**Telrad** *DIGITAL*

# Automatic Call Distribution (ACD)

# SUPERVISOR
# USER GUIDE

**Telrad**

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# (ACD)

# SUPERVISOR USER GUIDE

## Telrad

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Woodbury, N.Y.

## NOTICE

This publication refers to Telrad's **Automatic Call Distribution (ACD)** package running on Telrad's DIGITAL KEY BX, DIGITAL 400, and DIGITAL 1000 systems, Releases SB7, DB7, and LB7, respectively, as of August, 1999.

This publication describes the operation of the ACD supervisor's position, using any Telrad Avanti 3025 telephone.

Telrad reserves the right to modify the equipment and the software described herein without prior notice. However, changes made to the equipment or to the software described herein do not necessarily render this publication invalid.

# INTRODUCTION

## GENERAL

This guide provides instructions for the Automatic Call Distribution (ACD) supervisor.

It includes details of:
- Supervising agents;
- Viewing agent statistics;
- Viewing queue statistics.

The instructions refer to ACD supervisors in DIGITAL KEY BX, DIGITAL 400, and DIGITAL 1000 systems.

A detailed description of the Telrad ACD system is provided in the ACD System manual and in the DIGITAL System Description manual.

The supervisor must use an Avanti 3025 set . It is assumed that the supervisor using this guide is familiar with regular operation of the telephone. For detailed operating instructions, refer to the Avanti 3025 User Guide.

It is also assumed that the supervisor is familiar with the work and documentation of the ACD agents. For more details, refer to the ACD Agent User Guide.

## CONVENTIONS

The conventions adopted in this guide are described below.

**Typographical conventions**
In this guide:
- Fixed buttons are shown like this: **[HELP ANSWER].**
- Softkeys are shown by an icon like this: ♥
  or button like this: *{<MORE>}.*
- Press the softkeys to move from screen to screen as indicated in Figures 4 through 10, below.

- ♦ scrolls to the next screen.
- ♠ moves to the previous screen.

**Time conventions**
In the display of the supervisor's telephone:

:   separates hours from minutes;

'   indicates minutes;

"   indicates seconds.

Thus 3:45'26" means three hours, 45 minutes, 26 seconds.

## CURSOR MOVEMENT AND ENTER BUTTONS

Your Avanti 3025 telephone set has sixteen softkeys, a four-direction cursor movement key, an ENTER button for selecting the current cursor position (see Figure 1). You may move among the softkey options using the four-direction cursor movement key. Then press the ENTER button to select the highlighted option. Softkey functions may also be selected by pressing the softkey adjacent to the option.

## PURPOSE OF ACD

The purpose of the ACD system is to optimize the distribution of incoming calls so that callers receive prompt service, and so that the burden of answering calls is distributed evenly among the ACD agents.

## TASKS OF THE SUPERVISOR

The supervisor has two main tasks:
- Dealing with agents;
- Viewing the statistical data relating to queues and agents.

Dealing with agents involves:
- Monitoring and advising agents;
- Responding to agents' requests for help.

Viewing the statistical data involves:
- Viewing the current status of the ACD queues, ACD groups and agents;
- Viewing the accumulated data concerning the performance of the ACD queues, ACD groups, and agents.

The supervisor can have several buttons programmed on the telephone that are used for accessing various features. The buttons are defined in system programming. A recommended programming button layout is illustrated in Figure 1.
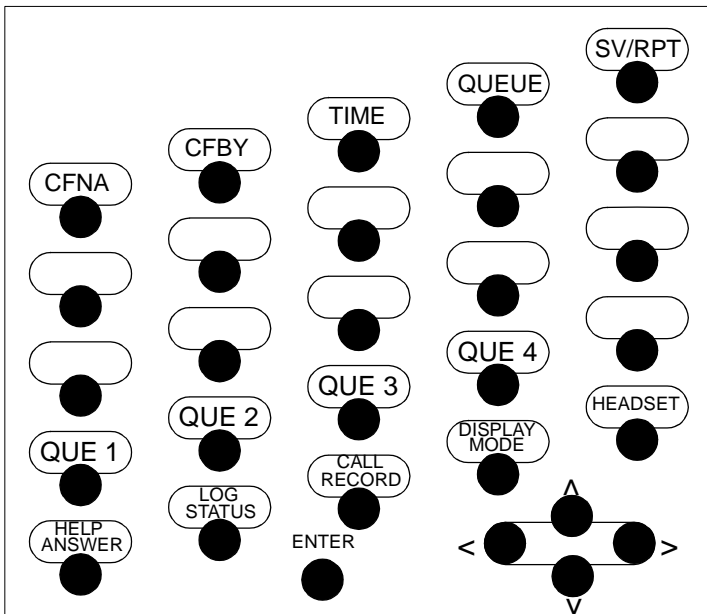


**Figure 1  ACD superviser telephone recommended button layout**

Table 1 lists and briefly explains the function of the programmable buttons.

### Table 1  Supervisor programmable buttons

| | |
|---|---|
| **DISPLAY MODE** | Toggles between supervisor mode and regular telephone display mode. |
| **HELP ANSWER** | Responds to a help request from an agent. |
| **QUE # \*** | Answers a call from the queue.<br>Also, the LED color and flash rate of the QUE buttons indicate which threshold the queue has reached (see Table 2). |
| **CALL RECORD** | Records the current conversation in the supervisor telephone's Telrad IMAGEN mailbox (if installed). |
| **HEADSET** | Used for operating the headset. |

**\*For DIGITAL KEY BX: QUE 1-16;**
**For DIGITAL 400 and DIGITAL 1000: QUE 1-24.**

### Table 2  Queue button LED indications

| Threshold level | LED color | LED flash rate |
|---|---|---|
| Before first threshold | Green | Slow |
| Between first and second thresholds | Red | Slow |
| Past second threshold | Red | Fast |
| All agents logged out or forced busy | Red | Steady |

The supervisor can program Memory buttons with the extension DN of each agent telephone, to give a BLF (Busy Lamp Field) LED indication of the agents' telephone status (see Table 3). The supervisor can then dial the agents directly, even when not in ACD supervisor Display mode, by just pressing the programmed Memory buttons.

### Table 3   BLF (Busy Lamp Field) LED indications

| Flash rate | Explanation |
| --- | --- |
| Off | Idle |
| Red steady on | Busy (not ringing) |
| Red slow flash | Ringing |
| Red fast flash | Do Not Disturb |

## LOGGING IN TO ACD

The supervisor follows the same procedure as the ACD agent when logging in and out of the ACD.

**To log in**
1. Dial the log in code.
2. Dial your supervisor ID.

**To log out**
• Dial the log out code.

## USING THE ACD SUPERVISOR POSITION AS A REGULAR TELEPHONE

In addition to serving as a supervisor position, the supervisor's telephone can also operate as a regular telephone extension.

Pressing the **[ACD DM]** button toggles between the regular and ACD supervisor Display mode.

On logging in to ACD, the supervisor's telephone automatically enters the supervisor Display mode.

**To return to regular telephone Display mode**
• Press **[ACD DM]**.

**To enter supervisor Display Mode (from regular operation)**
• Press **[ACD DM]**.

When the supervisor exits ACD mode, the system remembers which screen the supervisor was working in. Pressing **[ACD DM]** returns you to the screen that was displayed when you exited the ACD mode.

## SUPERVISOR SCREENS

The data viewed by the supervisor is displayed as a series of screens on the display of the Avanti 3025 telephone set.

The remainder of this guide describes the contents and purpose of the supervisor screens. It is divided into three sections:
• The SUPERVISOR MAIN Screens;
• Viewing agent statistics and monitoring agents;
• Viewing queue statistics.

Figures 2 and 3 show the architecture of the ACD screens.

In Figure 2, the supervisor is allocated just one ACD group.

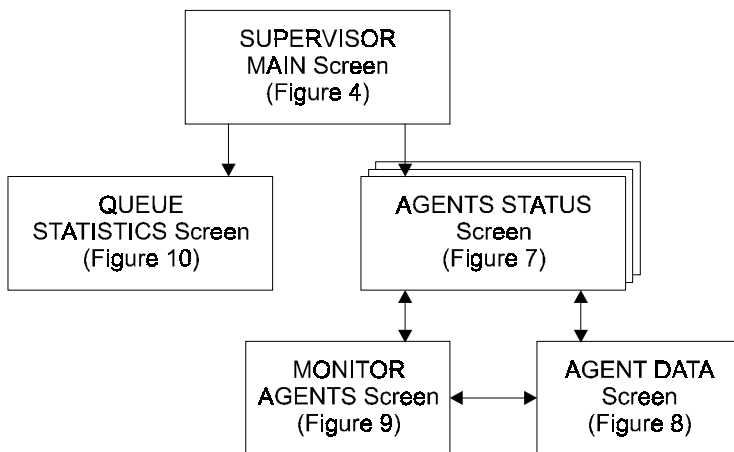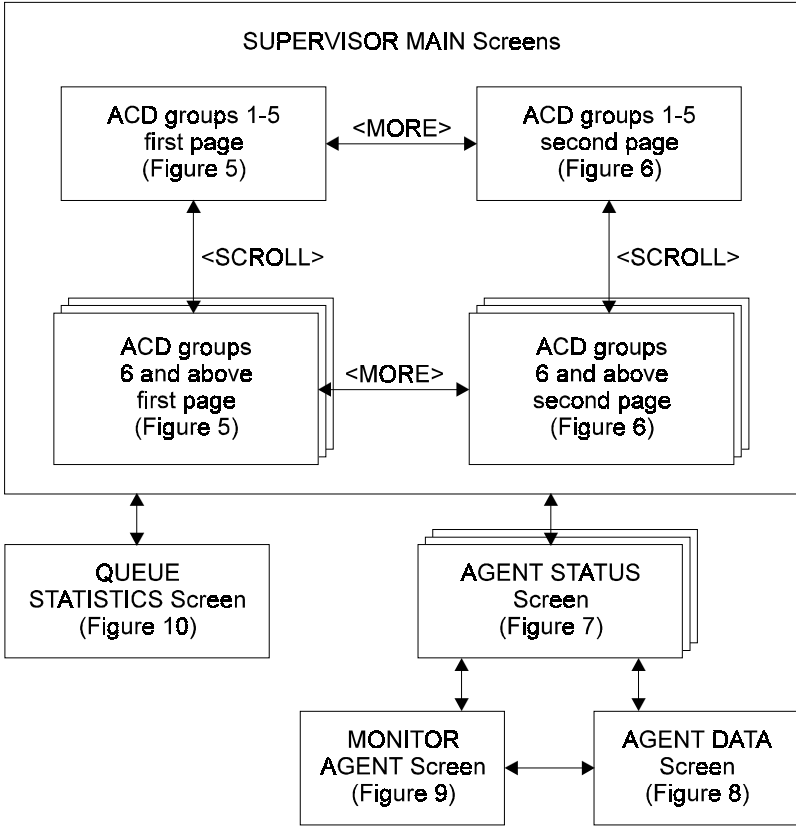In Figure 3, the supervisor is allocated more than one ACD group.



**Figure 2  Supervisor screens architecture (for supervisor with one ACD group)**

**Figure 3  Supervisor screens architecture
(for supervisor with more than one ACD group)**

# SUPERVISOR MAIN SCREENS

## GENERAL

From studying the data on the SUPERVISOR MAIN Screens, the supervisor receives a good general impression of the situation of the ACD queues and agents, and can then see which queues and agents require closer attention.

The first of the ACD supervisor screens is the SUPERVISOR MAIN Screen. This screen is displayed immediately after log in.

If the supervisor is allocated one ACD group, then the SUPERVISOR MAIN Screen appears as illustrated in Figure 4.

If the supervisor is allocated more than one ACD group then the SUPERVISOR MAIN Screen data spreads over two 'pages' (see Figures 5 and 6, below).

## SUPERVISOR WITH ONE ALLOCATED  ACD GROUP

Figure 4 shows the SUPERVISOR'S MAIN Screen which appears after the supervisor logs in, when the supervisor is allocated only one ACD group. This screen contains all the SUPERVISOR MAIN Screen parameters.

Note that this screen does not have ⬧*, {<SCROLL>}* or *{<MORE>}* icons or softkeys.
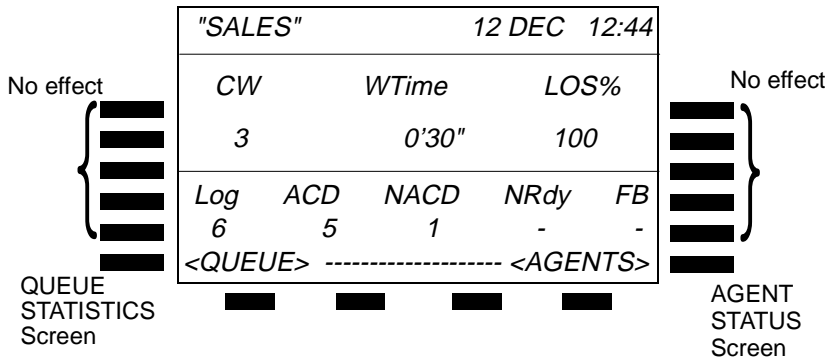
**Figure 4  SUPERVISOR MAIN Screen
(for one ACD group)**

## SUPERVISOR MAIN SCREEN - FIELD DESCRIPTIONS

At the top of the SUPERVISOR MAIN Screen the name of the supervised group, and the date and time are displayed. The screen fields are described in Table 4.

### Table 4 SUPERVISOR MAIN Screen - field descriptions

| Field | Explanation |
| --- | --- |
| CW | Number of calls waiting in the queue. |
| WTime | The time the longest unanswered call has been waiting in the queue. |
| LOS | Level of Service. |
| Log | Number of logged in agents. |
| ACD | Number of agents involved with ACD calls. |
| NACD | Number of agents involved with non-ACD calls. |
| NRdy | Number of agents in Not Ready state, i.e. in either: Busy wrap up, Not available, Busy or Forced Busy state. |
| FB | Number of agents in Forced Busy state. |

## SUPERVISOR WITH TWO TO FIVE ALLOCATED ACD GROUPS

When between two and five ACD groups are allocated to the supervisor, the data in the SUPERVISOR MAIN Screen, described in the SUPERVISOR MAIN SCREEN - FIELD DESCRIPTIONS section, above, is spread over two 'pages'. Figures 5 and 6 show the SUPERVISOR MAIN Screens for supervisors allocated more than one ACD group.

Note that the parameters in Figures 5 and 6 are the same as in Figure 4, above (one ACD group).

QUEUE STATISTICS Screen

AGENT STATUS Screen

| MAIN | | 12 | DEC | | 12:44 |
|---|---|---|---|---|---|
| | LOG | Wtime | CW | LOS |
| SALES | 2 | 0'20" | 2 | 100 |
| SERVICE | 3 | 0'35" | 5 | 70 |
| ORDERS | 1 | 0'40 | 3 | 85 |
| GENERAL | - | - | - | - |
| TECH1 | 5 | 0'30" | 5 | 75 |
| ↓ | <Que-Ag> | | | <MORE> |

Scroll

Figure 6

**Figure 5 SUPERVISOR MAIN Screen
(two or more ACD groups, first page)**

QUEUE STATISTICS Screen

AGENT STATUS Screen

| MAIN | | 12 | DEC | | 12:44 |
|---|---|---|---|---|---|
| | NACD | ACD | NRdy | FB |
| SALES | - | 2 | - | - |
| SERVICE | - | 2 | 1 | - |
| ORDERS | - | 1 | 1 | - |
| GENERAL | - | - | - | - |
| TECH1 | 1 | 4 | - | - |
| ↓ | <Que-Ag> | | | <MORE> |

Scroll

Figure 5

**Figure 6 SUPERVISOR MAIN Screen
(two or more ACD groups, second page)**

**NOTES**

The ↓ icon appears only when more than five ACD groups are defined.

The *{<MORE>}* softkey is used to toggle between the two pages of the SUPERVISOR MAIN Screen (see Figures 5 and 6).

Use the top five softkeys on the right to enter the AGENT STATUS Screens (see Figure 7, below).

Use the top five softkeys on the left to enter the QUEUE STATISTICS Screens (see Figure 10, below).

## SUPERVISOR WITH SIX OR MORE ALLOCATED ACD GROUPS

If the supervisor is allocated six or more ACD groups a ↓ icon is displayed on both pages of the MAIN Screen.

Pressing the softkey next to the ↓ icon leads to an additional screen covering ACD groups 6 to 10 and to further screens covering all other defined ACD groups. From the last ACD group screen, pressing the softkey next to the ↓ icon scrolls cyclically back to the first ACD screen.

# VIEWING AGENT STATISTICS AND MONITORING AGENTS

## GENERAL

Agent data and statistics are provided in the ACD AGENTS STATUS Screens and AGENT DATA Screens, which display detailed statistical and online data concerning the performance of the agents.

The agent statistics cover the time since log in, for the current work day. Data are retained even if the agent logs out and logs in again during the course of the same day. Agent statistics return to zero at midnight.

## AGENTS STATUS SCREEN

The AGENTS STATUS Screen displays, per agent, the number of ACD calls answered since log in, the rate of answering ACD calls, and the agent's state.

**To access the AGENTS STATUS Screens**
From the SUPERVISOR MAIN Screens (Figures 4 to 6):
• Press the softkey to the right of the desired ACD queue.
– The AGENTS STATUS Screen appears (see Figure 7).

MONITOR AGENTS Screen

| AGENTS | | ACD | C/h | ST |
|--------|--------|-----|-----|-----|
| 21 | ALAN | 40 | 12 | RDY |
| 22 | BELLA | 25 | 9 | RDY |
| 23 | CAROL | 38 | 22 | RDY |
| 24 | DAVID | - | - | - |
| 25 | MIKE | 15 | 12 | RDY |

<- Monitor      Data ->

AGENT DATA Screen
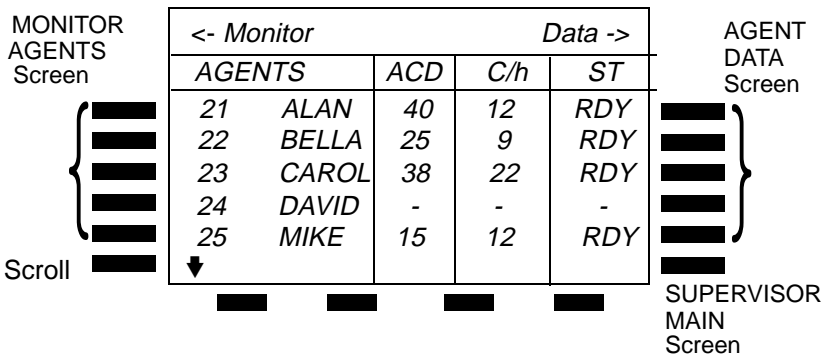
Scroll

SUPERVISOR MAIN Screen

**Figure 7 AGENTS STATUS Screen**

## NOTES

The ↓ softkey scrolls to the next page of the screen. It appears when there are more than five ACD agents defined for the queue.

Use the top five softkeys on the right to enter the AGENT DATA Screens (see Figure 8, below).

Use the top five softkeys on the left to enter the ACD MONITOR Screens (see Figure 9, below).

The fields and information provided in the AGENTS STATUS Screen are described in Table 5.

## Table 5 AGENTS STATUS Screen - field descriptions

| Field | Explanation |
|---|---|
| Agent ID code | Agent identification code (up to four digits). |
| Agent Name | Agent name (up to seven characters). |
| ACD | Number of calls processed by the agent since log in, during the current working day. |
| C/h | Rate of processing ACD calls (ACD calls per hour). |
| ST | Current agent state. See Table 6. |

## Table 6 Agent states (AGENT STATUS Screen)

| Code | Explanation |
|---|---|
| - | Logged out. |
| RDY | Agent is available to receive ACD calls. |
| RNG | ACD call is ringing the agent's telephone. |
| ACD | Agent is conducting an ACD call. |
| NCD | Agent is busy with a Non-ACD call. |
| NAV | Agent is not available. |
| WRP | Agent is in Busy Wrap Up state. |
| BSY | Agent is busy, but not in a conversation (e.g. dialing). |
| FB | Agent is in Forced Busy state. |

To receive further data concerning individual agents, access the AGENT DATA Screen.

## AGENT DATA SCREEN

The AGENT DATA Screen provides accumulated data concerning the performance of individual agents since log in, for the current day's work (i.e. since midnight). It also has a softkey which changes between *{<CALL>}* and *{<MON>}* (i.e. monitor), enabling the supervisor to call or monitor individual agents, depending on the agent's state.

### To access the AGENT DATA Screen
From the AGENTS STATUS Screen (Figure 7, above):

• Press the softkey to the right of the agent.
– The AGENT DATA Screen is displayed in Figure 8:



No effect

| LOIS | ID=236 | <22> |
|---|---|---|
| State: READY | | LI:  8:00' |
| ACD calls | 35 | Av: 4'12" |
| NON ACD | 7 | Av: 3'30" |
| LOG'D: | 6:32' | FB: 2 |
| WRP | 0:21'  (5%) | |
| NAV | 0:30'  (8%) | <CALL> |
| RDY | 1:15'  (19%) | <PREV> ↑ |

No effect

See Note

AGENT STATUS Screen

**Figure 8 AGENT DATA Screen**

**NOTE**
This softkey appears either as *{<CALL>}* when the agent station is idle or as *{<MON>}* (monitor) when the agent is on an ACD call.

The fields and information provided in the AGENT DATA screen are described in Table 7.

## Table 7 AGENT DATA Screen  - field descriptions

| Field | Explanation |
| --- | --- |
| Agent name | Agent name (up to seven characters). |
| Agent ID | Agent Identification code (up to four digits). |
| Agent station DN | Agent station DN (up to four digits). |
| State | Agent state. See Table 8. |
| LI | Time that the agent first logged in today. |
| ACD Calls | Number of calls handled by the agent today. |
| Av | Average duration of ACD calls today. |
| NON ACD | Number of Non-ACD calls handled since log in today. |
| Av | Average duration of non-ACD calls today. |
| LOGD | Total time period that the agent has been logged in today. |
| FB | Number of times that the agent has been in Forced Busy state. |
| WRP (%) | Total time and the percentage of the logged in time that the agent has been in Wrap up state. |
| NAV (%) | Total time and the percentage of the logged in time that the agent has been in Not Available state. |
| RDY (%) | Total time and the percentage of the logged in time that the agent has been in Ready state. |

## Table 8  Agent states (AGENT DATA Screen)

| Code | Explanation |
| --- | --- |
| LOGOUT | Agent is not logged in. |
| BUSY | Agent is not ready to receive calls. |
| READY | Agent is idle and ready to receive ACD calls. |
| NACD-IN | Agent is talking on an incoming non-ACD call. |
| NACD-OUT | Agent is talking on an outgoing non-ACD call. |
| ACD RING | An ACD call is ringing the agent's telephone. |
| ACD CALL | Agent is involved with an ACD call. |
| WRAP UP | Agent is in Busy Wrap Up state. |
| N.AVAILB | Agent is in Not Available state. |
| FRC BUSY | Agent is in Forced busy state. |

## SUPERVISING AGENTS

After viewing the agent data or status, you may wish to follow up more closely on a particular agent. You have the following options:

- MONITOR the call (i.e. listen to the call).
- ADVISE the agent (i.e. talk to the agent without being heard by the outside caller);
- Set up a CONFERENCE call between you, the agent and the outside caller.

### NOTE
Only ACD calls can be monitored.

## MONITORING AGENTS FROM THE AGENTS STATUS SCREEN

### To monitor the agent
- Press the softkey to the left of the desired agent.
- You are now listening to the agent's call;

- The ACD MONITOR Screen is displayed (see Figure 9).

Depending on system programming, you and the agent, and possibly also the outside caller may hear a tone indicating that the call is being monitored. Alternatively, no tone is heard by any party.
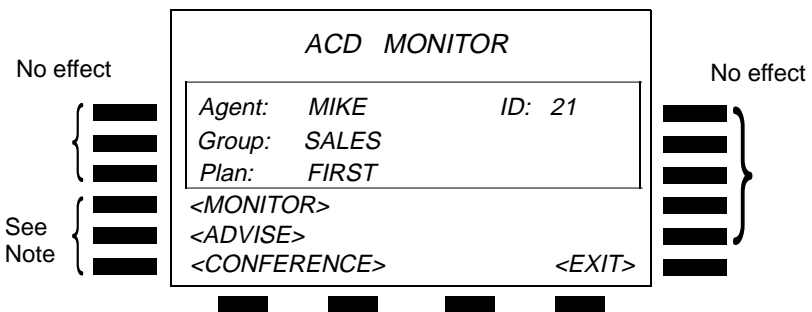
```
No effect                    ACD   MONITOR                No effect

            Agent:    MIKE          ID:  21
            Group:    SALES
            Plan:     FIRST
See         <MONITOR>
Note        <ADVISE>
            <CONFERENCE>              <EXIT>
```

**Figure 9  ACD MONITOR Screen**

---

**NOTE**

At any particular time, only two of these three softkeys appear. In place of the third softkey **<** --- **>** appears.

The ACD MONITOR Screen displays the agent's name, ID, group, and ACD routing plan.

From this screen, you can decide to advise the agent or set up a conference call with the agent and the outside caller.

**To speak to the agent**
- Press *{<ADVISE>}*.
− You are now connected in a two-way call with the agent;
− *ADVISE* appears in your telephone display (in place of *MONITOR*). Both you and the agent can hear the outside caller, but the outside caller cannot hear anything you say to the agent;
− At the beginning and end of the ADVISE process a tone is heard at the agent's telephone, indicating that the supervisor is now in ADVISE mode.

**To set up a conference with the agent and the caller**
- Press *{<CONFERENCE>}.*
− You are now connected in a three-way call with the agent and the outside caller;
− *CONFERENCE* appears in your telephone display (in place of *MONITOR*);
− The supervisor, agent, and outside caller all hear a tone indicating that a conference call has been established.

**Moving between monitor, advise and conference**

You can swap between MONITOR, ADVISE, and CONFERENCE state by pressing the appropriate softkey. The currently active state appears in the telephone display, and the other two options appear as softkeys. The display softkeys change dynamically to show the currently available options.

## MONITORING AGENTS FROM THE AGENT DATA SCREEN

You can also call or monitor an agent from the AGENT DATA Screen (see Figure 8, above) using a softkey whose function changes between *{<MON>}* (i.e. monitor) and *{<CALL>}*, depending on the agent's state. See the AGENT DATA SCREEN section, above.

## RESPONDING TO A HELP REQUEST

When an agent requests help from the supervisor by pressing the **[HELP REQUEST]** button, the supervisor's **[HELP ANSWER]** button lights.

**To answer the agent's call**
- Press **[HELP ANSWER].**
– The supervisor sees the ACD MONITOR Screen (see Figure 9, above).

**To  talk to the agent privately**
- Press *{<ADVISE>}.*

**To talk to the agent and the outside party**
- Press *{<CONFERENCE>}*.

# VIEWING QUEUE STATISTICS

## GENERAL

An initial picture of the state of the queue is received from the SUPERVISOR MAIN Screens (see Figures 4, 5, and 6, above), described in the SUPERVISOR MAIN SCREENS section, above. For more detailed information concerning queue statistics, access the QUEUE STATISTICS Screen.

## QUEUE STATISTICS SCREEN

The QUEUE STATISTICS Screen displays data accumulated over the statistics time, concerning the call flow into, and out of the selected queue.

**To access the QUEUE STATISTICS Screen**
From the SUPERVISOR MAIN Screen (see Figures 4, 5, and 6, above):

• Press the softkey to the left of the ACD group whose queue you wish to analyze.
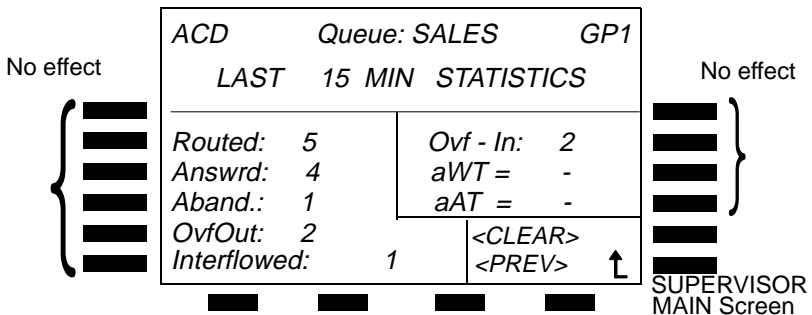– The QUEUE STATISTICS Screen appears (see Figure 10).



**Figure 10  QUEUE STATISTICS Screen**

## NOTE

The second row of the display shows the time upon which statistics are based (default = 15 minutes). This time is programmed in the DIGITAL system configuration program and may range from three to 30 minutes.

The QUEUES STATISTICS Screen fields are listed and explained in Table 9.

## Table 9 QUEUE STATISTICS Screen - field descriptions

| Field | Explanation |
|---|---|
| ACD Queue | ACD group name. |
| GP | ACD group number. |
| Routed | Number of routed calls (i.e. calls directly routed to the queue, not including calls overflowed to the queue). |
| Ovf-In | Number of calls overflowed into the ACD queue. |
| Answrd | Number of answered calls (both routed and overflowed). |
| aWT | Average time calls waited before being answered. |
| Aband | Number of routed calls that were abandoned (i.e. the caller hung up before being answered). |
| aAT | Average time callers waited before hanging up. |
| OvfOut | Number of routed calls that overflowed to other ACD queues. |
| Interflowed | Number of calls routed that interflowed to an Interflow destination. |

## RESETTING THE QUEUE DATA

At any time you can return the accumulated statistics for the queue to zero and start a new statistics time period, by pressing the *{<CLEAR>}* softkey. This will clear the queue statistics for all supervisors allocated to the queue.

## DETECTING AND COPING WITH EXTREMES IN CALL TRAFFIC

The supervisor can detect extremes in call traffic using several indicators such as:

- Low Level of Service;
- Large number of abandoned calls;
- Large number of calls in queue;
- High average wait times;
- Large number of overflow calls;
- Large number of interflow calls.

To cope with heavy call traffic the supervisor can:

- Add to the number of agents servicing the overloaded queue by instructing other agents to log out of less busy queues and to log in as agents of the overloaded queue;
- Pick up calls from the overloaded ACD queue with the **[QUE]** button;
- Log out as supervisor and log in again as an agent of the overloaded queue.

Additional methods of dealing with call traffic loads are available. These require the intervention of the system administrator who can adapt the system configuration in many ways such as:

- Reprogramming the overflow of calls to and from queues;
- Directing calls to other queues.

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