the appropriate line and select the preferred Schedule either by toggling with **SPACE BAR** or pressing the indicated letter (**n, o, h**, etc.) then press **ENTER**.

The no rep. option can be selected to temporarily cancel individual schedules without entirely deleting them (as in Step 2).

**Table 3-3 Report Schedules**

Schedule	Printout specification
Once	On a specified advanced day/date and time
Hourly	Every hour, on the hour
Daily	Each day at a specified time
Weekly	Each week at a specified day and time
Monthly	At a specified day/date and time

The functions of the remaining parameters are as follows:

- Day: The day of the week to print the report(s)
- Time: The time of the day to print the report(s)
- Date: The effective date (i.e., the date on/after which the report or reports will be printed).

Depending on the selected Schedule, not all of these parameters will be necessary. The actual entry requirements are set out in Table 3-4.

**Table 3-4 Day/Time/Date Applications**

Selected schedule	Parameter entry: Y (Yes) / N (No)		
	Day	Time	Date
Once	* Y	Y	* Y
Hourly	N	N	Y
Daily	N	Y	Y
Weekly	* Y	Y	* Y
Monthly	* Y	Y	* Y

*\* Where both day and date are options, day takes priority.*

- Step 5. **TAB** to Day. The days of the week are displayed at the bottom of the screen.
- Step 6. In a similar manner (i.e., **SPACE BAR** or indicated letter), assign or modify the entry for day, as required.
- Step 7. **TAB** to Time. Position the cursor at the appropriate point and assign or modify the required hour and minute (hh:mm) details.
- Use the **BACK SPACE** key to delete an existing entry.
- Step 8. **TAB** to Date and directly type in the date, month, and year (mm/dd/yy) details for required initial assignments.
- For modifications to or deletion of existing entries, position the cursor at the required point or use the **BACK SPACE** key.
- Step 9. Press **TAB** to move to Group on the next line and repeat the procedures from Step 2 for any other required entries.
- In the event that 10 entries have been completed, the second screen will appear which accommodates Groups 11 to 20.
- Step 10. Confirm all entries by pressing **PAGE DOWN**. The screen will return to the submenu.

## OPERATING PROCEDURES

### 4.4 Create Report

Step 1. From the Statistics Report submenu, press **4**. The Report Select screen will be displayed. All parameters will display their default values.

Step 2. Select the required Report Type from the listing at the bottom of the screen by toggling with the **SPACE BAR** or pressing the indicated digit 1 - 8, then press **ENTER**. The cursor moves to Destination.

Report Type indicates the statistical reports relating to ACD group and agent performance. Each is described in Section 5.5 - Report Data.

Step 3. The system defaults to the Screen option. To select printer or file, press **SPACE BAR** or the letter **p** or **f**.

Press **ENTER**. The cursor moves to Class.

Step 4. Select the required Class by toggling with the **SPACE BAR** or pressing **f**, **a**, or **s**.

Then press **ENTER**.

Step 5.

- If you entered either Full or All Class, the cursor will move to Date Type. Go to Step 6.
- If instead you entered Selected Class, the cursor will move to Selected. The pilot extensions of all assigned ACD groups will be displayed at the bottom of the screen. Select the required Group by toggling the **SPACE BAR** or pressing **a**, **b**, etc. Press **ENTER**. The cursor will now move to Date Type.

Step 6. Enter your selection for Date Type.

Step 7.

- For any selection of Date Type except for date and date range the cursor will move to the Break Down parameter. Go to Step 8.
- If your selection for Date Type was either for date or date range, the cursor will move to the From parameter.

Enter the applicable date or starting date (mm/dd/yy) of the reporting period.

If your selection for Date Type was 'for date', the cursor will move to the Break Down parameter.

For selection of date range, the cursor moves instead to To. In this case, enter the required end date of the reporting period.

Step 8. Enter your requirement for the last Breakdown parameter.

Step 9. Check all entries and if correct, press **PAGE DOWN**.

The on-screen message **Loading Data** will be indicated followed by display or printout of the report information. In some cases it may take a few seconds to compile the necessary information.

Step 10. Press the **ESC** key to return to the submenu.

## **OPERATING PROCEDURES**

### **4.5 Report Data**

ACD-MIS's statistical information is presented in ten system-generated reports:

- Calls Waiting
- Calls Abandoned
- Call Duration
- Traffic Analysis
- Group Workload
- Group Performance
- Group Break and Work
- Agent Performance
- Agent Demand
- Agent Break and Work

These reports (and the statistics included in these reports) are described in Chapter 1.

## 5. STATISTICS REGISTERED IN SPECIFIC CASES

Certain operations within ACD-MIS have a bearing on specific values recorded in the Statistics Monitor mode, as well as in various reports.

### 5.1 Conditions of Agent Log-Off

In calculating the Average Time - Available statistic, ACD-MIS in part counts the number of times agents log off. The totals are incremented only when agents do so while in the AVAILABLE status (i.e., not while engaged on an ACD or non-ACD call).

### 5.2 Call Transfer Before Answer

If an ACD call transferred from one agent to another is not answered and as a result is redirected to the original party, the call will be regarded as a new non-ACD call.

### 5.3 Multi-Group ACD Systems

In many installations the ACD-MIS will be associated with more than one ACD group in the connected PABX.

The statistics registered will reflect particular call-handling practices as described in the following cases.

#### 5.3.1 Inter-Group Call Pick-Up

Where calls to one ACD group are picked up by agents in another, the values for calls received (i.e., in/offered) and answered will be adjusted.

For example, a single call to Agent A (in Group A), which is picked up by Agent B (in Group B) will be recorded as shown in [Table 3-5](#).

**Table 3-5 Statistics for Inter-Group Call Pick-Up**

Statistic	Reporting Level				
	System	Group A	Agent A	Group B	Agent B
Calls In/Offered	1	1	1	0	0
Calls Answered	0	0	0	1	1

#### 5.3.2 Inter-Group Call Forwarding

Where calls are forwarded from one ACD group to agents in another group (either unconditionally, on busy or no answer), the relevant values for calls received (i.e., in/offered), abandoned and answered for both groups will represent that action.

## OPERATING PROCEDURES

For example, if a call arrives at Agent A (in Group A) and is forwarded to Agent B (in Group B), it will be recorded as shown in [Table 3-6](#).

**Table 3-6 Statistics for Inter-Group Call Forwarding**

Statistic	Reporting Level				
	System	Group A	Agent A	Group B	Agent B
Calls In/Offered	1	1	1	0	0
Calls Answered	0	0	0	1	1

### 5.3.3 Inter-Group Overflow

The use of Delay Announcement with Overflow, after the calling party has been in queue, will cause an abandon on the first group (A) and an incoming call on the second group (B).

**Table 3-7 Statistics Using Inter-Group Overflow**

Statistic	Reporting Level				
	System	Group A	Agent A	Group B	Agent B
Calls In/Offered	2	1	0	1	1
Calls Abandoned	1	0	0	1	1
Calls Answered	1	1	0	0	0

### 5.3.4 Combined Effect on Total Statistics

A continuing sequence of such call-handling procedures in a multi-group ACD produces statistics which require examination from an overall point of view.

As a simplified example, combination of the above two situations would result in values within the Statistics Monitor - System/Group Statistics, as summarized in [Table 3-8](#).

**Table 3-8 Combined Effect on Total Statistics**

Statistic	Reporting Level				
	System	Group A	Agent A	Group B	Agent B
Calls In/Offered	2	1	1	1	1
Calls Abandoned	1	1	1	0	0
Calls Answered	1	0	0	1	1



## 6. SYSTEM MAINTENANCE

From the Main Menu, press **3**. The SYSTEM MAINTENANCE submenu displays.

This submenu has eight separate functions:

Password Maintenance:	Control access to various system features
ACD Alarms:	Display/print file record listing excesses of specified statistical limits.
System Message:	Display/print file record listing system faults and occurrences
OAI Connection:	Control MIS-PABX communication channel status
Configuration Data Backup:	Copy general system, report, and alarm configuration data to floppy disk
EDU Port Selection:	Assign required message formats to the various multi-I/O ports for the External Display Units (where provided)
External Display Format:	Select required message formats for the External Display Units

### 6.1 Passwords

From the System Maintenance submenu, press **1**. The password set-up screen (with accommodation for 12 passwords) will be displayed.

The first two passwords are preset in the basic system software:

- The first of these (**//blank//**) is fixed to the use of the Enter key at the Welcome Screen. Initially, it is set to allow very limited access to features; but that can be modified, if required.
- The second (**mis**) allows fixed unrestricted access to all features. Its name can be changed to one of your choice.

## OPERATING PROCEDURES

### 6.1.1 Review Existing Passwords

- Step 1. Position the cursor within the brackets of the selected existing password.
- Step 2. Press **TAB**. The access assignments for the Main Menu are displayed.
- Access status indications are:  
accessible = [y] (item color is white)  
inaccessible = [n] (item color is amber)
  - Submenu indications are:  
[y> or [n> = submenu exists  
[y] or [n] = no associated submenu
- Step 3. Position the cursor at an appropriate Main Menu item (i.e., one indicated with [y> and in white). Press **TAB** to display the related submenu.
- Step 4. Repeat for all other similar items on the Main Menu.

### 6.1.2 Change / Delete Existing Password Details

- Step 1. Position the cursor within the brackets of the password entry to be changed/deleted.  
Observe the limitations on changing either of the two default passwords.
- Step 2.
- Use the Arrow, **DELETE**, **BACKSPACE**, and **INSERT** keys to delete necessary existing characters before retyping the new/modified password name. Upper- and lowercase letters are regarded separately by the system.
  - To completely delete the password, remove all characters (with the [Back Space] key). Go to Step 8.
- Step 3. Press **TAB** to display the current Main Menu access assignments.
- Step 4. Position the cursor at each required item in turn and alter the current access status (i.e., enter **y** or **n**).
- Step 5. Position the cursor at the first Main Menu item now indicated as [y> (but still in amber). Press **TAB** to display the associated submenu.
- Step 6. Make any necessary alterations as per Step 4.
- Step 7. Return to the Main Menu (press **SHIFT + TAB**) and repeat the process for other items as required.  
On return to the Main Menu, the color of an item which has been made accessible will have changed to white.
- Step 8. At the appropriate point, press **PAGE DOWN**.

Step 9. Confirm your entries then press **E, D, R,** or **C** according to:

**Execute** = enter specified changes and escape  
**Default** = return to original screen display and repeat all entries  
**Redo** = return to original screen display and repeat preferred entries only  
**Cancel** = escape to menu without effecting any changes.

**Note:** *For Default, any changes are lost; for Redo they are retained.*

### 6.1.3 Add New Password

Step 1. Position the cursor at the selected vacant location within the passwords entry screen.

Step 2. Enter the new password (maximum 10 alphabetical characters).

Upper- and lowercase letters are regarded separately by the system.

Step 3. Press **TAB** to display the Main Menu.

Step 4. Enable access (i.e., enter **y**) to each required item in turn.

Step 5. Position the cursor at the first appropriate item (i.e. now marked [y> but still in amber). Press **TAB** to display the associated submenu.

Step 6. Make any necessary alterations as per Step 4.

Step 7. Return to the Main Menu (press **SHIFT + TAB**) and repeat these last two procedures for all other items.

On return to the main Menu, the color of an item which has been made accessible will have changed to white.

Step 8. Confirm your entries. Then press **E, D, R,** or **C** according to:

**Execute** = enter specified changes and escape  
**Default** = return to original screen display and repeat all entries  
**Redo** = return to original screen display and repeat preferred entries only  
**Cancel** = escape to menu without effecting any changes

**Note:** *For Default, any changes are lost but for Redo they are retained.*

The message **New Password File created** appears whenever alterations and assignments are finally executed to indicate successful entry of the new data into memory.

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### 6.2 ACD Alarms

This function is applicable only after operational limits have been specified within the Group and Agent Alarm Configuration function.

Step 1. From the System Maintenance submenu, press **2**. The Alarm Log Display Select screen will appear with the cursor located at the Date parameter.

Step 2. Enter the required Date details (dd/mm/yy). The cursor will move to Destination.

Date can be any day of ACD-MIS operation. Refer also to Step 4, Note 2.

Step 3. The system defaults to the first of the two available Printer options. To select the Screen alternative, press the **SPACE BAR** or the letter **s**.

Step 4. Check your entries and when ready, press **PAGE DOWN**.

**Note 1:** *If printing, ensure that the printer is on-line.*

**Note 2:** *If no alarm threshold value has been equaled or exceeded for the day specified, the following message No log message for (specified date dd/mm/yy), Press Any Key, will be displayed.*

Pressing any key will return the screen to the original display in Step 1. If no preset alarm threshold value has been exceeded for the day specified, the screen will immediately revert to the submenu. Thereafter, pressing **ESC** will return the system to the submenu.

Step 5.

- Printer: Printing out of all events will commence and the system returns to the submenu.
- Display: The first group of events will be displayed. Follow the on-screen instructions (ESC or other key), as required.

For both printing and display, the presented information will have the following format:

AREA	STATISTIC	LEVEL	START TIME	END TIME
System	GOS	Non-urgent	Time indicated	Time indicated
Group	Avg. Answer	Urgent	level entered	level entered
Agent	Avg. Handling		(hh:mm)	(hh:mm)
	Avg. Available			
	Long. Wait. Call			
	Calls Waiting			

**Note:** *Non-urgent alarms display in amber. Urgent alarms display in red.*

### 6.3 System Messages

Step 1. From the System Maintenance submenu, press **3**. The following message will display:

**Print errors on printer? (y/n):**

Step 2. Enter your requirement (y or n) according to:

- For y (yes), printing of all records will immediately commence after which the display will return to the submenu.

**Note:** *Ensure that the printer is on-line.*

- For n (no), the System Message List screen will appear to display the applicable period of reporting, the total number of messages recorded, and the first listings in reverse chronological order, followed by the further request:

**Read the next errors? (y/n):**

Enter your requirement (y or n) according to:

- For y (yes), the next page of messages will be displayed and the request repeated. The action can be continued until a return display of the first page of listings.
- For n (no), the display will immediately return to the submenu.

### 6.4 OAI Connection

Step 1. From the System Maintenance submenu, press **4**.

Depending on the current status, one of the following two messages will display:

Current Status	Message
Off	<b>Connect to PABX (y/n):</b>
On	<b>Disconnect from PABX (y/n):</b>

The current status is always displayed on the left-hand side of the amber banner at the top of the screen.

Step 2. Enter your requirement (y for yes or n for no). The display will revert to the submenu.

There will be a slight delay when connecting to the PABX.

### 6.5 Configuration Data Backup

This feature enables files applicable to general configuration of the ACD-MIS to be saved to a floppy disk inserted in the Floppy Drive. In the event that a major fault requires the system to be rebuilt, those files can then be copied back to the hard disk once the ACD-MIS program has been re-installed.

A 5 1/4", 1.2Mb or 3 1/2", 1.44 Mb High Density floppy disk is required for the purpose. The relevant files are for:

- System Passwords
- Communications Port Parameters
- System Name
- Group and Agent Statistics Thresholds
- Agent Configuration
- ACD Group Configuration
- Report Configuration
- Report Group Configuration
- Report Schedules (two files)
- Agent ID Codes

#### 6.5.1 Back Up Files

- Step 1. Login to ACDMIS user directory at UNIX login prompt. ACDMIS will run automatically.
- Step 2. When asked for terminal type (keyboard type and display color/monochrome), press CTRL-C.
- Step 3. Insert a formatted disk into the floppy Drive. Ensure that it is correctly locked in.
- Step 4. At UNIX prompt, enter:  
**sh backup.sh**
- Step 5. Wait for the command to completed.
- Step 6. At UNIX prompt, enter:  
**exit**  
to logoff.

### 6.5.2 Reload Files

- Step 1. Login to ACDMIS user directory at UNIX login prompt. ACDMIS will run automatically.
- Step 2. When asked for terminal type (keyboard type and display color/monochrome), press CTRL-C.
- Step 3. Insert a formatted disk into the floppy Drive. Ensure that it is correctly locked in.
- Step 4. At UNIX prompt, enter:  
**sh reload.sh**
- Step 5. Wait for the command to completed.
- Step 6. At UNIX prompt, enter  
**exit**  
 to logoff.

### 6.6 EDU Port Selection

This function assigns installed External Display Units (EDUs) to the individual Ports on the I/O board. The actual selection of display formats is arranged in Item 8 - External Display Format.

- Step 1. From the System Maintenance submenu, press **7**. The Communications Port Assignment screen displays. The available assignment options are listed at the bottom of the screen.

For a new system all ports will be set to the default selection NONE.

For an existing system with the EDU feature, the current assignments will be shown.

The available options are identified as:

EDU 1 - EDU 4:	External Display Units 1 - 4
Spectrum/Dataline:	EDU type
TTY Device Name:	/dev/tty as defined by System Administrator for the Comm Port.

- Step 2. At whichever of Ports is to be set/modified first (move the cursor as required), use the **SPACE BAR** to toggle selection of the required option or press the indicated digit (1 to 4 or the letter **n**.)
- Step 3. Use the TAB key to move the cursor to the next selection, and use the SPACE bar to toggle selection of Spectrum or Dataline; or press the indicated key (**D** for Dataline, **S** for Spectrum, or **N** for None.)
- Step 4. Move the cursor to each next port to be set/modified, in turn and select as above.
- Step 5. Confirm all assignments. Then press **PAGE DOWN**. The system returns to the submenu.

## OPERATING PROCEDURES

### 6.7 External Display Format

The External Display Format submenu lets you specify:

- The choice of display format for each EDU
- The relevant ACD group(s) for each format

Examples of display formats are included in Chapter 1.

The individual assignments made are identified as EDU 1 to 4 which correspond to the separate display panels assigned to Ports on the I/O board in Item 7 - Auxiliary Port Selection.

Any format can be displayed on any panel. Even the same one can be displayed on all panels, if required.

Step 1. From the System Maintenance submenu, press **8**. The External Display Format screen appears with the cursor located ready for selection of the first format. The available message options are listed at the bottom of the screen.

For a new system, all formats will be set to the not used default selection. For an existing system with the EDU feature, the current selections for EDU 1 - 4 will instead be shown together with the pilot extension numbers of the associated ACD group(s).

The available display format options are identified as:

not used: provides a blank display on any specified panel

number: displays the current number of calls waiting in each of a maximum of seven (7) ACD groups

number time: displays the current number of waiting calls and the longest waiting time for each of a maximum of two (2) ACD groups

name, no., time: displays the group name, the number of waiting calls and the longest waiting time for one (1) ACD group.

Step 2. At whichever of EDU 1 - 4 is to be set/modified first (move the cursor as required), use the **SPACE BAR** to toggle selection of the required format option or press the indicated letter **n**, **A**, **B**, or **C**.

Step 3. Press **TAB** (or **ENTER**) to move the cursor to the first position within ACD Group Number, on the same line.

There are seven (7) ACD Group Number positions per line. For a new system, all will be blank. For an existing system with the EDU feature, the current selections of pilot extension number are displayed together with blanks in all vacant positions.



Step 4. Use the **SPACE BAR** to toggle selection of the required pilot extension number. Then press **ENTER** to move the cursor to the next position.

If during initial assignment, the position is not to be used, simply press **ENTER** directly. None will be displayed and the cursor will move to the next position. For later modification, toggle the selection of the none option first.

(“None” means that the display field for the particular ACD group position on any associated EDU will be blank.)

Step 5. Repeat for all other positions on the same line, observing the maximum allowed number of entries (7, 2, or 1) according to the selection originally made for the display format.

- Use **SHIFT + TAB** to move the cursor in the reverse direction, as required.
- If fewer than 7 entries are to be made, they can occupy any position:

<b>Format</b>	<b>ACD Group Number</b>						
	1	2	3	4	5	6	7
number	1234	none	2345	none	3456	none	4567

Step 6. Continue until the cursor moves to the next format line. Adjust its location as required.

Step 7. Repeat the procedures in Steps 2 to 6 to complete all necessary reassignments.

Step 8. Confirm your entries; then press **PAGE DOWN**. The system will return to the submenu.

## 7. SYSTEM CONFIGURATION

From the Main Menu, press **4**.  
The SYSTEM CONFIGURATION submenu displays.

This submenu includes eight functions:

System Name:	For display on all screens
Group Configuration:	Individual ACD groups
Station Configuration:	Associated stations
Agent Configuration:	Associated agents
ACD Key Configuratio:	Assigns MSF to LEDs
Report Time Values :	Time limit parameters for the Statistics Monitor mode and particular reports
Storage Intervals:	Variable time intervals for statistics processing in particular reports
System Date Format:	Changes the date format

### 7.1 System Name

System Name can be a maximum of any 40 characters, including spaces.

Step 1. From the System Configuration submenu, press **1**. The System Name Assignment screen will display.

Step 2. Depending on the action to be taken, proceed according to the following alternatives:

- Initial Name Assignment

Type in the preferred name characters and press **PAGE DOWN**.  
(The system will return to the submenu.)

- Current Name Modification

Using the ←, **BACK SPACE**, **DELETE**, and **INSERT** keys to erase, overwrite and add existing and new characters as required, enter the new preferred name. Then press **PAGE DOWN**. The system will return to the submenu.

Step 3. Check for immediate appearance of the (new/modified) system name at the top of the display screen. It will also be printed at the head of each report page.

## 7.2 Group Configuration

Step 1. From the System Configuration submenu, press **2**. The Group Configuration screen will display, with the cursor located at Group Name #01.

In the case of an existing MIS, first check the right-hand column for the current assignments indicated as:

- new group = unassigned (vacant) area
- in use = existing, fully assigned group
- not used = existing ACD group without agents assigned

**Note:** *At the time of initial ACD-MIS set-up, the indicated status of all ACD groups will be new group.*

Step 2. Depending on the action to be taken, proceed according to the following alternatives:

- New Group Assignment

Move the cursor to the first vacant location and type in the preferred group name.

- Existing Group Modification

Move the cursor to the applicable location and using the Arrow, **DELETE**, **BACK SPACE**, and **INSERT** keys, delete the required characters then retype the new Group Name characters. (Group name can be a maximum of any 11 characters.)

- Existing Group Deletion

Go to Step 4.

**Note:** *Before deleting an ACD group, delete the pilot number and all assigned agents.*

Step 3. Press **TAB** to move the cursor to the Indial No. - prfx column and proceed according to the following alternatives:

- New Group Assignment

Type in the specified indial digits for the ACD group.

- Existing Group Modification

Use the Arrow, **DELETE**, **BACK SPACE**, and **INSERT** keys to delete the required digits. Then retype the new Indial No. - prfx digits.

## OPERATING PROCEDURES

Step 4. Press **TAB** to move the cursor to the Indial No. - ext. column and proceed according to the following alternatives:

- New Group Assignment

Type in the specified pilot extension number.

- Existing Group Modification

Use the Arrow, **DELETE**, **BACK SPACE**, and **INSERT** keys to delete the required digits then re-type the new pilot extension digits.

In most situations the pilot extension will be a phantom number. It can be a physical extension; but if so, it must not receive direct calls.

- Existing Group Deletion

Use **BACK SPACE** to delete all digits of the pilot number; then go to Step 6.

Step 5. If required, move the cursor to the next Group Name positions in turn (**TAB** and **ENTER** keys) and repeat the above steps for any necessary entries/alterations/deletions.

**Note:** *Only when Group Names #01 to #10 are entered can #11 to #16 (on the next screen) be used.*

**Note:** *After deletion of any group(s), the system will automatically adjust the positions of the others to close the gaps.*

Step 6. Press **PAGE DOWN** to confirm all details and exit to the submenu.

### 7.3 Station Configuration

Step 1. From the System Configuration submenu, press **3**. The Station Configuration screen will be displayed, with the cursor located at Ext. No.

Step 2. Type in the required (first) extension number; then press **ENTER**.

The cursor will move to Tenant No.

- There is no requirement to enter extensions (including the pilot number) in any particular order during initial ACD group assignment.
- The specified extension number must be the Prime Line of a D<sup>term</sup> instrument which the agent uses (where installed) for the position to be able to log off and for certain report statistics to correspond to definition.

Step 3. Depending on the intended action, proceed according to the following alternatives:

- New Station Assignment

Check for display of the Add Station message which indicates that the extension number specified has not been assigned.

Enter the required tenant number and press ENTER. The cursor will move to Tel. Type.

**Note:** *The tenant number must always be the value for the ACD group set within the PABX.*

- Existing Station Modification

Check for the display of the station exists and Modify Station messages and also the current assignments for all other parameters.

Move the cursor (down) in turn to each entry to be altered. Make necessary adjustments to extension number digits or surname characters (by positioning the cursor and using the **DELETE**, **BACK SPACE**, and **INSERT** keys) and as otherwise described in Steps 4 - 5, then go to Step 8.

- Existing Station Deletion

Press **ENTER**. The cursor will move to the currently displayed Modify Station option. Select the Delete Station option by toggling the **SPACE BAR** or pressing the indicated letter **d**.

Go to Step 8.

Step 4. For either initial specification or later modification, use the **SPACE BAR** to change selection of Tel. Type or press the indicated letter **a - e**, as required. The five options are displayed at the bottom of the screen.

Press **ENTER**. The cursor will move to group.

The specified Tel. Type must be selected as one only of:

- The actual telephone instrument installed for the particular agents position (option a or b)
- The pilot number specified in the PBX (option c, d, or e)

Step 5. Similarly, specify/modify the associated ACD group by selecting the required Indial - prfx from the listing at the bottom of the screen.

Step 6. Check all specifications and when ready, press **PAGE DOWN** to confirm the entered details. The system will revert to the submenu.

Step 7. Repeat Steps 1 - 6 above for all remaining required station assignments or modifications.

## OPERATING PROCEDURES

### 7.4 Agent Configuration

Step 1. From the System Configuration submenu, press **4**. The Agent Configuration screen will display, with the cursor located at Agent ID.

Step 2. Type in the required ID code; then press ENTER.

**Note:** *There is a system limitation of 90 Agent ID codes which can be programmed in ACD-MIS. The cursor will move to Agent Name.*

Step 3. Type in the Agent's last name; press ENTER.

The cursor will move to Agent Initial.

Step 4. Type in the Agent's first name initial(s); press ENTER.

The cursor will move to Group.

Step 5. Select the ACD group to which the agent can log in. Select using either the Space Bar or the letter designation of the group.

Step 6. Check all specifications. When ready, press **PAGE DOWN** to confirm the entered details. The system will revert to the submenu.

Step 7. Repeat Steps 1-6 for all remaining agent assignments.

### 7.5 ACD Key Configuration

Step 1. From the System Configuration submenu, press **5**. The ACD Key Configuration screen will display, with the cursor located at Log On/Off (MSF no.).

Step 2. Type the MSF Operation Code 128 for Log On/Off; then press ENTER.

The cursor will move to LED no.

Step 3. Type in the LED no. that the MSF (Log On/Off) will appear on the D<sup>term</sup>; press ENTER. The cursor will move to Break Key.

Step 4. Type the MSF Operation Code 129 for Break; press ENTER.

The cursor will move to LED no.

Step 5. Type in the LED no. that the MSF (Break) will appear on the D<sup>term</sup>; press ENTER.

The cursor will move to the Work Key.

Step 6. Type the MSF Operation Code 130 for Work; press ENTER.

Led cursor will move to LED no.

Step 7. Type in the LED no. that MSF (Work) will appear on the D<sup>term</sup>; then press **PAGE DOWN** to save the entered details.

**Note:** *MSF and LED number must be the same as those entered in the PABX. These two parameters are system parameters, which cannot be different for each station.*

### 7.6 Report Time Values

Report Time Values are specified in number of seconds. Their individual applications are summarized below in [Table 3-9](#).

**Table 3-9 Report Time Values**

REPORT TIME VALUE	APPLICATION
Time to Answer (GOS)	Used for Grade of Service calculation: - Statistics Monitor mode
Abandoned Ignore Time	Minimum time a call disconnected before answer must have been queued before it is considered as abandoned:  - Statistics Monitor mode - Calls Abandoned report - Traffic Analysis report - Group Workload report - Agent Demand report
Answer Time, Abandon Time, Duration Time	Increments required for Calls Within parameters:  - Calls Waiting report - Calls Abandoned report - Call Duration report

- Step 1. From the System Configuration submenu, press **6**. The Report Time Values screen will display.
- Step 2. Using the Up/Down Arrow and/or **TAB** keys, move the cursor to the first parameter to be specified/ altered.
- Step 3. Position the cursor and use the **DELETE**, **BACK SPACE**, and **INSERT** keys to enter the required value (0 to 999 seconds).
- Step 4. Repeat these procedures for all other necessary adjustments.  
  
Ensure that the values specified for Answer Time, Abandon Time, and Duration Time are in ascending order.
- Step 5. Check your entries then press **PAGE DOWN** to confirm all details. The display will return to the submenu.

## OPERATING PROCEDURES

### 7.7 Storage Intervals

- Step 1. From the System Configuration submenu, press **7**. The Storage Intervals screen will display.
- The displayed table comprises hourly time segments from 0000 to 2359 and for each, a corresponding 60-minute (default) interval for call record storage. These intervals can be made more regular. Their application is in the presentation of statistics for specified reports where the selected option for report breakdown is by period.
- Step 2. Using the Up/Down Arrow keys, move the cursor to the first time segment to be altered.
- Step 3. Select the required alternative interval from the options shown at the bottom of the screen by toggling with the **SPACE BAR** or pressing the indicated letter **a, b, c**, etc.
- Call records will be processed for storage at a frequency corresponding to the selected interval [e.g., three times per hour if the value set is 20 (minutes)].
- Step 4. Repeat these procedures for all other necessary time segment changes.
- Step 5. Check your entries then press **PAGE DOWN** to confirm all details. The display will return to the submenu.

### 7.8 System Date Format

- Step 1. From the System Configuration submenu, press **8**. The System Date Format screen will display, with the cursor located at the System Date Format to be used.
- Step 2. Select the date format to be used.
- Step 3. Check the format. When ready, press **PAGE DOWN** to confirm the entered format.



## 8. ALARM CONFIGURATION

From the Main Menu, press **5**. The ALARM CONFIGURATION submenu will display.

This submenu has four functions:

Group Statistics Threshold:	Presetting of alarm limits for both the system and ACD group related parameters
Agent Statistics Threshold:	Presetting of similar alarm limits for the agent related parameters
Print Thresholds:	Printing out of the current status of both the System/Group and Agent Statistics configurations
Audible Alarm Period:	Setting the period of the audible alarm associated with the Statistics Monitor Mode - System/Group Statistics Longest Waiting Call parameter

**Note:** Alarm conditions are also recorded in the ACD Alarm file.

### 8.1 Group Statistics Threshold

- Step 1. From the Alarm Configuration submenu, press **1**. The Group Alarms set up screen will display.
- Step 2. Use the Up/Down Arrow and **TAB** keys to move the cursor between parameters for both initial specification and later alteration.

For each entry, position the cursor and use the **DELETE**, **BACK SPACE**, and **INSERT** keys to facilitate adjustment of the required value as per the following descriptions.

When the value to be entered is greater than 10, you must first erase the default value.

#### System/Group Statistics - G.O.S. - Low/High Alarms:

G.O.S. (Grade of Service) is the calculated percentage value used to indicate ACD call handling efficiency. The respective settings for the low and high alarms must therefore correspond to a **descending** order of G.O.S. Refer to the example below:

Assumed Target G.O.S.:	90 %
Low Alarm Setting:	70(%)
High Alarm Setting:	50(%).

#### System/Group Statistics - Average Answer, Average Talk, Average Available, and Longest Waiting Call - Low/High Alarms:

Average Answer, Average Talk, Average Available, and Longest Waiting Call are direct time measurements (in minutes and seconds) related to call handling. The respective settings for the low and high alarms must be in ascending order.

## OPERATING PROCEDURES

### System/Group Statistics - Calls Waiting - Low/High Alarms:

Calls Waiting is a numerical quantity (in the range: 0 - 999) for indication of the call queue status. Settings of low and high alarms are also to be assigned in **ascending** order.

- Step 3. Check your entries and when appropriate, press **PAGE DOWN** to confirm all details. The screen will return to the submenu.

### 8.2 Agent Statistics Threshold

- Step 1. From the Alarm Configuration submenu, press **2**. The Agent Alarms set-up screen will display.
- Step 2. For both initial specification and later alteration, use the Up/Down Arrow and **TAB** keys to move the cursor between each parameter. To enter a value, position the cursor and use the **DELETE**, **BACK SPACE**, and **INSERT** keys to facilitate adjustment. Refer to the following descriptions.

When the value to be entered is greater than 10, you must first erase the default value.

### Group Statistics - Average Answer, Average Talk, and Average Available - Low/High Alarms:

Average Answer, Average Talk, and Average Available are direct time measurements (in minutes and seconds) related to call handling. The respective settings for the low and high alarms must be in **ascending** order.

The parameters Max Talk, Max. Available, Max. O/G, and Max. Logged Off have no application in the present version of ACD-MIS and are therefore omitted.

- Step 3. Check your entries and when appropriate, press **PAGE DOWN** to confirm all details.
- The screen will return to the submenu.

### 8.3 Print Thresholds

From the Alarm Configuration submenu, press **3** to initiate direct printing.

**Note:** *If action is prevented because of a problem with the printer, an appropriate warning message will be given at the top of the screen (in the red banner) :*

**Printer not on line: Retry (Y/N) ?**

#### 8.4 Audible Alarm Period

The alarm warning tone associated with the high value of the Statistics Monitor - System and Group Statistics Waiting Longest parameter can be set to be repeated every 5, 10, 20, 30, 60 or 90 seconds or disabled altogether, by this function.

Any adjustment made has an immediate effect, even if the warning tone is currently being produced.

Step 1. From the Alarm Configuration submenu, press **4**. The Audible Alarm Period set-up screen is displayed with the cursor located ready for entry of the preferred value.

(The “none” default setting means the feature is disabled.)

Step 2. For either initial assignment or later alteration, toggle the **SPACE BAR** to select the required period or alternatively press the indicated digit 1 to 6.

Step 3. Confirm your selection and press **PAGE DOWN**.

The system will return to the submenu.

9. SYSTEM EXIT

**<<<<<WARNING>>>>>**

SYSTEM EXIT completely shuts down the MIS and returns the PC to the operating system. In that mode:

- 1.The Statistics Monitor mode will be initialized.
- 2.No new ACD call data can be received from the PBX and processed.
- 3.Any reports scheduled during the period of shut-down will not be printed.

- Step 1. Check for current printing of any reports.
- Step 2. From the Main Menu, select Item 3 - System Maintenance. The SYSTEM MAINTENANCE sub-menu will display.
- Step 3. Select Item 4 - OAI Connection.  
The **Disconnect from PBX (y/n)** message will be displayed.
- Step 4. Type **y**. The **Checking Communications Status. Please wait** message will be displayed.  
Wait for the system to return to the sub menu then ensure connection status indicates **OAI off**.  
If you decide not to proceed, type **n** (no). The display will immediately return to the Main Menu.
- Step 5. Press **ESC**. The system will return to the Main Menu.
- Step 6. Press **6**. The following message will display:  
**You are about to close down the system.**  
**When you do this, the system will stop receiving ACD statistics.**  
**Do you wish to stop the system (y/n):?**
- Step 7. Press **6**. The following messages will display:  
**Closing down the system.**  
**External display terminated....**  
**Saving call data.... Please wait.**  
**Call data save completed....**  
  
This will eventually be replaced by the \$ prompt.

## CHAPTER 4 CUSTOMER SPECIFICATIONS

### 1. SYSTEM CONFIGURATION

#### 1.1 Group Configuration

- A maximum of 16 ACD groups can be specified.
- Group name can be a maximum of 11 alphanumeric characters.
- The nominated pilot is usually a phantom extension. It can be a physical extension, but it must not receive direct calls.

**Table 4-1 ACD Group Configuration Table**

ACD group		Indial No.	
No.	Name	Prefix	Pilot ext.
01			
02			
03			
04			
05			
06			
07			
08			
09			
10			
11			
12			
13			
14			
15			
16			

**CUSTOMER SPECIFICATIONS**

**1.2 Agent Configuration**

- A maximum of 60 extensions can be assigned per ACD group.
- Extensions (including the pilot number) can be entered in any order.
- Tenant No. must be the value set for the ACD group within the PABX.
- Where preferred, the entry for Agent Name can be other than a surname (e.g., Agent 1). Each entry must be a maximum of 11 characters, including spaces.

**Table 4-2 Agent Configuration Table**

<b>TENANT NO.:</b> .....		<b>GROUP NAME:</b> .....	
		<b>GROUP No.:</b> .....	
	<b>AGENT ID CODE</b>	<b>AGENT (SUR)NAME</b>	<b>AGENT INITIAL</b>
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

**PHOTOCOPY AS REQUIRED:  
Agent Configuration Table**

<b>TENANT NO.:</b> .....		<b>GROUP NAME:</b> ..... <b>GROUP No.:</b> .....	
	<b>AGENT ID CODE</b>	<b>AGENT (SUR)NAME</b>	<b>AGENT INITIAL</b>
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			

## CUSTOMER SPECIFICATIONS

### 1.3 Report Time Values

- Terms are defined as follows:
  - Time to Answer refers to G.O.S. calculation.
  - Abandoned Ignore Time is the minimum required waiting time before disconnection for the call to be considered as abandoned.
  - Answer Time, Abandon Time and Duration Time refer to the Calls Within parameters of the Calls Waiting, Calls Abandoned, and Call Duration reports, respectively.
- Ensure that the values specified for Answer Time, Abandon Time, and Duration Time are in ascending order (see entries 1 - 5).
- All specifications are number of seconds in the range of 0 - 999.

**Table 4-3 Report Time Values**

TIME TO ANSWER:			ABANDON IGNORED TIME:		
ANSWER TIME:	1.	2.	3.	4.	5.
ABANDON TIME:	1.	2.	3.	4.	5.
DURATION TIME:	1.	2.	3.	4.	5.



1.4 Storage Intervals

Table 4-4 Storage Intervals

SEGMENT	INCREMENT					SEGMENT	INCREMENT				
0000 - 0059	10	15	20	30	60	1200 - 1259	10	15	20	30	60
0100 - 0159	10	15	20	30	60	1300 - 1359	10	15	20	30	60
0200 - 0259	10	15	20	30	60	1400 - 1459	10	15	20	30	60
0300 - 0359	10	15	20	30	60	1500 - 1559	10	15	20	30	60
0400 - 0459	10	15	20	30	60	1600 - 1659	10	15	20	30	60
0500 - 0559	10	15	20	30	60	1700 - 1759	10	15	20	30	60
0600 - 0659	10	15	20	30	60	1800 - 1859	10	15	20	30	60
0700 - 0759	10	15	20	30	60	1900 - 1959	10	15	20	30	60
0800 - 0859	10	15	20	30	60	2000 - 2059	10	15	20	30	60
0900 - 0959	10	15	20	30	60	2100 - 2159	10	15	20	30	60
1000 - 1059	10	15	20	30	60	2200 - 2259	10	15	20	30	60
1100 - 1159	10	15	20	30	60	2300 - 2359	10	15	20	30	60

**CUSTOMER SPECIFICATIONS**

**1.5 External Display Unit**

**1.5.1 EDU Port Selection**

- Only one EDU can be assigned to each port.
- The “None“ option can be selected to disable any particular port.

**Table 4-5 Auxiliary Port Selection**

PORT NO.	FORMAT			EDU SELECTION				/dev Name
	Spectrum	Dataline	None	1	2	3	4	
1								
2								
3								
4								

**Note:** Consult the UNIX System Administrator for the /dev name of the EDU ports.

**1.5.2 External Display Format**

- Any format can be assigned to any EDU.
- The same format can be selected for display on all EDUs.
- If the “Not used” option is assigned to any EDU, it will remain blank.
- Specify the required ACD group(s) and preferred display panel position by entering the pilot extension number.
- The three format options are:
  - Number of calls waiting - for up to 7 groups
  - Number of calls waiting and the longest waiting time - for up to 2 groups
  - Group name, number of calls waiting, and the longest waiting time - for one group only.

**Table 4-6 External Display Format**

EDU NO.	FORMAT SELECTION			ACD GROUP SELECTION & POSITION							
				1	2	3	4	5	6	7	
1	Not used	1	2	3							
2	Not used	1	2	3							
3	Not used	1	2	3							
4	Not used	1	2	3							

## 2. STATISTICS REPORTING

### 2.1 Report Configuration

- A maximum of 20 Report Configurations can be assigned.
- A maximum of 20 (alphanumeric) characters can be entered for Report Name.
- Observe the applications of Class for various Report Types as described in Chapter 1.

**Table 4-7 Report Configuration**

REPORT NAME:					
REPORT TYPE:		Group Break and Work		Agent Break and Work	
Calls Waiting		Calls Abandoned		Call Duration	
Group Workload		Group Performance		Agent Performance	
CLASS :		Full		All	
				Selected	
DATE TYPE					
Today		Yesterday		This Week	
Last Week					
This Month		Last Month		This Year	
Last Year		For Date		Date Range	
BREAKDOWN					
By Period		Hourly		Daily	
Monthly		Weekday		Total	

**PHOTOCOPY AS REQUIRED:**

**Report Configuration**

REPORT NAME:					
REPORT TYPE:		Group Break and Work		Agent Break and Work	
Calls Waiting		Calls Abandoned		Call Duration	
Group Workload		Group Performance		Agent Performance	
CLASS :		Full		All	
				Selected	
DATE TYPE					
Today		Yesterday		This Week	
				Last Week	
This Month		Last Month		This Year	
				Last Year	
				For Date	
				Date Range	
BREAKDOWN					
By Period		Hourly		Daily	
Monthly		Weekday		Total	

REPORT NAME:					
REPORT TYPE:		Group Break and Work		Agent Break and Work	
Calls Waiting		Calls Abandoned		Call Duration	
Group Workload		Group Performance		Agent Performance	
CLASS :		Full		All	
				Selected	
DATE TYPE					
Today		Yesterday		This Week	
				Last Week	
This Month		Last Month		This Year	
				Last Year	
				For Date	
				Date Range	
BREAKDOWN					
By Period		Hourly		Daily	
Monthly		Weekday		Total	

**2.2 Report Group Configuration**

- A maximum of 20 Report Group Configurations can be assigned. A maximum of 20 (alphanumeric) characters can be entered for Report Name.
- Observe the entry requirements for the parameters Group, Agent, Start Date and End Date. (See “[Report Group Configuration](#)”, Section 3.4.2.)

**Table 4-8 Report Group Configuration**

REPORT GROUP NAME				
	REPORT (NAME)	GROUP	START DATE	END DATE
1			/ /	/ /
2			/ /	/ /
3			/ /	/ /
4			/ /	/ /
5			/ /	/ /
6			/ /	/ /
7			/ /	/ /
8			/ /	/ /
9			/ /	/ /
10			/ /	/ /

REPORT GROUP NAME				
	REPORT (NAME)	GROUP	START DATE	END DATE
1			/ /	/ /
2			/ /	/ /
3			/ /	/ /
4			/ /	/ /
5			/ /	/ /
6			/ /	/ /
7			/ /	/ /
8			/ /	/ /
9			/ /	/ /
10			/ /	/ /

**CUSTOMER SPECIFICATIONS**

**PHOTOCOPY AS REQUIRED:**

**Report Group Configuration**

REPORT GROUP NAME				
REPORT (NAME)		GROUP	START DATE	END DATE
1			/ /	/ /
2			/ /	/ /
3			/ /	/ /
4			/ /	/ /
5			/ /	/ /
6			/ /	/ /
7			/ /	/ /
8			/ /	/ /
9			/ /	/ /
10			/ /	/ /

REPORT GROUP NAME				
REPORT (NAME)		GROUP	START DATE	END DATE
1			/ /	/ /
2			/ /	/ /
3			/ /	/ /
4			/ /	/ /
5			/ /	/ /
6			/ /	/ /
7			/ /	/ /
8			/ /	/ /
9			/ /	/ /
10			/ /	/ /

**2.3 Scheduler**

- A maximum of 20 schedules can be assigned.
- Observe the entry requirements for the parameters Day, Time, and Date as described in “Scheduler” , Section 3.4.3.

**Table 4-9 Report Scheduler Table**

(REPORT) GROUP	SCHEDULE	DAY	TIME	DATE
1			:	/ /
2			:	/ /
3			:	/ /
4			:	/ /
5			:	/ /
6			:	/ /
7			:	/ /
8			:	/ /
9			:	/ /
10			:	/ /
11			:	/ /
12			:	/ /
13			:	/ /
14			:	/ /
15			:	/ /
16			:	/ /
17			:	/ /
18			:	/ /
19			:	/ /
20			:	/ /

**3. SYSTEM ADMINISTRATION**

**3.1 Passwords**

- ACD-MIS accommodates a maximum of 12 passwords. The first two are set in default data.
- In reference to the default passwords:
  - Only the access status of the first can be changed. It will always correspond to the Enter key.
  - Only the name of the second can be changed. It is initially specified as mis (lowercase letters).
- Assignable passwords are all maximum 10 (alphabetical) characters. Upper and lower case letters are regarded separately by the system.
- In completing the following tables, if access to a general area (e.g., SYSTEM MAINTENANCE) is restricted (i.e., N is entered), no entry is required for the associated items.

**Table 4-10 First Default Password Reassignment Table**

(DEFAULT) PASSWORD 1 : Enter Key (Fixed)			
ACCESS STATUS : Enter [Y] or [N] for Each Item			
STATISTICS MONITOR	[ ]	SYSTEM CONFIGURATION:	[ ]
REPORT:	[ ]	- System Name	[ ]
- Report Configuration	[ ]	- Group Configuration	[ ]
- Report Group Configuration	[ ]	- Agent Configuration	[ ]
- Scheduler	[ ]	- Report Time Values	[ ]
- Create Report	[ ]	- Storage Intervals	[ ]
SYSTEM MAINTENANCE:	[ ]	ALARM CONFIGURATION :	[ ]
- Password	[ ]	- Group Statistics Threshold	[ ]
- ACD Alarms	[ ]	- Agent Statistics Threshold	[ ]
- System Message	[ ]	- Print Thresholds	[ ]
- OAI Connection	[ ]	- Audible Alarm Period	[ ]
- EDU Port Selection	[ ]	EXIT	[ ]
- External Display Format	[ ]		

**Table 4-11 Second Default Password Reassignment Table**

(DEFAULT) PASSWORD 2 :									
ACCESS STATUS : Unrestricted (Fixed)									



**Table 4-12 New Password Assignment**

PASSWORD 3 :	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
ACCESS STATUS : Enter [Y] or [N] for Each Item										
STATISTICS MONITOR	[ ]									
REPORT:	[ ]									
- Report Configuration	[ ]									
- Report Group Configuration	[ ]									
- Scheduler	[ ]									
- Create Report	[ ]									
SYSTEM MAINTENANCE:	[ ]									
- Password	[ ]									
- ACD Alarms	[ ]									
- System Message	[ ]									
- OAI Connection	[ ]									
- EDU Port Selection	[ ]									
- External Display Format	[ ]									
SYSTEM CONFIGURATION:	[ ]									
- System Name	[ ]									
- Group Configuration	[ ]									
- Agent Configuration	[ ]									
- Report Time Values	[ ]									
- Storage Intervals	[ ]									
ALARM CONFIGURATION :	[ ]									
- Group Statistics Threshold	[ ]									
- Agent Statistics Threshold	[ ]									
- Print Thresholds	[ ]									
- Audible Alarm Period	[ ]									
EXIT	[ ]									

PASSWORD 4 :	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
ACCESS STATUS : Enter [Y] or [N] for Each Item										
STATISTICS MONITOR	[ ]									
REPORT:	[ ]									
- Report Configuration	[ ]									
- Report Group Configuration	[ ]									
- Scheduler	[ ]									
- Create Report	[ ]									
SYSTEM MAINTENANCE:	[ ]									
- Password	[ ]									
- ACD Alarms	[ ]									
- System Message	[ ]									
- OAI Connection	[ ]									
- EDU Port Selection	[ ]									
- External Display Format	[ ]									
SYSTEM CONFIGURATION:	[ ]									
- System Name	[ ]									
- Group Configuration	[ ]									
- Agent Configuration	[ ]									
- Report Time Values	[ ]									
- Storage Intervals	[ ]									
ALARM CONFIGURATION :	[ ]									
- Group Statistics Threshold	[ ]									
- Agent Statistics Threshold	[ ]									
- Print Thresholds	[ ]									
- Audible Alarm Period	[ ]									
EXIT	[ ]									

PHOTOCOPY AS REQUIRED:

New Password Assignment Table

PASSWORD :	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
ACCESS STATUS : Enter [Y] or [N] for Each Item										
STATISTICS MONITOR	[ ]	SYSTEM CONFIGURATION:	[ ]							
REPORT:	[ ]	- System Name	[ ]							
- Report Configuration	[ ]	- Group Configuration	[ ]							
- Report Group Configuration	[ ]	- Agent Configuration	[ ]							
- Scheduler	[ ]	- Report Time Values	[ ]							
- Create Report	[ ]	- Storage Intervals	[ ]							
SYSTEM MAINTENANCE:	[ ]	ALARM CONFIGURATION :	[ ]							
- Password	[ ]	- Group Statistics Threshold	[ ]							
- ACD Alarms	[ ]	- Agent Statistics Threshold	[ ]							
- System Message	[ ]	- Print Thresholds	[ ]							
- OAI Connection	[ ]	- Audible Alarm Period	[ ]							
- EDU Port Selection	[ ]	EXIT	[ ]							
- External Display Format	[ ]									

PASSWORD :	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
ACCESS STATUS : Enter [Y] or [N] for Each Item										
STATISTICS MONITOR	[ ]	SYSTEM CONFIGURATION:	[ ]							
REPORT:	[ ]	- System Name	[ ]							
- Report Configuration	[ ]	- Group Configuration	[ ]							
- Report Group Configuration	[ ]	- Agent Configuration	[ ]							
- Scheduler	[ ]	- Report Time Values	[ ]							
- Create Report	[ ]	- Storage Intervals	[ ]							
SYSTEM MAINTENANCE:	[ ]	ALARM CONFIGURATION :	[ ]							
- Password	[ ]	- Group Statistics Threshold	[ ]							
- ACD Alarms	[ ]	- Agent Statistics Threshold	[ ]							
- System Message	[ ]	- Print Thresholds	[ ]							
- OAI Connection	[ ]	- Audible Alarm Period	[ ]							
- EDU Port Selection	[ ]	EXIT	[ ]							
- External Display Format	[ ]									

**3.2 Group Statistics Thresholds**

- The settings for the G.O.S. low and high alarms (% values) must be in descending order.
- The same settings for Average Answer, Average Talk, Average Available and Longest Waiting Call (minutes and seconds) and Calls Waiting (numerical value 0-999) must be in ascending order.

**Table 4-13 Group Statistics Thresholds**

GROUP		ALARM LEVEL	STATISTICS					
NO.	PILOT EXT.		G.O.S.	AVG. ANS.	AVG. TALK.	AVG. AVAIL.	CALLS WAIT.	LONG. WAIT.
System		Low High						
01		Low High						
02		Low High						
03		Low High						
04		Low High						
05		Low High						
06		Low High						
07		Low High						
08		Low High						
09		Low High						
10		Low High						
11		Low High						
12		Low High						
13		Low High						
14		Low High						
15		Low High						
16		Low High						

**CUSTOMER SPECIFICATIONS**

**3.3 Agent Statistics Thresholds**

The settings for Average Answer, Average Talk, and Average Available low and high alarms (minutes and seconds) must be in ascending order.

**Table 4-14 Agent Statistics Thresholds**

GROUP		ALARM LEVEL	STATISTICS		
NO.	PILOT EXT.		AVG. ANS.	AVG. TALK.	AVG. AVAIL.
01		Low High			
02		Low High			
03		Low High			
04		Low High			
05		Low High			
06		Low High			
07		Low High			
08		Low High			
09		Low High			
10		Low High			
11		Low High			
12		Low High			
13		Low High			
14		Low High			
15		Low High			
16		Low High			

**3.4 Audible Alarm Period**

- The respective low and high alarm thresholds for Longest Waiting Call must be set in Group Statistics Threshold (see [page 139](#)) for this feature to be effective.
- The “None” option can be selected to inhibit the alarm altogether.

**Table 4-15 Audible Alarm Period**

PERIOD (Seconds)							
None	5	10	15	20	30	60	90



## APPENDIX A ACD-MIS TERMINAL USER GUIDE (Real Time Statistic Screen)

### LOG ON (Multiline Display Terminal)

*With telephone idle and handset on hook:*

- Real Time Statistic screen on MIS PC shows “LOGGED OFF” with your extension number.
- Log On/Off key LED is dark.
- Press Log On/Off key. Log On/Off key LED flash red at 120 ipm.
- LCD display shows “Enter ID:”
- Dial ID number followed by #.
- Terminal chimes twice. Log On/Off LED is green. The terminal displays “LOG ON” momentarily.
- Real Time Statistic screen on MIS PC shows “AVAILABLE” with your designation and extension number.

### LOG ON (Single Line and Multiline Non Display Terminal)

*With telephone idle and handset on hook:*

- Real Time Statistic screen on MIS PC shows “LOGGED OFF” with your extension number.
- Lift handset. If using headset with non display terminal, press Headset/Handset key. **Note 1**
- Receive dial tone and dial Log On/Off Feature Access Code.
- Receive Feature Dial Tone and dial ID number, followed by#.
- Receive Feature Set Tone.
- Replace handset. If using headset with non display terminal, press Headset/Handset key. **Note 1**
- Real Time Statistic screen on MIS PC shows “AVAILABLE” with your designation and extension number.

### ANSWERING ACD CALLS (Calls Directed at Pilot of ACD Group)

*Receive incoming ring signal:*

- Real Time Statistic screen on MIS PC shows “ACD RINGING” with your designation and extension number.
- Lift handset. If using headset with display or non display terminal, press Headset/Handset key. **Note 1**
- Converse
- Real Time Statistic screen on MIS PC shows “ACD CALL” with your designation and extension number.

### ANSWERING NON-ACD CALLS (Calls Directed at Available Agent Station)

*Receive incoming ring signal:*

- Real Time Statistic screen on MIS PC shows “NON ACD” with your designation and extension number.
- Lift handset. If using headset with display or non display terminal, press Headset/Handset key. **Note 1**
- Converse
- Real Time Statistic screen on MIS PC shows “NON ACD” with your designation and extension number.

**BREAK MODE (Multiline Display Terminal)**

**SET**

*With no call in progress:*

- Real Time Statistic screen on MIS PC shows “AVAILABLE” with your designation and extension number.
- Break key LED is dark.
- Press Break key. Break key LED flash red at 120 ipm.
- Terminal chimes twice. Break key LED flash red at 60 ipm. The Terminal displays “BREAK” momentarily.
- Real Time Statistic screen on MIS PC shows “BREAK” with your designation and extension number.

**BREAK MODE (Multiline Display Terminal)**

**SET**

*With call in progress:*

- Real Time Statistic screen on MIS PC shows “ACD CALL” with your designation and extension number.
- Break key LED is dark.
- Press Break key. Break key LED flash red at 120 ipm.
- When finished conversing, replace handset. If using headset, press Headset/Handset key. **Note 1**
- Terminal chimes twice. Break key LED flash red at 60 ipm. The terminal displays “BREAK” momentarily.
- Real Time Statistic screen on MIS PC shows “BREAK” with your designation and extension number.

**BREAK MODE (Single Line and Multiline Non Display Terminal)**

**SET**

*With no call in progress:*

- Real Time Statistic screen on MIS PC shows “AVAILABLE” with your designation and extension number.
- Lift handset. If using headset with non display terminal press, Headset/Handset key. **Note 1**
- Receive dial tone and dial Break Feature Access Code.
- Receive Feature Set Tone.
- Replace handset. If using headset with non display terminal press, Headset/Handset key. **Note 1**
- Real Time Statistic screen on MIS PC shows “BREAK” with your designation and extension number.

**BREAK MODE (Single Line and Multiline Non Display Terminal)**

**SET**

*With call in progress:*

“Not Allowed” (If this capability is needed, a Multiline Display Terminal must be used.)

**BREAK MODE (Multiline Display Terminal)**

**CANCEL**

- Real Time Statistic screen on MIS PC shows “BREAK” with your designation and extension number.
- Break key LED flash red at 60 ipm.
- Press Break key. Break key LED flash red at 120 ipm.
- Terminal chimes twice. Break key LED goes dark. The terminal displays “AVAILABLE” momentarily.
- Real Time Statistic screen on MIS PC shows “AVAILABLE” with your designation and extension number.



**BREAK MODE (Single Line and Multiline Non Display Terminal)****CANCEL**

- Real Time Statistic screen on MIS PC shows “BREAK” with your designation and extension number.
- Lift handset. If using headset with non display terminal press, Headset/Handset key. **Note 1**
- Receive dial tone and dial Break Feature Access Code.
- Receive Feature Set Tone.
- Replace handset. If using headset with non display terminal press, Headset/Handset key. **Note 1**
- Real Time Statistic screen on MIS PC shows “AVAILABLE” with your designation and extension number.

**WORK MODE (Multiline Display Terminal)****SET**

*With no call in progress:*

- Real Time Statistic screen on MIS PC shows “AVAILABLE” with your designation and extension number.
- Work key LED is dark.
- Press Work key. Work key LED flash red at 120 ipm.
- Terminal chimes twice. Work key LED flash red at 60 ipm. The terminal displays “WORK” momentarily.
- Real Time Statistic screen on MIS PC shows “WORK” with your designation and extension number.

**WORK MODE (Multiline Display Terminal)****SET**

*With call in progress:*

- Real Time Statistic screen on MIS PC shows “ACD CALL” with your designation and extension number.
- Work key LED is dark.
- Press Work key. Work key LED flash red at 120 ipm.
- When finished conversing replace handset (if using headset press Headset/Handset key) **Note 1**
- Terminal chimes twice. Work key LED flash red at 60 ipm. The terminal displays “WORK” momentarily.
- Real Time Statistic screen on MIS PC shows “WORK” with your designation and extension number.

**WORK MODE (Single Line and Multiline Non Display Terminal)****SET**

*With no call in progress:*

- Real Time Statistic screen on MIS PC shows “AVAILABLE” with your designation and extension number.
- Lift handset. If using headset with non display terminal, press Headset/Handset key. **Note 1**
- Receive dial tone and dial Work Feature Access Code.
- Receive Feature Set Tone.
- Replace handset. If using headset with non display terminal, press Headset/Handset key. **Note 1**
- Real Time Statistic screen on MIS PC shows “WORK” with your designation and extension number.

**WORK MODE (Single Line and Multiline Non Display Terminal)**

**SET**

*With call in progress:*

*“Not Allowed” (If this capability is needed, a Multiline Display Terminal must be used.)*

**WORK MODE (Multiline Display Terminal)**

**CANCEL**

- Real Time Statistic screen on MIS PC shows “WORK” with your designation and extension number.
- Work key LED flash red at 60 ipm.
- Press Work key. Work key LED flash red at 120 ipm.
- Terminal chimes twice. Work key LED goes dark. The terminal displays “AVAILABLE” momentarily.
- Real Time Statistic screen on MIS PC shows “AVAILABLE” with your designation and extension number.

**WORK MODE (Single Line and Multiline Non Display Terminal)**

**CANCEL**

- Real Time Statistic screen on MIS PC shows “WORK” with your designation and extension number.
- Lift handset. If using headset with non display terminal, press Headset/Handset key. **Note 1**
- Receive dial tone and dial Work Feature Access Code.
- Receive Feature Set Tone.
- Replace handset. If using headset with non display terminal, press Headset/Handset key. **Note 1**
- Real Time Statistic screen on MIS PC shows “AVAILABLE” with your designation and extension number.

**LOG OFF (Multiline Display Terminal)**

*With no call in progress:*

- Real Time Statistic screen on MIS PC shows “AVAILABLE” with your designation and extension number.
- Log On/Off key LED is green.
- Press Log On/Off key. Log On/Off key LED flash red at 120 ipm.
- Terminal chimes twice. Log On/Off LED goes dark. The terminal displays “VACANT” momentarily.
- Real Time Statistic screen on MIS PC shows “LOGGED OFF” with your extension number.

**LOG OFF (Multiline Display Terminal)**

*With call in progress:*

- Real Time Statistic screen on MIS PC shows “ACD CALL” with your designation and extension number.
- Log On/Off key LED is green.
- Press Log On/Off key. Log On/Off key LED flash red at 120 ipm.
- When finished conversing, replace handset. If using headset press, Headset/Handset key. **Note 1**
- Terminal chimes twice. Log On/Off LED goes dark. The terminal displays “VACANT” momentarily.
- Real Time Statistic screen on MIS PC shows “LOGGED OFF” with your designation and extension number.

**LOG OFF (Single Line and Multiline Non Display Terminal)**

*With no call in progress:*

- Real Time Statistic screen on MIS PC shows “AVAILABLE” with your designation and extension number.
- Lift handset. If using headset with non display terminal, press Headset/Handset key. **Note 1**
- Receive dial tone and dial Log On/Off Feature Access Code.
- Receive Feature Set Tone.
- Replace handset. If using headset with non display terminal, press Headset/Handset key. **Note 1**
- Real Time Statistic screen on MIS PC shows “LOGGED OFF” with your extension number.

**LOG OFF (Single Line and Multiline Non Display Terminal)**

*With call in progress:*

“Not Allowed” (If this capability is needed, a Multiline Display terminal must be used.)

**MAKING CALLS**

*With Real Time Statistic screen on MIS PC showing “AVAILABLE”:*

- Real Time Statistic screen on MIS PC shows “AVAILABLE” with your designation and extension number.
- Lift handset and receive dial tone. If using headset with display or non display terminal, press Headset/Handset key. **Note 1**
- Dial desired number.
- Converse
- Real Time Statistic screen on MIS PC show “AVAILABLE with your designation and extension number. **Note 2**

**MAKING CALLS**

*With Real Time Statistic screen on MIS PC showing “BREAK” or “WORK”:*

- Real Time Statistic screen on MIS PC shows “BREAK” or “WORK” with your designation and extension number.
- Lift handset and receive dial tone. If using headset with display or non display terminal, press Headset/Handset key. **Note 1**
- Dial desired number.
- Converse
- Real Time Statistic screen on MIS PC show “BREAK” or “WORK” with your designation and extension number. **Note 3**

**Note 1:** *For headset use, Multiline Terminal must be equipped with a ADA-J Unit and Headset/Handset key must be assigned to the Multiline Terminal.*

**Note 2:** *When using the Prime Line to make outgoing calls, you will not receive any ACD calls, even though the Real Time Statistic screen shows the agent is “AVAILABLE”.*

**Note 3:** *Outgoing calls from the agent’s Prime Line have no effect on the Real Time Statistic screen status.*

